I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

APPENDIX 2A

Alternative Development and Screening Report

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I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Alternatives Development and Screening Report

I-15 Environmental Impact Statement Farmington to Salt Lake City

Lead agency:
Utah Department of Transportation

September 2023

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Acronyms and Abbreviations

BRT	bus rapid transit
CD	collector-distributor
CFR	Code of Federal Regulations
DDI	diverging diamond interchange
D&RGW	Denver and Rio Grande Western Rail
EIS	environmental impact statement
FHWA	Federal Highway Administration
GIS	geographic information systems
GP	general-purpose (lane)
HOT	high-occupancy/toll (lane)
I-15	Interstate 15
I-215	Interstate 215
I-80	Interstate 80
MOU	Memorandum of Agreement
NB	northbound
NEPA	National Environmental Policy Act
NOI	Notice of Intent
RTP	Regional Transportation Plan
SB	southbound
SPUI	single-point urban interchange
SUP	shared-use path
TDM	travel demand management
TSM	transportation system management
U.S. 89	U.S. Highway 89
UDOT	Utah Department of Transportation
USC	United States Code
UTA	Utah Transit Authority
USDOT	United States Department of Transportation
WFRC	Wasatch Front Regional Council

1.0 Introduction

1.1 Report Purpose and Background Information

This report describes the alternatives development and screening process that was used for the Interstate 15 (I-15) Farmington to Salt Lake City Environmental Impact Statement (EIS) (Figure 1-1). The Utah Department of Transportation (UDOT) is preparing the EIS to evaluate transportation solutions to improve safety, replace aging infrastructure, provide better mobility for all users, strengthen the state and local economy, and better connect communities along I-15 from Farmington to Salt Lake City.

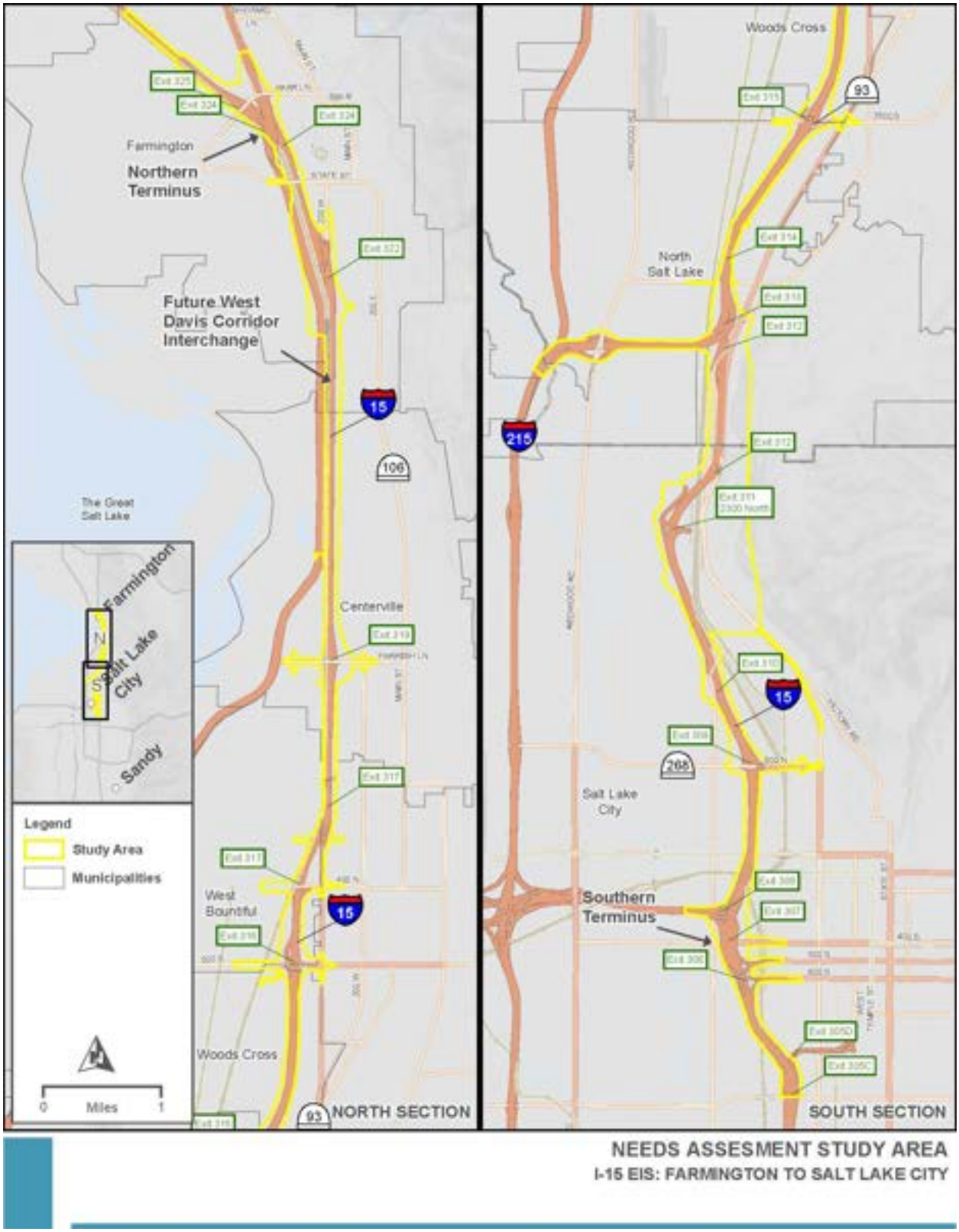
What is the purpose of this report?

