I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Alternatives Development and Screening Methodology Report

I-15 Farmington to Salt Lake City Environmental Impact Statement

Lead agency:
Utah Department of Transportation

April 7, 2022

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the Utah Department of Transportation (UDOT) pursuant to 23 United States Code 327 and a Memorandum of Understanding dated January 17, 2017, extended to April 29, 2022, and executed by the Federal Highway Administration and UDOT.

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1.0 Introduction

This report describes the concepts and alternatives development and screening process that will be used for the Interstate 15 (I-15) Farmington to Salt Lake City Environmental Impact Statement (EIS). The Utah Department of Transportation (UDOT) is preparing the EIS to evaluate transportation improvements on I-15 between Farmington and Salt Lake City (Figure 1). A summary of the purpose of and need for the project is provided in Section 2.2.1, *Level 1 Screening*.

What is the purpose of this report?

This report describes the concepts and alternatives development and screening process that will be used for the I-15 EIS.

The Federal Highway Administration (FHWA) has assigned its responsibilities under the National Environmental Policy Act (NEPA) and other federal environmental laws to UDOT for highway projects in Utah, pursuant to 23 United States Code (USC) Section 327, in a Memorandum of Understanding (MOU) dated January 17, 2017, and extended to April 29, 2022. In accordance with the assignment MOU, UDOT is carrying out the environmental review process for the I-15 Project in lieu of FHWA and serves as the lead agency in the NEPA process. The assignment MOU does not change the roles and responsibilities of any other federal agency whose review or approval is required for the project.

What is a concept?

A concept is a preliminary alternative. The term *concept* is used before screening, and the term *alternative* is used after screening on this project.

The concepts and alternatives development and screening process will consist of the following four phases:

1. Develop initial concepts for I-15 mainline, interchanges, and multimodal connectivity improvements.
2. Apply first-level (Level 1, purpose and need) screening criteria to eliminate concepts that do not meet the purpose of and need for the project. Refine the concepts that pass first-level screening for further evaluation in second-level screening.
3. Apply second-level (Level 2, impacts) screening criteria to eliminate concepts that meet the purpose of and need for the project but would be unreasonable for other reasons—for example, a concept that would have unreasonable impacts to the natural and human environment, would not meet regulatory requirements, or could be replaced by a less costly concept with similar impacts to the natural and human environment.
4. Combine concepts that pass Level 2 screening into alternatives and conduct preliminary engineering. The alternatives will be refined to avoid and minimize impacts to the natural and human environment and will be designed to a higher level of detail before UDOT performs the detailed impact analyses for the EIS.

Figure 2 presents an overview of the alternatives development and screening process.

