



## I-15 from Flamingo to Sahara Feasibility Study

### **PLANNING AND ENVIRONMENTAL LINKAGES**

NDOT Agreement No.: P384-18-015

**July 2021**



I-15 FROM FLAMINGO TO SAHARA

# Planning and Environmental Linkages Questionnaire and Checklist

JULY 2021

*Prepared for*



Nevada Department of Transportation

*and*



Federal Highway Administration



## BACKGROUND

The Nevada Department of Transportation (NDOT) seeks to employ unified and dedicated efforts to deliver transportation solutions that improve the quality of life for those in Nevada. Improvements to the transportation system are typically accomplished through projects. Federal and State transportation improvement funds and NDOT's construction program and projects are scheduled and delivered through the Statewide Transportation Improvement Program (STIP). For 40 years, Congress directed this sequencing of funding flow, triggered by metropolitan and statewide transportation planning processes that serve as the basis for project decisions and incorporate an emphasis on public involvement, environmental considerations, and other factors.

The National Environmental Policy Act of 1969 (NEPA) established a national environmental policy intentionally focused on federal activities and the desire for a sustainable environment balanced with other, essential, present and future needs of generations of Americans. NEPA mandated that federal agencies consider the potential environmental consequences of their proposed actions, document the analysis, and make this information available to the public for comment prior to implementation. These requirements form the basic framework for federal decision making and the NEPA process. NEPA applies only where there is a federal action. For the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), implementation of NEPA is based on the Council on Environmental Quality (CEQ) regulations set down in 40 Code of Federal Regulations [C.F.R.] §§ 1500–08 and 23 C.F.R. § 771.

1978 CEQ regulations call for an integration of “the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts” (40 C.F.R. § 1501.2). Despite this statutory and regulatory emphasis on the early integration of transportation planning with NEPA, these two activities have, in practice, been carried out in a separate and sequential manner. Environmental analyses prepared to support the project development/NEPA process are typically disconnected from the analyses used to develop long-range transportation plans, statewide and metropolitan Transportation Improvement Programs, and planning-level corridor/subarea/feasibility studies. When transportation planning and NEPA processes are not well coordinated, duplication of work and delays in implementing transportation improvements frequently occur.

A requirement to consider mitigation activities in long-range plans and a requirement to consult with resource and land management agencies and related plans, maps, or inventories during the development of long-range transportation plans provide an opportunity for early identification of environmental and design considerations that could cause project costs to rise and jeopardize schedules. This initiative is referred to as planning and environmental linkages (PEL). The goal of PEL is to create a decision-making process that minimizes duplication of effort, promotes environmental stewardship, and reduces delays, from the visioning and planning stages all the way through project development to project implementation.

The PEL process seeks to develop subarea and corridor studies that have been scoped to more directly inform the NEPA process for those projects that ultimately become part of the STIP. Effective, conceptual-level transportation planning studies that follow the PEL process provide opportunities both to identify important issues of concern early and to build agency, stakeholder, and public understanding of the project. Such early, integrated planning is not driven solely by regulatory requirements and the quest for more efficient and effective processes, although those are desirable results. Transportation and environmental professionals—as well as those in metropolitan planning organizations, state and federal resource agencies, and nongovernmental organizations—are finding that early collaboration helps achieve broader transportation and environmental stewardship goals through better decisions regarding programs, planning, and projects.

This document has been developed based on the adopted PEL Questionnaire and Checklist by NDOT dated July 2012 to provide guidance, particularly to transportation planners and NEPA specialists, regarding how to

most effectively link the transportation planning and NEPA processes. By considering the questions and issues raised in this questionnaire, transportation planners will become more aware of potential gaps in their subarea or corridor studies, better understand the needs of future users of the studies, and be reminded of the benefits of wider and/or deeper collaboration with agencies, the public, and other stakeholders. NEPA specialists who fill out the checklist will assume a new role in the transportation planning process: becoming advocates for early awareness of environmental issues before the NEPA process begins. This questionnaire and checklist is designed to assist in linking planning with potential environmental concerns and should be viewed as a tool, not a mandatory exercise when reviewing potential transportation projects.

The following PEL questionnaire and checklist are intended to be used as tools to guide proper documentation and selection of information gathered during the planning process that can later be made available for input, review, and possible incorporation by reference during the NEPA project development process.

This questionnaire and checklist will be used to effectively influence the scope, content, and process employed for NDOT transportation planning studies that focus on specific transportation corridors or on transportation network subareas (versus statewide transportation studies). Completion of this questionnaire and checklist will support the PEL process and serve dual objectives:<sup>1</sup>

- provide guidance to transportation planners on the level of detail needed to ensure that information collected and decisions made during the transportation planning study can be used during the NEPA process for a proposed transportation project
- provide the future NEPA study team with documentation on the outcomes of the transportation planning process, including the history of decisions made and the level of detailed analysis undertaken

Major issues to consider when conducting a transportation planning study that links to the future NEPA process include:<sup>2</sup>

- identifying the appropriate level of environmental analysis for the study
- identifying the appropriate level of agency, stakeholder, and public involvement
- defining unique study concurrence points for seeking agreement from relevant resource agencies, stakeholders, and members of the public
- developing a process to ensure that the study will be recognized as valid within the NEPA process
- identifying when to involve resource agencies in the study, and to what extent they influence decision making
- identifying how to persuade U.S. Department of Transportation reviewers to accept the use of these studies in the NEPA process

These issues will be considered throughout the Study process. Users of this *Planning and Environmental Linkages Questionnaire and Checklist* should review the entire document at the beginning of the study to familiarize themselves with whatever local and general issues may be operative. The questionnaire is provided in two parts: one to be completed by transportation planners at the beginning of the study and one to be completed at the end. The checklist (Part 3) should be used by NEPA specialists throughout the study and should be finalized at the end of the study.

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<sup>1</sup> Objectives are based on the Federal Highway Administration's online document: *Case Studies: Colorado: Colorado Department of Transportation: Tools and Techniques to Implement PEL*, <[www.environment.fhwa.dot.gov/integ/case\\_colorado2.asp](http://www.environment.fhwa.dot.gov/integ/case_colorado2.asp)> (accessed October 24, 2011).

<sup>2</sup> Further guidance is available in the Federal Highway Administration's *Guidance on Using Corridor and Subarea Planning to Inform NEPA*, dated April 5, 2011, available online at <[www.environment.fhwa.dot.gov/integ/corridor\\_nepa\\_guidance.pdf](http://www.environment.fhwa.dot.gov/integ/corridor_nepa_guidance.pdf)>.

Upon completion of the Study, this document should be included as an appendix to the study’s final report to document how the study meets the requirements of 23 C.F.R. § 450.212 or § 450.318 (Subpart B: Statewide Transportation Planning and Programming or Subpart C: Metropolitan Transportation Planning and Programming, respectively).

The flowchart below outlines the major inputs, decision points, and outcomes that occur during implementation of a transportation planning study using the PEL process that will be adhered to on this study.