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

The alternatives development and screening process provides critical information about how well an alternative or concept satisfies the project's purpose. This process also assists with determining whether an alternative meets the regulatory standards under a variety of federal statutes, such as the National Environmental Policy Act (NEPA), the Clean Water Act, 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. For more information regarding the regulations considered in this screening process, see Section 1.3, *Reasons Why a Concept Might Be Eliminated during the Screening Process*.

The Federal Highway Administration (FHWA) has assigned its responsibilities under NEPA and other federal environmental laws to UDOT for highway projects in Utah, pursuant to 23 United States Code (USC) Chapter 327, in a Memorandum of Understanding (MOU) dated May 26, 2022. In accordance with its responsibilities, UDOT is carrying out the environmental review process for the I-15 Farmington to Salt Lake City Project in lieu of FHWA and serves as the lead agency in the NEPA process. The assignment of NEPA responsibilities to UDOT does not change the roles and responsibilities of any other federal agency whose review or approval is required for the project.

Figure 1-1. I-15 EIS Study Area



1.2 Alternatives Development and Screening Process Overview

The alternatives development and screening process consisted of the following four phases:

1. Develop initial concepts for I-15 mainline, interchanges, and bicyclist and pedestrian connectivity improvements.
2. Apply first-level (Level 1, purpose and need) screening criteria to eliminate concepts that do not meet the project purpose. 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 project purpose but would be unreasonable for other reasons—for example, a concept that would have identifiable adverse impacts to the natural and human environment, would not meet requirements to obtain necessary permits and approvals, or could be replaced by a less-costly concept with comparatively fewer impacts. Additionally, concepts may also be eliminated in Level 2 screening if it is determined that the concept would substantially duplicate or overlap other concepts advanced through Level 2 screening, would have impacts substantially similar to those of other concepts that are advanced through Level 2 screening, or would substantially duplicate other less harmful or less expensive concepts that are advanced through Level 2 screening.
4. Combine concepts that pass Level 2 screening into alternatives and conduct preliminary engineering. These 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.

What is a concept?

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

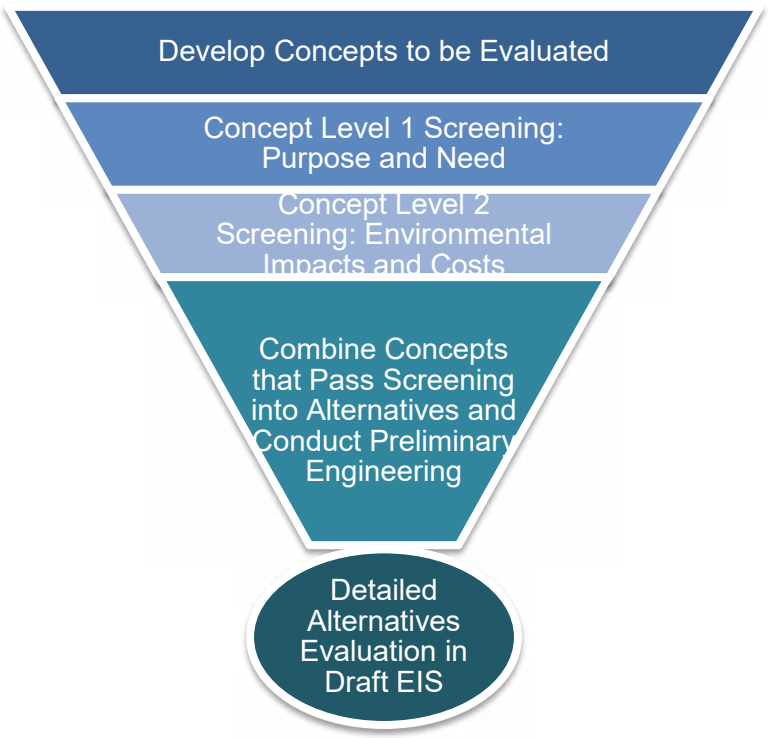
UDOT conducted a two-level (Level 1 and Level 2) screening evaluation of concepts. The initial agency and public inputs occurred during the project's scoping process in 2022. A summary of the public and agency input received during the formal comment period held during the scoping phase is provided in Section 2.3.2, *Scoping*, and included the *Scoping Summary Report*.