Figure 1. I-15 EIS Study Area

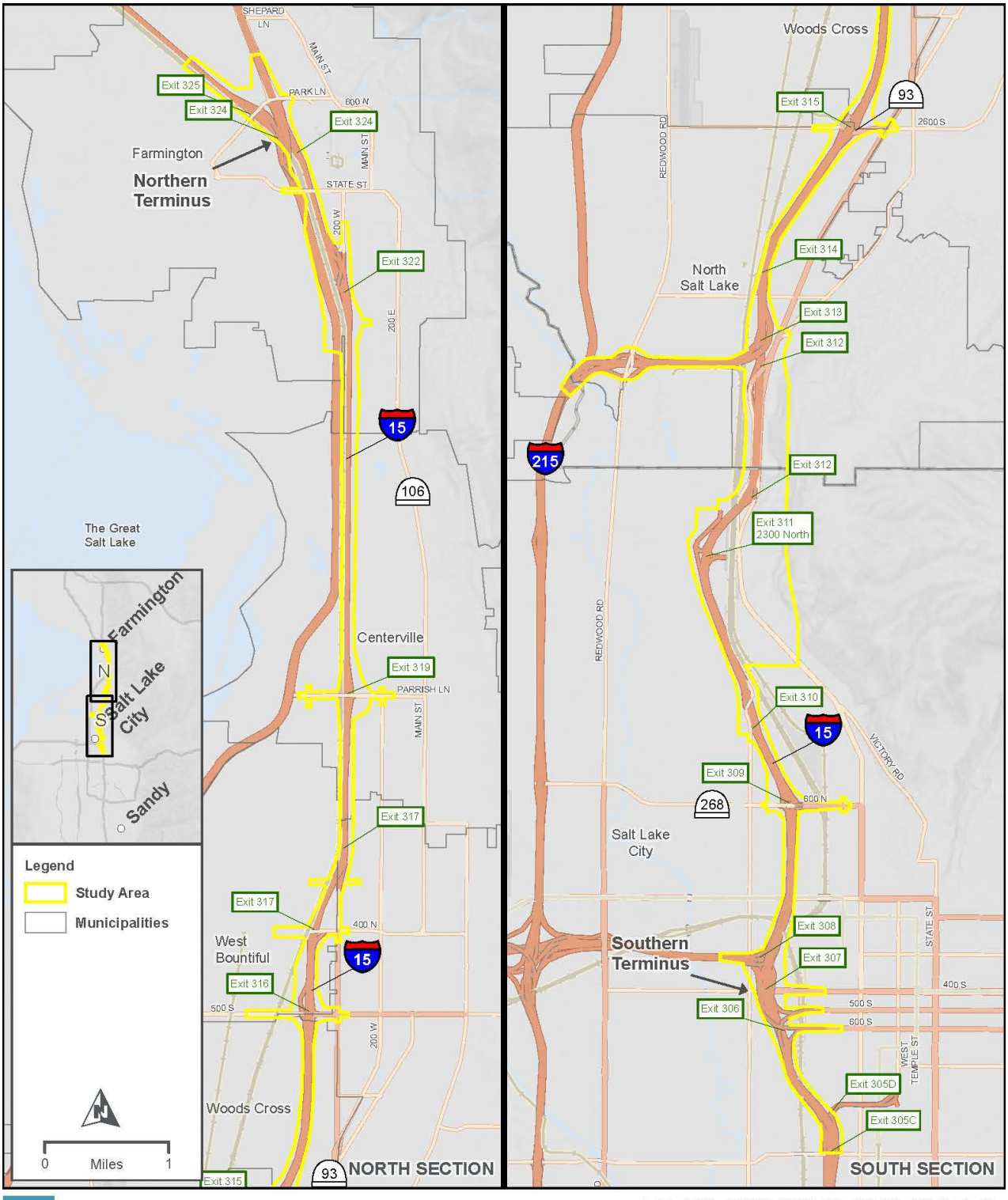
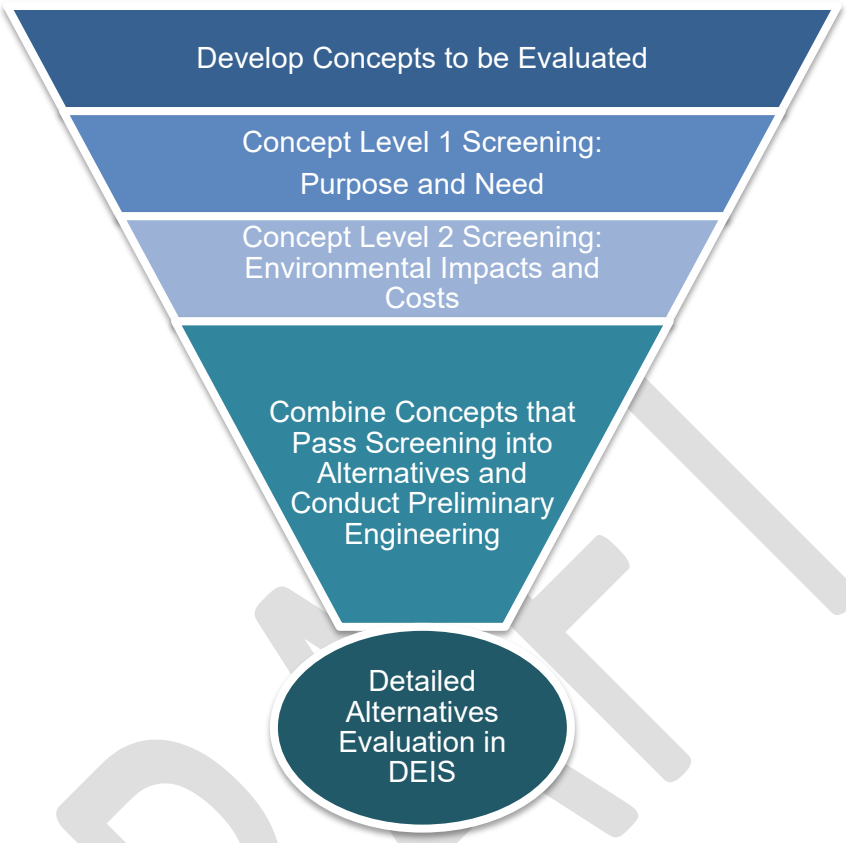