	Transportation Planners	Both	NEPA Specialists
<b>PEL Launch</b>	Review Part 1 and Part 2 of questionnaire Complete Part 1 of questionnaire	Become familiar with local and general issues  Modify study scope to include or deepen analysis of specific resources or environmental issues	Review checklist  Advocate inclusion of resources and issues  Seek resource agency assistance in changing study scope
<b>Analysis and Comment</b>	Define, clarify, analyze, and screen modes, corridors, and alternatives (including no-action alternative)  Involve relevant stakeholders, agencies, and public in comments and reviews to ensure later acceptability and defensibility in NEPA	Become familiar with local and general issues  Modify study scope to include or deepen analysis of specific resources or environmental issues	Continue to advocate addressing collection and analysis of data pertinent to effective application in NEPA process
<b>PEL Completion</b>	Complete Part 2 of questionnaire	Include questionnaire and checklist in appendix to study  Document relevant findings for use in later NEPA documents	Complete checklist (Part 3)



**Beginning of NEPA Process**

NEPA specialists review completed PEL questionnaire and checklist and confirm that study recommendations and analyses can support the anticipated NEPA process(es) and document type(s), including, if applicable, incorporation into the content of a Notice of Intent



# Questionnaire for Transportation Planners – Part 1

This part of the questionnaire should be completed by transportation planners at the beginning of the transportation planning study. Please note that planners should also review Part 2 of the questionnaire to understand what additional issues will need to be considered and documented as the study progresses.

<b>Project identification</b>	
<i>What is the name of the study? What cities and counties does it cover? What major streets or highways are covered? For corridor studies, what are the intended termini?</i>	
<p><b>Name of the study:</b> I-15 from Flamingo to Sahara</p> <p><b>Intended termini:</b> This feasibility study covers an area of approximately 4.5 miles on Interstate 15 (I-15) from Sahara Avenue to the I-15/I-215/CC-215 system interchange, located in the City of Las Vegas and Clark County, Nevada (see map to the right). This stretch of highway parallels the Las Vegas Strip, and is crossed by a Union Pacific Railroad (UPRR) corridor.</p> <p>The project study area includes six interchanges with I-15: Sahara Avenue, Spring Mountain Road, Flamingo Road, Tropicana Avenue, Russell Road, and I-15/I-215/CC-215 system interchange. Additionally, seven grade separations exist within the corridor; Desert Inn Road (over I-15), UPRR (under I-15), Dean Martin Drive (under I-15), Twain Avenue (under I-15), Harmon Avenue (over I-15), Hacienda Avenue (over I-15), and Sunset Road (over I-15).</p>	
<i>Who is the study sponsor?</i>	
Nevada Department of Transportation (NDOT)	
<i>Briefly describe the study and its purpose.</i>	
<p>I-15 is the primary transportation corridor in southern Nevada connecting to California and Arizona. Over the past three decades, the Nevada Department of Transportation (NDOT) has been making investments in improvements to I-15 to keep up with the growth in the Las Vegas area. The section of I-15 between Flamingo Road and Sahara Avenue is the last section to be upgraded adjacent to the resort corridor (Las Vegas Strip). Recently completed projects include NDOT's I-15 South Design-Build Project (Silverado Ranch Boulevard to Tropicana Avenue) to the south and NDOT's first phase of Project NEON (Sahara Avenue to I-15/US95/I-515 Interchange) to the north.</p> <p>The existing corridor I-15 from Flamingo Road to Sahara Avenue can only accommodate five through lanes in each direction, while future traffic demands are expected to further breakdown I-15 traffic operations within this segment. The I-15 from Flamingo to Sahara Feasibility Study (Feasibility Study) was initiated by NDOT to develop and evaluate alternatives primarily focusing on improving I-15 safety and traffic operations, and to identify right-of-way needs to accommodate future traffic demands.</p>	

<i>Who are the primary study team members (include name, title, organization name, and contact information)?</i>				
<b>Name</b>	<b>Organization</b>	<b>Title</b>	<b>Phone</b>	<b>Email</b>
Jae Pullen, PE	NDOT	Project Manager	(775) 888-7589	<a href="mailto:JPullen@dot.nv.gov">JPullen@dot.nv.gov</a>
Cassie Mlynarik	NDOT	Public Affairs	(702) 232-5288	<a href="mailto:cmlynarek@dot.nv.gov">cmlynarek@dot.nv.gov</a>
Greg McDermott	CLV	Project Manager	(702) 229-6011	<a href="mailto:gmcdermott@LasVegasNevada.GOV">gmcdermott@LasVegasNevada.GOV</a>
Herb Arnold	CCPW	Project Representative	(702) 455-6117	<a href="mailto:hla@clarkcountynv.gov">hla@clarkcountynv.gov</a>
Abdelmoez Abdalla	FHWA-NV	Project Representative	(775) 687-1231	<a href="mailto:Abdelmoez.Abdalla@dot.gov">Abdelmoez.Abdalla@dot.gov</a>
Jim Caviola, PE,PTOE	CA Group	Project Manager	(702-418-6822	<a href="mailto:James.Caviola@c-agroup.com">James.Caviola@c-agroup.com</a>
Jack Sjostrom, PE	CA Group	Project Lead	(702) 426-9867	<a href="mailto:Jack.Sjostrom@c-agroup.com">Jack.Sjostrom@c-agroup.com</a>
Andrea Engelman	CA Group	Environmental Planner	(702) 245-7692	<a href="mailto:andrea.engelman@c-agroup.com">andrea.engelman@c-agroup.com</a>
Susan Berkley	Atkins	Public Outreach Lead	(702) 551-0366	<a href="mailto:Susan.Berkley@atkinsglobal.com">Susan.Berkley@atkinsglobal.com</a>
Bardia Nezhati	Parametrix	PEL Lead	(702) 445-2307	<a href="mailto:bnezhati@parametrix.com">bnezhati@parametrix.com</a>
Jackie Kuechenmeister	Parametrix	PEL Support	(630) 251-7579	<a href="mailto:JKuechenmeister@parametrix.com">JKuechenmeister@parametrix.com</a>
<i>Does the team include advisory groups such as a technical advisory committee, steering committee, or other? If so, include roster(s) as attachment(s).</i>				
<p>A technical advisory committee (TAC) provided input and shared their opinions and ideas throughout the process. The TAC included representatives from the following agencies (a complete roster is attached):</p> <ul style="list-style-type: none"> <li>• NDOT</li> <li>• Federal Highway Administration (FHWA)</li> <li>• Regional Transportation Commission of Southern Nevada (RTCSNV)</li> <li>• Clark County</li> <li>• City of Las Vegas</li> </ul> <p>The <b>Public</b> had opportunities to learn about the study and share their opinions via the website (active throughout the study) and an online virtual public engagement session was held near the end of the study process.</p>				

Have previous transportation planning studies been conducted for this region? If so, provide a brief chronology, including the years the studies were completed. Provide contact names and locations of the studies and study websites.