UDOT released a preliminary version of this report in November 2022 and provided a comment period from November 10, 2022, to January 13, 2023. Section 2.3.4, *Draft Alternatives Screening Process*, summarizes the public and agency input received during the formal comment period held during the draft alternatives phase. Full copies of all public comments received are included in the *I-15 EIS Draft Alternatives Public Comment Supplemental Report* (UDOT 2023).

As shown below in Figure 1-2, the project's purpose and need are the foundation of the alternatives screening process. Level 1 screening was based on the project's purpose. The project purpose is to improve safety, replace aging infrastructure, provide better mobility for all users, strengthen the state and local economy, and better connect communities along I-15 from Farmington to Salt Lake City as described in Section 1.4, *Summary of the Project's Purpose and Need*. The concepts that passed Level 1 screening were determined to satisfy the project's purpose and were further refined and evaluated with Level 2 screening criteria to determine their expected impacts to key resources. Concepts that do not satisfy the project's purpose or that have identifiable adverse impacts were determined to be not reasonable.

The alternatives development and screening process is designed to be dynamic throughout the EIS process. If a new alternative or refinement of an alternative is developed or arises later in the EIS process, it will be considered using the same screening considerations and criteria as the other alternatives, as described in this report.

Figure 1-2. Screening Process Overview



1.3 Reasons Why a Concept Might Be Eliminated during the Screening Process

This section describes the laws and applicable regulations and guidance used to determine whether a concept might be eliminated during the screening process.

1.3.1 Council on Environmental Quality Regulations and Guidance

NEPA's implementing regulations define *reasonable alternatives* as those that meet the project's purpose and need and that are technically and economically feasible. According to these 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 be 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 Farmington to Salt Lake City Project).
2. The alternative or concept meets the purpose of the project but is unreasonable or infeasible based on a combination of other factors such as costs, logistical or technical issues, environmental impacts, or inability to meet permitting or other regulatory requirements (evaluated in the Level 2 screening). During Level 2 alternatives screening analysis, permitting requirements were identified based on anticipated resource impacts. At this stage, however, no options were eliminated based on the criterion of an alternative's inability to meet those requirements.
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). A concept could also be eliminated in Level 2 screening if UDOT determines that the concept would substantially duplicate other concepts advanced through Level 2 screening, would have impacts substantially similar to those of other concepts that are advanced through Level 2 screening, or would substantially duplicate other less harmful or less expensive concepts that are advanced through Level 2 screening.

1.3.2 Clean Water Act Requirements

Because federally regulated wetlands or other waters of the United States might be present in the project study area, UDOT will 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 standards in the U.S. Army Corps of Engineers Clean Water Act *Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material* (40 Code of Federal Regulations [CFR] Part 230) and Executive Order 11990, *Protection of Wetlands*, during the concept development phase.

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.

1.3.3 Section 4(f) and Section 6(f) Requirements

Pursuant to 23 USC Chapter 327 and the NEPA Assignment MOU, UDOT is responsible for compliance with Section 4(f) of the Department of Transportation Act of 1966, as amended (49 USC Chapter 303), and with applicable provisions of Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended (54 USC Chapter 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 agencies within the U.S. Department of Transportation (USDOT) from approving the use of any Section 4(f) land for a transportation project, except as follows:

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 the project would have "no adverse effect" on the historic property.

- 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.