Figure 2. Overview of the I-15 EIS Alternatives Development and Screening Process



The alternatives development and screening process described in this report will provide critical information about how well an alternative or concept satisfies the project's purpose and whether it is reasonable under NEPA, practicable under the Clean Water Act, and prudent and feasible under Section 4(f) of the Department of Transportation Act of 1966. For more information regarding regulations considered in this screening process, see Section 4.0, *Reasons Why Alternatives or Concepts Might Be Eliminated*. The results of the screening process will be presented in a memorandum and summarized in the EIS.

The alternatives development and screening process is designed to be dynamic. If a new concept is developed later in the process, it will be subject to the same screening process as all of the other concepts, as described in this report. The No-Action Alternative is not subject to the screening process because evaluation of the No-Action Alternative is a requirement of NEPA; the No-Action Alternative will be fully evaluated in the EIS.

2.0 Alternatives Development and Screening Process

2.1 Concept Development Phase

UDOT will develop an initial list of concepts to be evaluated from previous studies and from local and regional land-use and transportation plans. UDOT will also solicit public and agency input on concepts during the formal scoping public comment period in the spring of 2022. In general, the basic concepts could include:

- Capacity improvements to I-15 such as adding general-purpose, high-occupancy, or auxiliary lanes and interchange improvements
- Additional or modified accesses to and from I-15
- Additional or modified road, bicycle, and pedestrian crossings of I-15
- Additional or modified multimodal connections to FrontRunner stations, regional transit access, and trails
- Transportation System Management (TSM) solutions
- Combinations of any of the above
- Other reasonable concepts identified during the EIS process

All proposed concepts will be developed to an equal level of detail to allow for objective screening. To accommodate Level 1 screening, UDOT will develop the proposed concepts in enough detail to evaluate traffic operations on I-15 or at the I-15 interchanges.

2.2 Screening Phase (Level 1 and Level 2 Screening)

The screening phases test each of the initial concepts using criteria that identify whether the concept meets the purpose of the project (Level 1 screening) and then evaluates the concept's impacts to the natural and human environment, estimated project costs, logistical considerations, and overall feasibility (Level 2 screening).

After the initial list of concepts is developed for I-15 mainline, interchanges, and multimodal connectivity, the concepts will go through the Level 1 screening process. The concepts that pass first-level screening will be refined for Level 2 screening.

The concept screening phases will be supported by technical analyses to help UDOT refine the concepts and identify those concepts that meet the purpose of the project. This report explains how the process will occur and the criteria that will be applied. The results of the screening process will be documented in a separate screening report.

2.2.1 Level 1 Screening

During the Level 1 screening phase, each of the initial concepts will be evaluated using criteria that identify whether the concept meets the purpose of the project.

What is the purpose of Level 1 screening?

The purpose of Level 1 screening is to determine which concepts meet the project's purpose and eliminate concepts that do not meet the purpose of the project.

The purpose of Level 1 screening is to determine which concepts meet the project's purpose and eliminate concepts that do not meet the project's purpose. Concepts that are determined by UDOT to not meet the purpose of the project will be considered unreasonable for NEPA purposes, not practicable for Clean Water Act Section 404(b)(1) purposes, not prudent or feasible for Section 4(f) purposes, and not practical for Section 6(f) conversion purposes. Such concepts will not be carried forward for further analysis. The basis for that determination will be documented in the screening results memorandum. For more information, see Section 4.0, *Reasons Why Alternatives or Concepts Might Be Eliminated*.

Purpose of the Project

The purpose of the I-15 project is to improve safety, replace aging infrastructure, provide better mobility for all travel modes, strengthen the state and local economy, and better connect communities along I-15 from Farmington to Salt Lake City. Meeting the project purpose is measured by whether or how well a concept addresses the following objectives, which are organized by UDOT's Quality of Life Framework categories of Good Health, Connected Communities, Strong Economy, and Better Mobility.

Improve Safety

- Improve the safety and operations of the I-15 mainline, interchanges, bicycle and pedestrian crossings, and the supporting roadway network.