I-15 between Flamingo Road and Sahara Avenue has been studied extensively over the past 15 years. The table below includes a list of previous relevant transportation planning studies conducted for this region in chronological order. In addition to these planning studies, various capital improvements are under design or construction in the vicinity of this study.

Study	Lead Agency	Year Completed	Location of Study Document(s)
I-15 North Environmental Assessment	NDOT	2007	<a href="ftp://ftp.dot.state.nv.us/ProjectMgmt/I-15%20N%20Phase%204/73536%20I-15_CC-215%20North%20Interch%20Phase%204/300%20EXTERNAL%20CORRESPONDENCE/330%20LOCAL%20AGENCY/021715%20Mtg%20Mayor%20CNLV/I-15%20N%20-%20021715%20Update%20All%20Phases.pdf">ftp://ftp.dot.state.nv.us/ProjectMgmt/I-15%20N%20Phase%204/73536%20I-15_CC-215%20North%20Interch%20Phase%204/300%20EXTERNAL%20CORRESPONDENCE/330%20LOCAL%20AGENCY/021715%20Mtg%20Mayor%20CNLV/I-15%20N%20-%20021715%20Update%20All%20Phases.pdf</a>
I-15 South Corridor Improvement Sloan Road to Tropicana Avenue Environmental Assessment	NDOT	2008	<a href="https://www.nevadadot.com/home/showdocument?id=6900">https://www.nevadadot.com/home/showdocument?id=6900</a>
I-15 Resort Corridor Study	NDOT	2009	<a href="ftp://ftp.nevadadot.com/ProjectMgmt/Southern%20Nevada%20Traffic%20Study/I-15%20Gap/final_i-15rcsfinalreport_120109.pdf">ftp://ftp.nevadadot.com/ProjectMgmt/Southern%20Nevada%20Traffic%20Study/I-15%20Gap/final_i-15rcsfinalreport_120109.pdf</a>
I-15 Corridor Improvements and Local Arterial Improvements (Project NEON)	NDOT	2010	<a href="http://ndotprojectneon.com/">http://ndotprojectneon.com/</a>
Apex to Mesquite and Moapa Valley Corridor Study	NDOT	2011	<a href="https://www.ammvcorridorstudy.org/AMMV_Final_Report.pdf">https://www.ammvcorridorstudy.org/AMMV_Final_Report.pdf</a>
I-11 & Intermountain West Corridor Study	NDOT/ADOT	2014	<a href="http://i11study.com/IWC-Study/PDF/2014/I-11CCR_Report_2014-12_sm.pdf">http://i11study.com/IWC-Study/PDF/2014/I-11CCR_Report_2014-12_sm.pdf</a>
I-15 Tropicana Interchange Feasibility Study	NDOT	2015	<a href="https://www.nevadadot.com/Home/ShowDocument?id=12706">https://www.nevadadot.com/Home/ShowDocument?id=12706</a>
Southern Nevada HOV Plan	NDOT	2015	<a href="https://www.nevadadot.com/home/showdocument?id=15930">https://www.nevadadot.com/home/showdocument?id=15930</a>
Transportation Investment Business Plan	RTCSNV	2016	<a href="http://www.rtcnv.com/govegas/resources/RTC-TIBP-full.pdf">http://www.rtcnv.com/govegas/resources/RTC-TIBP-full.pdf</a>
Las Vegas NFL Stadium Sites Traffic Assessment	NDOT	2016	<a href="https://www.nevadadot.com/home/showdocument?id=2973">https://www.nevadadot.com/home/showdocument?id=2973</a>
I-15 Corridor System Master Plan/I-15 Mobility Alliance	NDOT	2017	<a href="http://i15alliance.org/pdfs/I-15_CSMP_v31.pdf">http://i15alliance.org/pdfs/I-15_CSMP_v31.pdf</a>
Multistate I-15 Alternate Routes Study	NDOT/I-15 Mobility Alliance	2017	<a href="http://www.i15alliance.org/pdfs/I-15CSMP_AltRoute_FINAL_ReportOnly.pdf">http://www.i15alliance.org/pdfs/I-15CSMP_AltRoute_FINAL_ReportOnly.pdf</a>
Southern Nevada HOV Plan Addendum	NDOT	2018	<a href="https://www.nevadadot.com/home/showdocument?id=15914">https://www.nevadadot.com/home/showdocument?id=15914</a>
Southern Nevada Traffic Study	NDOT	2018	<a href="http://www.ndotsnts.com/assets/SNTS_Final_Report_Interactive.pdf">http://www.ndotsnts.com/assets/SNTS_Final_Report_Interactive.pdf</a>
One Nevada Transportation Plan / I-15 Critical Corridor Plan	NDOT	2018	<a href="http://onenvplan.com/pdf/FINALNDOTOneNVTransportationPlanDecember2018.pdf">http://onenvplan.com/pdf/FINALNDOTOneNVTransportationPlanDecember2018.pdf</a>
Dean Martin–MLK Extension Feasibility Study	City of Las Vegas	2018	On file
I-15 Tropicana Environmental Assessment	NDOT	2019	<a href="https://www.nevadadot.com/projects-programs/road-projects/i-15-tropicana-project">https://www.nevadadot.com/projects-programs/road-projects/i-15-tropicana-project</a>
Brightline/Virgin Trains High-Speed Rail Environmental Impact Statement Re-Evaluation (Victorville, CA to Las Vegas, NV)	FRA	2020	N/A
Stadium District Plan	Clark County	2021	<a href="https://www.clarkcountynv.gov/government/departments/comprehensive_planning_department/stadium_district_plan.php">https://www.clarkcountynv.gov/government/departments/comprehensive_planning_department/stadium_district_plan.php</a>