A concept that would have more than a *de minimis* impact on Section 4(f) resources could be eliminated during Level 2 screening. To comply with the Section 4(f) regulations, UDOT will need to demonstrate that either (1) the alternative or concept selected would have a use with more than *de minimis* impacts on 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 alternative or concept includes all possible planning to minimize harm to Section 4(f) resources. If there is more than one alternative or concept with a use of Section 4(f) property with greater–than–*de minimis* impacts, UDOT must demonstrate that the alternative or concept would have the least overall harm in light of Section 4(f)'s preservation purpose.

Section 6(f) requires that the conversion of lands or facilities acquired with Land and Water Conservation Fund Act of 1965 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 could be eliminated in Level 2 screening if that concept could not avoid Section 6(f) impacts or if there was not an opportunity to substitute converted land of equal value and reasonably equivalent usefulness and location.

The *Alternatives Development and Screening Methodology Report* (UDOT 2022a) provides additional information regarding the methodology and process for developing and screening alternatives and concepts for the I-15 Farmington to Salt Lake City Project.

1.4 Summary of the Project's Purpose and Need

The primary criterion for determining whether an alternative or concept meets the various regulatory standards is whether it meets the purpose of the project. The purpose of the project is selected to address the needs for the project.

1.4.1 Need for the Project

I-15 between Farmington and Salt Lake City has aging infrastructure and worsening operational characteristics for current and projected (2050) travel demand, both of which contribute to decreased safety, increased congestion, lost productivity, and longer travel times. East-west streets that access or cross I-15 currently do not adequately address multimodal mobility. These streets are important to connect communities and support other travel modes such as biking, walking, and transit. When I-15 and its interchanges do not support travel demand, traffic is added to the local streets, which affects both the regional and local transportation system as well as safe, comfortable, and efficient travel by other modes. Additional details regarding the needs for the project are provided in the *Draft Purpose and Need* (UDOT 2022b).

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, light rail, carpooling, and bicycling.

1.4.2 Purpose of the Project

The purpose of the I-15 Farmington to Salt Lake City Project is to improve safety, replace aging infrastructure, provide better mobility for all users, strengthen the state and local economy, and better connect communities along I-15 from Farmington to Salt Lake City. The project purpose consists of 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, I-15 interchanges, bicyclist and pedestrian crossings, and connected roadway network.

Better Connect Communities

- Be consistent with planned land use, growth objectives, and transportation plans.
- Support the planned FrontRunner Double Track projects and 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.

Improve Mobility for All Users

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

Table 2-1, *Level 1 Screening Criteria and Measures*, in Section 2.2.1, *Level 1 Screening*, provides the Level 1 screening measures for each of these items.

2.0 Alternatives Development and Screening Process

2.1 Study Area and Logical Termini

The study area for the I-15 EIS extends on I-15 from the U.S. Highway 89 (U.S. 89)/Legacy Parkway/Park Lane interchange (I-15 milepost 325) in Farmington to the Interstate 80 (I-80) West/400 South interchange (I-15 milepost 308) in Salt Lake City (see Figure 1-1 above). The boundaries for the study area shown in Figure 1-1 extend north of the north terminus and south of the south terminus to include ramps that begin or end at these interchanges.

What are logical termini?

Logical termini are the rational end points for evaluating proposed transportation improvements. Generally, they are the points of major traffic generation such as intersecting roads.

Pursuant to 23 CFR Section 771.111(f), UDOT developed the logical termini for the I-15 EIS to include areas that would influence the proposed project's transportation operations. These logical termini are also an adequate distance apart to assess the environmental impacts on a broad scope, and they are located at rational end points for evaluating proposed transportation improvements. The identified logical termini for the study area are sufficiently broad and do not prevent UDOT from considering a reasonable range of alternatives that could meet the identified needs for the project. For more information about the logical termini, see Section 1.1.2, *Description of the Needs Assessment Area and Logical Termini*, of the *Draft Purpose and Need* (UDOT 2022b).

2.2 Screening Process Overview

2.2.1 Level 1 Screening

Level 1 screening was based on the project purpose. Each of the initial concepts was evaluated using criteria that identified whether the concept would meet the purpose of the project. Concepts that were determined to not meet the purpose of the project were screened from further consideration by UDOT because they would also not satisfy the standards under NEPA, the Clean Water Act, Section 4(f), and Section 6(f). As a result, these concepts were not carried forward for further analysis.

What is the purpose of Level 1 screening?

Level 1 screening eliminates concepts that do not meet the purpose of the project.