Better Connect Communities

- Be consistent with planned land use, growth objectives, and transportation plans.
- Enhance access and connectivity to FrontRunner, to regional transit and trails, and across I-15.

Strengthen the Economy

- Replace aging infrastructure on I-15.
- Enhance the economy by reducing travel delay on I-15.

What is travel demand?

Travel demand is the expected number of transportation trips in an area. Travel demand can be met by various modes of travel, such as automobile, bus, commuter rail, carpooling, and bicycling.

Improve Mobility for All Modes

- Improve mobility and operations on the I-15 mainline, I-15 interchanges, the supporting roadway network, transit connections, and bicyclist and pedestrian facilities to help accommodate projected travel demand in 2050.

Level 1 Screening Criteria

UDOT developed Level 1 screening criteria based on the need to improve safety, reliability, and mobility on I-15 and its interchanges from Farmington to Salt Lake City. The initial concepts will be screened against criteria pertaining to travel demand, safety, and pedestrian and bicycle access and connectivity (Table 1). To accommodate Level 1 screening, UDOT will develop the initial concepts in enough detail to allow UDOT to use the Wasatch Front Regional Council's (WFRC) travel demand model to forecast the future traffic volumes and associated congestion for I-15. (For more information about the travel demand model, see Section 5.1, *Travel Demand and Microsimulation Model*.)

When UDOT reviews the Level 1 screening results, the initial concepts will be eliminated if they fail to meet the Level 1 screening criteria. The concepts that pass first-level screening will be refined and advanced to Level 2 screening.

Table 1. Level 1 Screening Criteria (Purpose and Need)

Quality of Life Category	Criterion	Measure
Improve Safety	Improve the safety and operations of the I-15 mainline, interchanges, bicycle and pedestrian crossings, and the supporting roadway network.	• Does the concept meet UDOT's safety standards (such as curvature, lane and shoulder widths, access, and sight distance)? • Does the concept meet UDOT's operational standards (such as traffic weaving, ramp operations, queuing, etc.)? • Can the concept be designed to reduce conflicts between motorized and nonmotorized modes? • Does the concept improve bicycle and pedestrian accommodations at cross streets or interchanges?
Better Connect Communities	Be consistent with planned land use, growth objectives, and transportation plans.	• Is the concept consistent with land use and transportation plans? (Yes/No)
	Enhance access and connectivity to FrontRunner, to regional transit and trails, and across I-15.	• Can the concept be designed to improve connectivity to FrontRunner stations? (Yes/No) • Can the concept be designed to enhance multimodal access across I-15 and connectivity to regional trails? (Yes/No)
Strengthen the Economy	Replace aging infrastructure on I-15.	• Does the concept address I-15 aging infrastructure needs? (Yes/No)
	Enhance the economy by reducing travel delay on I-15.	• Does the concept reduce daily hours of delay on I-15, interchanges, and cross streets in 2050?
Improve Mobility for All Modes	Improve mobility and operations on the I-15 mainline, I-15 interchanges, the supporting roadway network, transit connections, and bicyclist and pedestrian facilities to help accommodate projected travel demand in 2050.	• Does the concept decrease through-traffic travel time on I-15 during the AM and PM peak periods?[a] • Does the concept improve average speed on I-15 during the AM and PM peak periods?[a]

[a] Both of these metrics will compare traffic conditions with the concepts versus the no-action conditions during the AM and PM peak 4-hour periods in 2050. Peak periods are the periods of the day with the greatest amounts of traffic. For the I-15 project, the AM (morning) peak period is from 6 AM to 10 AM, and the PM (afternoon) peak period is from 3 PM to 7 PM.

2.2.2 Level 2 Screening

The purpose of Level 2 screening is to identify concepts that are practicable and reasonable and eliminate concepts that are not practicable and reasonable. During Level 2 screening, UDOT will collectively evaluate the concepts that passed Level 1 screening against criteria that focus on the concepts' impacts to the natural and built environment, estimated project costs, logistical considerations, and technological feasibility.

What is the purpose of Level 2 screening?

The purpose of Level 2 screening is to identify concepts that are practicable and reasonable and eliminate concepts that are not practicable and reasonable.

Although public and agency involvement is critical throughout the entire concepts development and screening process, the comments received from the public and agencies during the public scoping period will be particularly relevant during Level 2 screening. Several of the Level 2 screening criteria focus on local and community elements and regulated resources, so the public and agency scoping comments that pertain to these elements will be critical to this phase of screening.