<i>What current or near-future planning (or other) studies in the vicinity are underway or will be undertaken? What is the relationship of this study to those studies? Provide contact names and locations of the studies and study websites.</i>	
The following studies are ongoing in the general study area:	
<ul style="list-style-type: none"> <li>• (NDOT) One Nevada Transportation Plan, to formalize project prioritization process, including identifying and prioritizing transportation project needs statewide.</li> <li>• (NDOT) Environmental Assessment Re-Evaluation on I-15 South Corridor (Sloan Road to Tropicana Avenue). The purpose of this study is to perform a re-evaluation of the October 2008 Environmental Assessment for the I-15 South Corridor, and provide high-speed rail technical expertise regarding design review services and coordination for the Brightline/Virgin Trains high-speed rail line.</li> </ul>	
<b>Study objectives</b>	
What are your desired outcomes for this study? (Check all that apply.)	
<input checked="" type="checkbox"/> Stakeholder identification <input checked="" type="checkbox"/> Stakeholder roles/responsibilities definition <input checked="" type="checkbox"/> Travel study area definition <input checked="" type="checkbox"/> Performance measures development <input checked="" type="checkbox"/> Development of purpose and need goals and other objectives <input checked="" type="checkbox"/> Alternative evaluation and screening <input type="checkbox"/> Alternative travel modes definition	<input type="checkbox"/> Operationally independent segments <input checked="" type="checkbox"/> Scheduling of infrastructure improvements over short-, mid-, and long-range time frames <input checked="" type="checkbox"/> Environmental impacts <input type="checkbox"/> Mitigation identification <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____
<i>Have system improvements and additions that address your transportation need been identified in a fiscally constrained statewide or regional long-range transportation plan?</i>	
No. Minor system improvements are planned within the study area, but do not cumulatively serve the need that exists for the corridor.	
<i>Will a purpose and need statement<sup>3</sup> be prepared as part of this effort? If so, what steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?</i>	
Yes. A Purpose and Need Statement was developed as part of this study and provides a high-level examination of deficiencies in the I-15 corridor between Flamingo Road and Sahara Avenue. A more detailed, data-driven analysis of factors will be undertaken during a subsequent NEPA evaluation.	
<b>Establishment of organizational relationships</b>	
<i>Is a partnering agreement in place? If so, who are signatories (for example, affected agencies, stakeholders, organizations)? Attach the partnering agreement(s).</i>	
No partnering agreements are in place.	
<i>What are the key coordination points in the decision-making process?</i>	
TAC meetings were held monthly during the study process. Additional agency coordination meetings were held at key milestones including traffic analysis and forecasting methodology, alternatives development, screening process and results, and draft PEL document. Public outreach occurred near the end of the study process to present the conceptual alternatives to the public and solicit feedback.	
<b>Planning assumptions and analytical methods</b>	
<i>Is the time horizon of the study sufficiently long to consider long-term (20 years or more from completion of the study) effects of potential scenarios?</i>	
Yes, the study used a 2040 assessment year, in line with the RTCSNV's 2040 travel demand model. This allowed for the consideration and assessment of long-term potential scenarios.	

<sup>3</sup> For an explanation of purpose and need in environmental documents, please see the Federal Highway Administration's (FHWA's) "NEPA and Transportation Decisionmaking: The Importance of Purpose and Need in Environmental Documents," <[Purpose and Need](#)>. This website provides links to five additional resources and guidance from FHWA that should be helpful in understanding the relationship between goals and objectives in transportation planning studies and purpose and need statements of NEPA documents.

<i>What method will be used for forecasting traffic volumes (for example, traffic modeling or growth projections)? What are the sources of data being used? Has USDOT validated their use? Are the models and their output conducive for use with NEPA-related noise and air quality modeling?</i>
Traffic volumes are forecasted for the year 2040 and is based on RTCSNV's travel demand model runs, using the Aimsun Next subarea traffic model. A 2040 No-Action network (incorporating planned projects, while excluding any proposed upgrades as part of the I-15 from Flamingo to Sahara Study) was developed with projects in the Las Vegas Valley that are included either short term in the TIP/STIP or have funding and would be accelerated, and those that would be constructed before 2035. FHWA has accepted this methodology on other similar studies. For future NEPA studies, traffic forecasts should be revisited prior to NEPA-level analyses. More detailed traffic data likely would be required for traffic noise and air quality modeling.
<i>Will the study use FHWA's Guide on the Consistent Application of Traffic Analysis Tools and Methods<sup>4</sup>? If not, why not? How will traffic volumes from the travel demand model be incorporated, if necessary, into finer-scale applications such as a corridor study?</i>
Yes, the study analysis tools are consistent with FHWA's Guide. The traffic forecasts used in the operation analysis were developed using the RTCSNV's 2040 travel demand model. The origin-destination (OD) matrices from the travel demand model were imported into the traffic analysis software Aimsun Next. The OD matrices were adjusted (as needed), refined, and used in the Aimsun Next for microscopic and mesoscopic simulation.
<i>Do the travel demand models base their projections on differentiations between vehicles?</i>
Yes. The model differentiates between cars, shared rides (high occupancy vehicles), and trucks, but does not distinguish buses from cars.
<b>Data, information, and tools</b>
<i>Is there a centralized database or website that all State resource agencies may use to share resource data during the study?</i>
<i>ProjectWise</i> was used for document and file management for NDOT, the project consultant team and other key stakeholders.

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<sup>4</sup> FHWA November 2011 publication: <[Traffic Analysis Tools and Methods](#)>

## Questionnaire for Transportation Planners – Part 2

This part of the questionnaire should be completed by transportation planners at the end of the transportation planning study. This completed document should become an appendix to the study's final report to document how the study meets the requirements of 23 Code of Federal Regulations § 450.212 or § 450.318.

Purpose and need for this study
<i>How did the study process define and clarify corridor-level or subarea-level goals (if applicable) that influenced modal infrastructure improvements and/or the range of reasonable alternatives?</i>
The intent of this feasibility study was to explore improvements that will maximize the operational efficiency of the I-15 mainline, as well as its interchanges with Sahara Avenue, Spring Mountain Road and Flamingo Road. This segment is a “chokepoint” along the I-15 corridor through Southern Nevada, in that it is the only segment that has not been improved to keep up with regional growth, development, and overall travel demand. Thus, capacity was a driving factor, with related goals of safety and operations on the corridor and its intersecting roadways.
<i>What were the key steps and coordination points in the decision-making process? Who were the decision-makers and who else participated in those key steps?</i>
<p>NDOT is the ultimate decision-maker, however this was a collaborative effort with the Technical Advisory Committee (TAC), who participated in the study on a monthly basis to be appraised of progress and provide input on critical decisions. Primary agencies representing the TAC included various NDOT divisions, FHWA-Nevada, RTC, City of Las Vegas, and Clark County. Additional coordination occurred with specific groups, as required.</p> <p>Critical steps included:</p> <ul style="list-style-type: none"> <li>• Project Kick-off</li> <li>• Data Collection</li> <li>• Alternatives Development</li> <li>• Data Analysis</li> <li>• Alternatives Selection</li> <li>• Concept Plans</li> <li>• Feasibility Study Report/PEL documentation</li> </ul>
<i>How should this study information be presented in future NEPA document(s), if applicable? Are relevant findings documented in a format and at a level of detail that will facilitate reference to and/or inclusion in subsequent NEPA document(s)?<sup>5</sup></i>
The final I-15 from Flamingo to Sahara Feasibility Study includes concise findings and should be referenced during subsequent NEPA studies. Appended to the Feasibility Study are various technical studies that provides detailed information in support of the analysis conducted (e.g., traffic projections, crash analysis, drainage considerations, etc.). All documentation can be found on the project website: <a href="https://www.dot.nv.gov/projects-programs/programs-studies/i-15-flamingo-to-sahara">https://www.dot.nv.gov/projects-programs/programs-studies/i-15-flamingo-to-sahara</a>
<i>Were the study's findings and recommendations documented in such a way as to facilitate an FHWA or Federal Transit Administration decision regarding acceptability for application in the NEPA process? Does the study have logical points where decisions were made and where concurrence from resource or regulatory agencies, stakeholders, and the public was sought? If so, provide a list of those points.</i>
<p>FHWA (Nevada Division) participated in monthly TAC meetings and reviewed preliminary and final documents. Mid-way through the project, a one-one-one meeting was held with the project team and FHWA to ensure the process and projected outcomes would form an acceptable foundation for subsequent NEPA studies.</p> <p>TAC meetings were held monthly with agencies and stakeholders that have decision-making responsibilities relative to project implementation. They reviewed preliminary and final documents and provided input at critical milestones, such as development of alternative concepts, fatal flaw analysis, traffic model calibration, alternatives screening, recommended alternatives, and preliminary design concepts. Their acceptance was sought, not concurrence.</p> <p>Regulatory agencies were not involved in the study's findings and recommendations.</p> <p>Because of the COVID-19 pandemic, the traditional public meeting approach to solicit input was not conducted. A robust web presence (<a href="https://www.nevadadot.com/projects-programs/programs-studies/i-15-flamingo-to-sahara">https://www.nevadadot.com/projects-programs/programs-studies/i-15-flamingo-to-sahara</a>) and a virtual town hall was used instead, which included a power point presentation, technical materials (maps, exhibits, fact sheet), and the opportunity for public comment. More than 2,600 people visited the virtual meeting site, with 60 people signing into the live presentation.</p>