Table 2 lists the Level 2 screening criteria.

Table 2. Level 2 Screening Criteria (Impacts)

Criterion	Measure
Impacts to the natural environment	• Acres and types of aquatic resources (wetlands, streams, and springs)[a] • Linear feet of ditches and creeks affected • Acres of floodplains affected
Access to transit and nonmotorized facilities	• Number and relative quality of connections to regional transit facilities and regional trails
Impacts to Section 4(f) and Section 6(f) resources	• Number and type of Section 4(f) uses[b] • Number and type of Section 6(f) conversions[b]
Impacts to the built environment	• Number and area of parks, trails, and other recreation resources • Number of community facilities • Number of potential property acquisitions, including residential and business relocations • Number of cultural resources (for example, historic and archaeological resources) affected • Assessment of the potential impacts and benefits to low-income or minority populations (environmental justice populations)[c]
Cost, technology, and logistics	• Estimated project cost (general) • Constructability given available technology • Logistical considerations

[a] Consistent with the avoidance and minimization concepts of the Clean Water Act, a concept with the potential to impact a substantially greater number of delineated aquatic features could be eliminated from detailed study in the EIS. However, UDOT will not eliminate a concept from detailed study in the EIS unless it is clear that the concept would not comply with the Section 404(b)(1) Guidelines. For more information, see Section 4.2, *Clean Water Act Requirements*.

[b] Based on the requirements of Section 4(f) of the Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act of 1965, a concept with substantially greater Section 4(f) or Section 6(f) impacts could be eliminated from detailed study in the EIS. For more information, see Section 4.3, *Section 4(f)/Section 6(f) Requirements*.

[c] Areas with higher percentages of low-income or minority populations are identified using U.S. Census data.

The overall process for Level 2 screening will be as follows:

- The team will develop basic alignments and footprints, including rights of way, for the concepts carried forward from Level 1 screening. During this step, the team will adjust or modify the concept design to try to minimize impacts to natural resources and the built environment. (Concepts that pass Level 2 screening will be further refined during the engineering process.)
    - Project engineers will review the concepts to make sure they continue to meet basic requirements for roadway design and safety.
- Project engineers will evaluate the concepts for costs, logistical considerations, and technological feasibility and will determine whether any of the concepts would have substantially greater impacts or costs without having substantially greater benefits.
- The team will convert the concepts' footprints to geographic information systems (GIS) format, and a GIS analysis will be performed to determine the amount of resource impacts for each concept.
- The concepts' effects on the resources listed above in Table 2 will be compared to determine the reasonable concepts that will be advanced for detailed analysis in the Draft EIS.

Using the information gathered from Level 2 screening, UDOT will determine which concepts should be combined into corridor-wide alternatives to study in detail in the EIS. More information about each of these steps is provided below.

Estimate Impacts to Natural Resources and the Built Environment. Using GIS software, UDOT will estimate how each concept that passed Level 1 screening might affect resources such as wetlands and other waters of the United States, Section 4(f) and Section 6(f) resources, existing and planned parks and trail systems, cultural resources, and community facilities such as schools, senior centers, fire stations, and community gathering places. The amount of impacts will be determined by overlaying the estimated right of way for each concept on the GIS datasets for these resources. UDOT will use the same approach to identify the expected number of impacts to homes and businesses, property acquisitions, and community and environmental justice impacts.

What are Sections 4(f) and 6(f)?

For more information about Sections 4(f) and 6(f), see Section 4.3, *Section 4(f)/ Section 6(f) Requirements*.

Compare Impacts and Costs to Benefits. UDOT will use the screening results to determine whether any of the concepts would have substantially greater impacts or costs without having substantially greater benefits. Concepts that have the same or similar benefits as other concepts but have substantially greater impacts or costs will be eliminated and considered unreasonable for NEPA purposes.

Evaluate Concepts for Consistency with Permitting Requirements. UDOT will evaluate the concepts independently for their consistency with applicable permitting requirements. If the impact assessment indicates that an individual Section 404 permit could be required for one or more concepts, UDOT will consider whether a concept is likely to be practicable for Clean Water Act Section 404(b)(1) purposes. If UDOT determines that the concept is likely to be practicable and could have less adverse impacts to the aquatic environment than other concepts, it will be retained for detailed analysis in the EIS.