<sup>5</sup> For an explanation of the types of documents needed under the NEPA process and the nature of the content of those documents, please see “NEPA Documentation: Improving the Quality of Environmental Documents,” <[Documentation](#)>.

Overall stakeholder and public outreach is documented in the I-15 from Flamingo to Sahara Virtual Public Information Meeting Summary Report.			
<b>Establishment of organizational relationships – tribes and agencies<sup>6</sup></b>			
Tribe or agency	Date(s) contacted	Describe level of participation	Describe the agency's primary concerns and the steps needed to coordinate with the agency during NEPA scoping. <sup>7</sup>
<b>Tribal</b>			
N/A	--	--	--
<b>Federal</b>			
Federal Highway Administration	Monthly TAC meetings from March 2019 – August 2020 Interim update meeting May 2020	Agency Stakeholder	
U.S. Army Corps of Engineers	Not contacted	Stakeholder Partner	Need to solicit input during NEPA on drainage-related impacts and solutions
<b>County</b>			
Clark County Public Works	Monthly TAC meetings from March 2019 – August 2020	Agency Stakeholder	
<b>Regional</b>			
Regional Transportation Commission of Southern Nevada	Monthly TAC meetings from March 2019 – August 2020	Agency Stakeholder	
<b>Local</b>			
City of Las Vegas	Monthly TAC meetings from March 2019 – August 2020	Agency Stakeholder	
<b>Public</b>			
Members of the public	May 25, 2021 – June 23, 2021	Refer to I-15 from Flamingo to Sahara Feasibility Report for more details on public engagement efforts; overall greater support for Alternative 2; primary corridor concerns include safety and HOV lane logistics.	

<b>Planning assumptions and analytical methods</b>
<i>Did the study provide regional development and growth assumptions and analyses? If so, what were the sources of the demographic and employment trends and forecasts?</i>
Yes, the study used growth projections identified in the RTC regional travel demand model to understand existing and future growth and demographic trends. This information was incorporated into the Aimsun subarea model used for traffic analyses.
<i>What were the future-year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?</i>
Local land use and economic development assumptions are a component of the RTC regional travel demand model, which contributed to the analysis of existing and future (2040) conditions, as well as fed the Aimsun subarea model used to understand traffic projections for the various alternatives. Network assumptions are also built into the model, based on completed planning and design work, of which several recent studies have been completed along the I-15 corridor.  Cost estimates were derived using NDOT's standardized cost estimating software for planning/design (Wizard), utilizing current item quantity costs provided by NDOT.

<sup>6</sup> Users may add rows to this table to accommodate additional tribes and agencies. Unused rows may be deleted.

<sup>7</sup> If the transportation planning study final report does not adequately document interactions (for example, meeting notes, resolutions, letters) with the relevant agencies, append such information to the end of this questionnaire and checklist.

<i>Were the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?</i>
Yes, the study compiled recommendations from other plans along I-15 to understand the overall vision of the corridor throughout Southern Nevada, as well as specifically in the Resort Corridor to ensure consistency of the system, as well as compatibility with the regional collector-distributor (CD) road system and intersecting streets. Two recently completed projects bookend this study area, providing the most applicable long-range guidance: Project NEON – first phase (north) and I-15 South Design-Build Project (south).
<b>Data, information, and tools</b>
<i>Are the relevant data used in the study available in a compatible format that is readily usable? Are they available through a centralized web portal?</i>
Yes, the traffic data is embedded in the Aimsun subarea traffic model, which is available from NDOT. This model was originally developed during the Southern Nevada Traffic Study to provide a more focused look at operations within the Las Vegas Valley transportation system and has evolved with new and updated information through subsequent studies. Annual/historical traffic data can be found on NDOT's website through the Traffic Records Information Access (TRINA) portal: <a href="https://ndot.maps.arcgis.com/apps/webappviewer/index.html?id=278339b4605e4dda8da9bddd2fd9f1e9">https://ndot.maps.arcgis.com/apps/webappviewer/index.html?id=278339b4605e4dda8da9bddd2fd9f1e9</a> Crash data is also available on NDOT's website for the most recently available three-year cycle of information: <a href="https://ndot.maps.arcgis.com/apps/webappviewer/index.html?id=00d23dc547eb4382bef9beabe07eaefd">https://ndot.maps.arcgis.com/apps/webappviewer/index.html?id=00d23dc547eb4382bef9beabe07eaefd</a>
<i>Are the completeness and quality of the data consistent with the quality (not scale or detail) of inputs needed for a NEPA project-level analysis<sup>8</sup>?</i>
Yes, this study process was structured to facilitate a NEPA project-level analysis for the recommended corridor alternatives. However, due to the fast-paced development changes that occur in this vicinity, inputs to the travel demand model should be confirmed during project development to ensure no major changes in traffic patterns.
<i>Are the data used in the study regularly updated and augmented? If regularly updated, provide schedule and accessibility information.</i>
Yes, NDOT and RTC updates traffic and socioeconomic data regularly. Links for historical traffic data and crash data are presented above. FEMA updates flood mapping regularly, with new information readily available online: <a href="https://msc.fema.gov/portal/home">https://msc.fema.gov/portal/home</a> . Other sources of environmental data will be updated during subsequent NEPA technical studies.
<i>Have the environmental data been mapped at scales that facilitate comparison of effects across different resources and at sufficient resolution to guide initial NEPA issue definition? If not, what data collection and/or manipulation would likely be needed for application to the NEPA scoping process?</i>
Yes, data has been mapped at scales sufficient to guide initial NEPA scoping. However, further detailed environmental technical resource analyses will be required as part of subsequent NEPA studies.
<i>Did the study incorporate models of, for example, species/habitat locations (predictive range maps), future land use, population dynamics, stormwater runoff, or travel demand? What models were used? Did the study adequately document what models were used, who was responsible for their use, and how they were used (with respect to, for example, calibration, replicability, contingencies, and exogenous factors)?</i>
The study focused on travel demand modeling, drainage considerations, and socioeconomic dynamics, due to the urban setting of the corridor. Traffic analysis utilized the regional travel demand model and Aimsun subarea model. Documentation of the model inputs, assumptions, and calibration can be found as an appendix to the I-15 from Flamingo to Sahara Feasibility Study. No modeling of environmental resources were developed or used. Only readily available maps and reports were used, which may have been originally derived from modeling from the reporting federal agency (e.g., FEMA floodplain mapping).
<i>In scoping, conducting, and documenting the planning study, participants have come across documents and leads from agency staff and other sources that NEPA specialists may be able to use in conducting their studies. List any applicable memoranda of understanding, cost-share arrangements, programmatic agreements, or technical studies that are underway but whose findings are not yet published, etc.</i>
No additional sources have been identified at this time.