If the impact assessment indicates that a Section 4(f) use with greater–than–*de minimis* impact could be required for one or more concepts, UDOT will consider whether a concept is prudent and feasible for Section 4(f) purposes. If a concept is found by UDOT to be prudent and feasible and to have less adverse impacts to Section 4(f) resources than other concepts, it will be retained for detailed analysis in the EIS.

For more information, see Section 4.0, *Reasons Why Alternatives or Concepts Might Be Eliminated*.

The concepts that pass Level 2 screening will be further refined for detailed analysis as alternatives in the Draft EIS.

2.3 Preliminary Engineering Phase

The concepts that pass the screening process will be combined into alternatives (alternatives are a combination of concepts for I-15 mainline, interchanges, and multimodal connectivity improvements). The alternatives will be further developed through preliminary engineering to support detailed analysis in the EIS. The preliminary engineering phase will include design work to provide details such as horizontal and vertical alignments; right-of-way needs; interchange design; parking lot, trail, and bicycle lane configurations; access design; and potential drainage designs. All alternatives will be designed to a similar level of detail.

Once the preliminary engineering phase is complete, the expected effects of the alternatives will be characterized and compared to the No-Action Alternative in the EIS, as required by NEPA.

3.0 Agency and Public Involvement

UDOT will make this *Alternatives Development and Screening Methodology Report* available to the public, agencies, and tribal representatives for review and comment as part of the agency and public scoping period held during the spring of 2022 for the project. UDOT will also seek input on the range of concepts during the agency and public scoping period. The agency review process will be consistent with the coordinated environmental review process for “major projects” under 23 USC Section 139.

Following the screening process, UDOT will prepare an alternatives screening report technical memorandum and will present the results of the alternatives screening process to the public, agencies, and tribal representatives for their review and comment. This review period will include agency and public meetings. The alternatives screening report and supporting information will be posted on the project website.

UDOT will consult with Native American tribes under NEPA, Section 106 of the National Historic Preservation Act, and the coordinated environmental review process under 23 USC Section 139.

The final version of the alternatives screening results technical memorandum will document the input UDOT received from agencies and the public, and how UDOT considered the input during the screening process. This information will also be summarized in the EIS.

4.0 Reasons Why Alternatives or Concepts Might Be Eliminated

4.1 NEPA Regulations and Council on Environmental Quality Guidance

According to NEPA regulations and guidance issued by the Council on Environmental Quality, there are three primary reasons why an alternative or concept might be determined to be not reasonable and eliminated from further consideration.

1. The alternative or concept does not satisfy the purpose of the project (evaluated in the Level 1 screening for the I-15 EIS Project).
2. The alternative or concept meets the purpose of the project but is unreasonable based on a combination of other factors such as costs, logistical or technical issues, environmental impacts, or its inability to meet permitting or other regulatory requirements (evaluated in the Level 2 screening).
3. The alternative or concept substantially duplicates another alternative or concept; that is, it is otherwise reasonable but offers little or no advantage for satisfying the project's purpose, and it has impacts and/or costs that are similar to or greater than those of other, similar alternatives or concepts (evaluated in the Level 2 screening).

4.2 Clean Water Act Requirements

Because the area of analysis for the project might support federally regulated wetlands or other waters of the United States, UDOT will also consider compliance with the permitting requirement under Section 404 of the Clean Water Act during the concept development phase and the identification of alternatives for review in the EIS. If it appears that an individual Section 404 permit could be required, UDOT would consider the Clean Water Act Section 404(b)(1) Guidelines for Dredged or Fill Material (40 Code of Federal Regulations Part 230) and Executive Order 11990, *Protection of Wetlands*, during the concept development phase. The U.S. Army Corps of Engineers is responsible for determining compliance with the Section 404(b)(1) Guidelines and may permit only the least environmentally damaging practicable alternative.

The Section 404(b)(1) Guidelines state that "no discharge of dredged or fill material [to Section 404–regulated waters] shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" [Section 230.10(a)]. This section of the guidelines further states that:

1. For the purpose of this requirement, practicable alternatives include but are not limited to:
    a. Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters;
    b. Discharges of dredged or fill material at other locations in waters of the United States or ocean waters;
2. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered.
3. Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in Subpart E of the guidelines) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not water dependent), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

If impacts to wetlands and other waters of the United States would be large enough that an individual Section 404 permit will be required, UDOT, in coordination with the U.S. Army Corps of Engineers, will demonstrate through an evaluation of alternatives in the EIS that the alternative selected in the project's Record of Decision is the least environmentally damaging practicable alternative under the Section 404(b)(1) Guidelines.