<sup>8</sup> For an explanation of the types of information needed to evaluate impacts in environmental documents, please see FHWA's "NEPA and Transportation Decisionmaking: Impacts," <[Analysis of Impacts](#)>. This website provides links to six additional resources and guidance that should be helpful in understanding the types of impacts that need to be assessed, their context, and their intensity.



Examine the Checklist for NEPA specialist, at the back of this document, for more detail about potential impacts that could be mapped. Below is an abbreviated list of resources that could occur in the study area and may be knowable at this time and at the study's various analytical scales:

Resource or issue	Is the resource or issue present in the area?	Would any future transportation policies or projects involve the issue? Would there be impacts on the resource?	Resource or issue	Is the resource or issue present in the area?	Would any future transportation policies or projects involve the issue? Would there be impacts on the resource?
Sensitive biological resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Section 4(f) <sup>9</sup> wildlife and/or waterfowl refuge, historic site, recreational site, park	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Wildlife corridors	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Section 6(f) <sup>10</sup> resource	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Wetland areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Existing development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Riparian areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Planned development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
100-year floodplain	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Title VI/ Environmental justice populations <sup>11</sup>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Prime or unique farmland or farmland of statewide or local importance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Visual resources	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Hazardous materials	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Designated scenic road/byway	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Sensitive noise receivers <sup>12</sup>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Archaeological resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Air quality	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Historical resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Other (list) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable

<sup>9</sup> Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S. Code § 303, as amended); see <[Section 4\(f\)](#)>.

<sup>10</sup> Section 6(f) of the Land and Water Conservation Fund Act

<sup>11</sup> refers to Title VI of the 1964 Civil Rights Act and 1994 Executive Order 12898 on environmental justice

<sup>12</sup> under FHWA's Noise Abatement Criterion B: picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals

<b>Development of alternatives</b>
<p><i>Were resource agencies, stakeholders, and members of the public engaged in the process of identifying, evaluating, and screening out modes, corridors, a range of alternatives,<sup>13</sup> or a preferred alternative (if one was identified—the latter two refer to corridor plans)? If so, how? Did these groups review the recommendation of a preferred mode(s), corridor(s), range of alternatives (including the no-build alternative), or an alternative? Were the participation and inputs of these groups at a level acceptable for use in purpose and need statements or alternatives development sections in NEPA documents? If not, why not?</i></p>
<p>A two-day alternatives concept workshop was convened early in the process to bring together the study team, various NDOT divisions, and agency stakeholders (i.e., City of Las Vegas, Clark County) to share data collection/analysis findings, define project need, gain consensus on the anticipated study outcome, and brainstorm alternatives and screening criteria. These stakeholders continued study involvement through monthly TAC meetings to review and provide input on study progress, including the definition of project need, data analysis, alternatives development, alternatives screening, preliminary concept design, and project recommendations. Input was continually solicited to ensure consensus on project process and recommendations to be carried forward into NEPA.</p> <p>An online public engagement effort was conducted in May/June 2021 to present findings and recommendations to the public for input and comment.</p> <p>Note: stakeholder involvement to date has not included casinos or other large landowners in the project vicinity. Their input is solicited through the public engagement efforts, and the next phase of study will include more focused coordination.</p>
<p><i>Describe the process of outreach to resource agencies, the public, and other stakeholders. Describe the documentation of this process and of the responses to their comments. Is this documentation adequate in breadth and detail for use in NEPA documents?</i></p>
<p>The outreach process included monthly progress meetings with NDOT and stakeholder partners, and a virtual town hall/public engagement event (in light of the COVID-19 pandemic). Monthly meetings were held via webinar, and included a progress update of all study activities, as well as a facilitated discussion to obtain input on pertinent decision points. Meeting minutes were distributed following each monthly TAC meeting for edits/revisions, and circulated back out to the team in a final format, documenting all decisions made, next steps, and any comment resolution required.</p>

<sup>13</sup> For an explanation of the development of alternatives in environmental documents, please see FHWA’s “NEPA and Transportation Decisionmaking: Development and Evaluation of Alternatives,” <[Alternatives](#)>.

*If the study was a corridor study, describe the range of alternatives or modes of transportation (if any) considered, screening process, and screening criteria. Include what types of alternatives were considered (including the no-build alternative) and how the screening criteria were selected. Was a preferred alternative selected as best addressing the identified transportation issue? Are alternatives' locations and design features specified?*

A detailed alternatives development and screening process was carried out to identify the candidate ideas to be studied in detail in the Feasibility Study.

The Alternatives Development Workshop was held in June 2019. Prior to the workshop, the project team collected data pertaining to existing conditions and operations of the corridor, right-of-way verification, crash information, utility information, adjacent project plans, past planning studies and other pertinent data. The first step was to review past studies, generate ideas and possible solutions based on purpose and need. Participants at the workshop developed 80 ideas that were prepared for the initial (Level 1) screening (e.g., geometric ramp changes, local street reconfigurations, lane widening, ITS/smart sign technology, etc.). Screening criteria were developed which include: safety, mobility, accessibility, compatibility with other plans/studies, implementability, environmental impacts, and schedule impact. Scoring criteria was established using a 0 – 4 scale from poor to best.

Next, the Level 1 screening reviewed the 80 ideas with a pass/fail determination to eliminate any ideas with fatal flaws. Twenty-three ideas were eliminated. Level 2 screening categorized the remaining ideas as either interim or ultimate solutions. Four interim ideas were identified, and the remaining 53 ultimate ideas were scored as part of the Level 2 screening. A cutoff was established for evaluating ultimate ideas, requiring a total idea score of 2.00 or greater to advance to the detailed screening process. Thirty ideas were eliminated, and 23 ideas were carried forward for quantitative evaluation.

Of the remaining 23 ideas, 7 ideas were deferred from further evaluation as other concepts would provide greater benefits with fewer impacts. The Level 3 screening categorized the 16 remaining ideas into three concept types: Southbound I-15, Northbound I-15, and interchange concepts. Three complete concepts for Southbound I-15, three complete concepts for Northbound I-15, and multiple interchange types at Flamingo Road and Spring Mountain Road were evaluated and scored. Recommendations from the Level 3 screening form the development of two full conceptual alternatives, which merge together several of the concepts evaluated. Build Alternative 1 combines Southbound Concept 3 and Northbound Concept 1 with the I-15/Flamingo Road tight diamond interchange and the No-Action with flyover reconstruction for the I-15/Spring Mountain Road interchange. This alternative addresses needed improvements from Flamingo Road to south of Sahara Avenue. Build Alternative 2 combines Southbound Concept 3 and Northbound Concept 3, with the I-15/Flamingo Road tight diamond interchange and the No-Action with flyover reconstruction for I-15/Spring Mountain Road interchange. This alternative addresses needed improvements from Tropicana Avenue to south of Sahara Avenue.

During agency review of the administrative draft Feasibility Study report, the City of Las Vegas requested that NDOT develop and evaluate an alternative that would not preclude the improvements under consideration for the City's MLK Extension Project; thus, both conceptual alternatives were also evaluated with minor modifications to shift I-15 approximately 30 feet to the east between Flamingo Road and Desert Inn Road. These modifications are identical for both alternatives.

Both Build Alternatives, including the "shift" alternatives, were evaluated using the evaluation criteria, with their performance compared against each other, along with a no-action alternative. Preliminary concept design plans were developed for each alternative.

Trade-offs exist between all alternatives. Both sets of alternatives are recommended to advance into NEPA.

The full range of concepts, screening results, and technical analysis can be found in the I-15 from Flamingo to Sahara Feasibility Report.

*Also regarding whether the study was a corridor study, for alternatives that were screened out, summarize the reasons for their rejection. Are defensible, credible rationale articulated for their being screened out? Did the study team take into account legal standards<sup>15</sup> needed in the NEPA process for such decisions? Did the study team have adequate information for screening out the alternatives?*

Are defensible, credible rationale articulated for their being screened out?

Yes, the I-15 from Flamingo to Sahara Feasibility Report and appendices discuss the alternatives development process, screening process, and results. Alternatives were screened out for fatal flaws or inability to meet the project's purpose and need.

Did the study team take into account legal standards<sup>14</sup> needed in the NEPA process for such decisions?

Coordination with FHWA-Nevada occurred as part of the corridor study and alternatives analysis to ensure the integrity of this process to lay the foundation for future NEPA actions, however legal standards did not form the basis for study decision-making.

Did the study team have adequate information for screening out the alternatives?

Yes, detailed data analyses provided justification to screen out alternatives.

<sup>14</sup> 23 Code of Federal Regulations (CFR) § 771.123(c), 23 CFR § 771.111(d), 40 CFR § 1502.14(a), 40 CFR § 1502.14(b) and (d), 23 CFR § 771.125(a)(1); see FHWA Technical Advisory T 6640.8A, October 30, 1987, <[FHWA Technical Advisory T 6640.8A](#)>.

<i>What issues, if any, remain unresolved with the public, stakeholders, and/or resource agencies?</i>
Both alternatives, however, would impact the natural and built environment and require additional coordination on how impacts will be addressed (e.g., right-of-way, utility relocation, structural changes, etc.). Additionally, because of the COVID-19 pandemic, public outreach efforts were modified from in-person public meeting to a virtual town hall format. Continued engagement and consensus-building with the public around the recommended alternatives is necessary in the next round of study. Additionally, one-on-one coordination with resource agencies that may be impacted or have decision-making responsibilities during NEPA will be required (e.g., Army Corps of Engineers).
<b>Identification of potential environmental mitigation activities</b>
<i>Could the transportation planning process be integrated with other planning activities, such as land use or resource management plans? If so, could this integrated planning effort be used to develop a more strategic approach to environmental mitigation measures?</i>
Improvements to I-15 and intersecting roadways will be integrated with local land use planning. Both Clark County and the City of Las Vegas are on the TAC and have regularly participated in the study process for the study duration. Study recommendations will also be integrated into RTC's regional air quality modeling.
<i>With respect to potential environmental mitigation opportunities at the PEL level, who should NDOT consult with among federal, State, and local agencies and tribes, and how formally and frequently should such consultation be undertaken?</i>
NDOT should continue to coordinate with the project's TAC, which is comprised of the local and regional planning authorities responsible for this project area. The formality and frequency of the coordination is dependent on the timing of implementation. As additional NEPA technical resource analyses occur, coordination will be required for areas requiring permitting, such as with the U.S. Army Corps of Engineers.
<b>Formally joining PEL with the NEPA process</b>
<i>Lead federal agencies proposing a project that will undergo the NEPA process will want to most effectively leverage the transportation planning study's efforts and results. How could a Notice of Intent (for an environmental impact statement<sup>15</sup>) refer to the study's findings with respect to preliminary purpose and need and/or the range of alternatives to be studied?</i>
The I-15 from Flamingo to Sahara Feasibility Study summarizes the overall purpose and need, alternatives development and evaluation process, and recommendations of corridor alternatives identified for further study. This report should be incorporated by reference in a Notice of Intent or Intent to Study notification, depending on level of NEPA documentation.
<i>Could a Notice of Intent in the NEPA process clearly state that the lead federal agency or agencies will use analyses from prior, specific planning studies that are referenced in the transportation planning study final report? Does the report provide the name and source of the planning studies and explain where the studies are publicly available? If not, how could such relevant information come to the NEPA specialists' attention and be made available to them in a timely way?</i>
Yes, technical documents prepared as part of this study are appended to the I-15 from Flamingo to Sahara Feasibility Study and include detailed information regarding data analysis and findings that may contribute to future NEPA analysis.
<i>List how the study's proposed transportation system would support adopted land use plans and growth objectives.</i>
The recommendations included in the study are in response to the growth and development of the surrounding Resort Corridor area. Relevant data points of development plans within the City of Las Vegas and Clark County have been incorporated into the regional travel demand model to capture anticipated additional traffic needs and other transportation considerations that are a direct result of land use changes.
<i>What modifications are needed in the goals and objectives as defined in the transportation study process to increase their efficient and timely application in the NEPA process?</i>
No modifications are required.

<sup>15</sup> While Notices of Intent are required by some federal agencies for environmental assessments, they are optional for FHWA. Please see "3.3.2 Using the Notice of Intent to Link Planning and NEPA," in *Guidance on Using Corridor and Subarea Planning to Inform NEPA* (Federal Highway Administration, April 5, 2011), <[Notice of Intent](#)>.