4.3 Section 4(f)/Section 6(f) Requirements

Pursuant to 23 USC Section 327 and the NEPA Assignment Memorandum of Understanding between FHWA and UDOT, UDOT is responsible for compliance with Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC Section 303), and with applicable provisions of Section 6(f) of the Land and Water Conservation Fund Act of 1985, as amended (54 USC Section 2003).

Section 4(f) applies to certain publicly owned parks, recreation areas, wildlife and waterfowl refuges, and historic properties that are listed on or eligible for listing on the National Register of Historic Places.

Section 4(f) prohibits USDOT agencies from approving the use of any Section 4(f) land for a transportation project, except as follows:

- First, the USDOT agency can approve the use of Section 4(f) land by making a determination that (1) there is no prudent and feasible alternative that would avoid the use of the Section 4(f) resource *and* (2) the project includes all possible planning to minimize harm to that property, and, if there is more than one alternative with a use of Section 4(f) property with greater–than–*de minimis* impacts, the alternative would have the least overall harm in light of Section 4(f)'s preservation purpose.
- Second, the USDOT agency can approve the use of Section 4(f) property by making a finding of *de minimis* impact for that property.

What is a *de minimis* impact?

For publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that would not adversely affect the activities, features, or attributes of the property.

For historic sites, a finding of *de minimis* impact means FHWA has determined that either the project would not affect the historic property or the project would have "no adverse effect" on the historic property.

A concept that would not be available because of the severity of Section 4(f) impacts could be eliminated during Level 2 screening. To achieve compliance with the Section 4(f) regulations, UDOT will need to demonstrate through an evaluation of alternatives or concepts that either (1) the alternative or concept selected would have a *de minimis* use of the Section 4(f) property or (2) there is no feasible and prudent alternative or concept that would avoid the use of the Section 4(f) property, and the concept or alternative includes all possible planning to minimize harm to Section 4(f) resources, and, if there is more than one alternative or concept with a use of Section 4(f) property with greater-than–*de minimis* impacts, the alternative or concept would have the least overall harm in light of Section 4(f)'s preservation purpose.

Section 6(f) of the Land and Water Conservation Act requires that the conversion of lands or facilities acquired with Land and Water Conservation Act funds be approved by the U.S. Department of the Interior. Approval requires consideration of whether there are practical alternatives or concepts that would avoid the conversion of the land and, if not, "substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location." A concept that would not be available because of the severity of Section 6(f) impacts could be eliminated during Level 2 screening.

5.0 Tools Used

5.1 Travel Demand and Microsimulation Models

A travel demand model is a computer model that predicts the number of transportation trips (travel demand) in an area at a given time. This prediction is based on projections of land use, socioeconomic patterns, and transportation system characteristics in the area.

What is a travel demand model?

A travel demand model is a computer model that predicts the number of transportation trips (travel demand) in an area at a given time.

UDOT will use the output from WFRC's travel demand model version 8.3.2 to determine whether an alternative meets the traffic-related purposes (delay, travel time, and average speed) of the I-15 project.

Microsimulation will also be used for the traffic modeling analysis because of its ability to analyze complex interchange configurations. Specifically, PTV Group's VISSIM software will be used to determine whether a concept meets the measures of effectiveness for operational standards. Traffic densities, speeds, and travel times will be analyzed at the mainline, merge segments, and diverge segments for the action and no-action conditions.

5.2 GIS Data

GIS-based data will be used during the screening phases to help UDOT understand the locations and extents of several resources. Some GIS data are managed by the State of Utah, the federal government, Cities, or Counties and are readily available to UDOT. The data that will be checked regularly include data layers that show streets, parcels, land ownership, parks, and land use designations. UDOT will also use other data layers available from the State that provide information such as the locations of rivers, streams, and water bodies; jurisdictional boundaries (such as city and county boundaries); critical habitats; and geology.

UDOT is also developing GIS databases through reconnaissance-level field surveys in the I-15 study area. The specific data layers that UDOT is creating and that will be used during Level 2 screening include wetland locations and types, Section 4(f) resources, Section 6(f) resources, and cultural (prehistoric and historic) resources.