*Jurisdictional delineations of waters of the United States frequently change. Housing and commercial developments can alter landscapes dramatically and can be constructed quickly. Noise and air quality regulations can change relatively rapidly. Resource agencies frequently alter habitat delineations to protect sensitive species. Will the study data's currency, relevance, and quality still be acceptable to agencies, stakeholders, and members of the public for use in the NEPA process? If not, what will be done to rectify this problem? Who will be responsible for any needed updating?*

Yes, pursuant to 23 U.S.C. 168 the data should remain relevant within the 5 year period ending on the date on which the information is adopted or incorporated by reference, however it will be verified that all data remains current. NDOT will ensure this occurs during the NEPA process.

### Other issues

Are there any other issues a future NEPA study team should be aware of (mark all that apply)? In the space below the check boxes, explain the nature and location of any issue(s) checked.

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Public and/or stakeholders have expressed specific concerns | <input type="checkbox"/> Contact information for stakeholders                                     |
| <input checked="" type="checkbox"/> Utility problems  | <input type="checkbox"/> Special or unique resources in the area                                  |
| <input checked="" type="checkbox"/> Access or right-of-way issues                               | <input type="checkbox"/> Federal regulations that are undergoing initial promulgation or revision |
| <input checked="" type="checkbox"/> Encroachments into right-of-way                             | <input type="checkbox"/> Other _____  |
| <input checked="" type="checkbox"/> Need to engage—public, resource agencies                    |   |

There are many major utilities in the study area that will need to be considered for relocation or protection during design and construction.

Continued coordination on potential right-of-way impacts and geotechnical issues should continue into the next phase of study.

As the City of Las Vegas moves forward with the southern extension of MLK Boulevard, NDOT should coordinate design and improvement needs together with this project.

Due to the COVID-19 pandemic, public outreach was limited. While information was made available via the internet, more targeted outreach should occur to ensure all stakeholders and community members are aware of project recommendations and next steps.



**Concurrence**

By signature, we concur that the transportation planning document meets or exceeds the following criteria in terms of acceptability for application in NEPA projects:

- Public involvement (outreach and level of participation)
- Stakeholder involvement (outreach and level of participation)
- Resource agencies' involvement and participation
- Documentation of the above efforts
- Applicability of the general findings and conclusions for use, by reference, in NEPA documents

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_      Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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**NAME**  
**Assistant Division Administrator – Nevada**  
 Federal Highway Administration

## Checklist for NEPA Specialists – Part 3

By completing this checklist, NEPA specialists will be able to systematically evaluate the transportation planning study with regard to environmental resources and issues. It provides a framework for future NEPA studies by identifying those resources and issues that have already been evaluated, and those that have not. The role of NEPA specialists during the study's various stages is laid out in the flowchart on page 4. This role includes timely advocacy for resources and issues that will later be integral to NEPA processes.

### Checklist for NEPA specialists

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
<b>Natural environment</b>				
Sensitive biological resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Wildlife corridors	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Invasive species	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Wetland areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Riparian areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
100-year floodplain	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Analysis of FEMA flood zones was carried out during this study, with findings in the I-15 from Flamingo to Sahara Feasibility Report and detailed appendices; further analysis of how the recommended alternative may impact this resource and what mitigation may be required should be carried out during NEPA.
Clean Water Act Sections 404/401 waters of the United States	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Limited review conducted; jurisdictional status to be verified during NEPA process.
Prime or unique farmland	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Farmland of statewide or local importance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.

## Checklist for NEPA specialists

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
Sole-source aquifers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; no known resources.
Wild and scenic rivers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Visual resources	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Visual resources impacts will be assessed against a highly developed urbanized corridor; but a visual impact assessment was not conducted.
Designated scenic road/byway	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	I-15 is not a designated scenic byway, however Las Vegas Boulevard, parallel to I-15, from Sahara Avenue to Washington Avenue is designated a National Scenic Byway.
<b>Cultural resources</b>				
Archaeological resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Historical resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Age of the surrounding city makes it likely there are historical resources of sufficient age along the corridor. Detailed assessment to be conducted during NEPA process.
<b>Section 4(f) and Section 6(f) resources</b>				
Section 4(f) wildlife and/or waterfowl refuge	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; highly developed urbanized corridor; no known resources.
Section 4(f) historic site	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Limited review conducted of Nevada State Register of Historic Places and National Register of Historic Places; no known Section 4(f) sites. Detailed assessment to be conducted during NEPA process.
Section 4(f) recreational site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; no known resources.
Section 4(f) park	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; no known resources.
Section 6(f) resource	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Limited review conducted; no known resources.

**Checklist for NEPA specialists**

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
<b>Human environment</b>				
Existing development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Alternatives development considered all adjacent developments, and potential impacts to properties are documented in the I-15 from Flamingo to Sahara Feasibility Study. Additional documentation and coordination will be required upon development/ refinement of corridor alternatives during NEPA.
Planned development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Alternatives development considered all planned developments, and potential impacts are documented in the I-15 from Flamingo to Sahara Feasibility Study. Additional documentation and coordination will be required upon development/ refinement of corridor alternatives during NEPA.
Displacements	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Impacts are unknown at this time and are dependent upon development/refinement of corridor alternatives during NEPA.
Access restriction	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Access changes are likely and preliminary findings are discussed in the I-15 from Flamingo to Sahara Feasibility Study, but specifics are unknown until further study and refinement occur during NEPA.
Neighborhood continuity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Adjacent properties are mostly commercial/hospitality-based or industrial, but there are limited residential areas in the study area.
Community cohesion	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Not reviewed as part of this analysis.
Title VI/Environmental justice populations	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Unknown at this time; Adjacent properties are mostly commercial/hospitality-based or industrial, but there are limited residential areas in the study area. analysis will be required during the NEPA process.
<b>Physical environment</b>				
Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Preliminary utilities coordination is documented in the I-15 from Flamingo to Sahara Feasibility Report; further analysis will be required during NEPA upon development/refinement of corridor alternatives.
Hazardous materials	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Unknown at this time; further analysis will be required during NEPA upon development/ refinement of corridor alternatives.
Sensitive noise receivers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Unknown at this time; assumed to be present based on proximity to hospitality facilities and some residential areas. Further analysis will be required during NEPA upon development/ refinement of corridor alternatives.

**Checklist for NEPA specialists**

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
Air quality	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Clark County is designated as a marginal nonattainment area; to be further evaluated in future NEPA process.

Identification of potential environmental mitigation activities
<i>Off-site and compensatory mitigation areas are often creatively negotiated to advance multiagency objectives or multiple objectives within one agency. Who determined what specific geographic areas or types of areas were appropriate for environmental mitigation activities? How were these determinations made?</i>
N/A
<i>To address potential impacts on the human environment, what mitigation measures or activities were considered and how were they developed and documented?</i>
No specific mitigation activities were advanced as part of this study.

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_ Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

**Christopher Young** Jackie Kuechenmeister, AICP  
**NDOT Environmental Services Manager** PEL Lead  
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## NDOT I-15 from Flamingo to Sahara Feasibility Study

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