The initial concepts were screened against criteria pertaining to travel demand, safety, and bicyclist and pedestrian access and connectivity (Table 2-1). To accommodate Level 1 screening, UDOT developed the initial concepts in enough detail to allow them to use the Wasatch Front Regional Council's (WFRC) travel demand model to forecast the future traffic volumes and associated congestion for I-15. Not all measures apply to all project elements considered in the EIS. For example, delay and congestion measures do not apply to bicyclist and pedestrian crossing improvements.

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. The travel demand model used for the I-15 project is maintained by WFRC.

Table 2-1. Level 1 Screening Criteria and Measures

Quality of Life Category	Criterion	Measure(s)
Improve Safety	Improve the safety and operations of the I-15 mainline, I-15 interchanges, bicyclist and pedestrian crossings, and connected roadway network.	• Does the concept meet UDOT's safety standards (such as curvature, lane and shoulder widths, access, and sight distance)? (Yes/No) • Does the concept meet UDOT's operational standards (such as traffic weaving, ramp operations, and queuing)? (Yes/No) • Can the concept be designed to reduce conflicts between motorized and bicyclist and pedestrian modes? (Yes/No) • Does the concept improve bicyclist and pedestrian accommodations at cross streets or interchanges? (Yes/No)
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)
	Support the planned FrontRunner Double Track projects and enhance access and connectivity to FrontRunner, to regional transit and trails, and across I-15.	• Does the concept provide sufficient space for the Utah Transit Authority to construct the planned FrontRunner Double Track projects? (Yes/No) • Can the concept be designed to improve connectivity to FrontRunner stations? (Yes/No) • Can the concept be designed to enhance bicyclist and pedestrian 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? [a]
Improve Mobility for All Users [b]	Improve mobility and operations on the I-15 mainline, I-15 interchanges, connected 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 morning and evening peak periods? [a,c] • Does the concept improve average speed on I-15 during the morning and evening peak periods? [a,c]

[a] UDOT determined whether concepts met these three measures when comparing the concepts' modeled metrics versus the no-action conditions in 2050.

[b] Measures for improving the mobility of transit and bicyclist and pedestrian modes are included in the "Improve Safety" and "Better Connect Communities" categories. These measures would improve mobility for transit and bicyclist and pedestrian modes. To avoid duplication, they are not repeated in the "Improve Mobility for All Users" category.

[c] Both of these metrics compare traffic conditions with the concepts versus the no-action conditions during the morning and evening 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 morning peak period is from 6 AM to 10 AM, and the evening peak period is from 3 PM to 7 PM.

2.2.2 Level 2 Screening

Level 2 screening identifies and then eliminates concepts that are not practicable, feasible, and reasonable. During Level 2 screening, UDOT collectively evaluated 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. These Level 2 screening criteria also support UDOT's Quality of Life Framework categories of Good Health, Connected Communities, Strong Economy, and Better Mobility.

What is the purpose of Level 2 screening?

Level 2 screening identifies and then eliminates concepts that are not practicable, feasible, and reasonable.

Public and agency comments received during the formal scoping comment period and the draft alternatives public comment period were particularly relevant during Level 2 screening because several of the Level 2 screening criteria focus on local and community elements and regulated resources such as housing and equity concerns. Table 2-2 lists the Level 2 screening criteria.

Table 2-2. Level 2 Screening Criteria and Measures

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, bicyclist, and pedestrian 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 types of Section 4(f) uses [b] • Number and types of Section 6(f) conversions [b]
Impacts to the built environment	• Number and area of parks, trails, and other recreation resources affected • Number of community facilities affected • Number of potential property acquisitions, including residential and business relocations • Number of cultural resources (for example, historic and archaeological resources) affected • 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 Clean Water Act Section 404(b)(1) Guidelines. For more information, see Section 1.3.2, *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 1.3.3, *Section 4(f) and Section 6(f) Requirements.*

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

The criteria listed above in Table 2-2 were selected based on applicable federal regulations—such as Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 404 of the Clean Water Act—

and comments received during agency and public outreach. Waters of the United States and Section 4(f) properties were given special consideration during screening because federal laws require UDOT to consider and analyze alternatives that avoid or minimize impacts to these resources. See Section 1.3, *Reasons Why a Concept Might Be Eliminated during the Screening Process*, for more information regarding Section 4(f) of the of the Department of Transportation Act and Section 404 of the Clean Water Act.

The overall process for Level 2 screening includes the following steps:

1. Develop basic alignments and footprints, including rights-of-way, for the concepts carried forward from Level 1 screening. The concept design will try to minimize impacts to natural resources and the built environment while meeting design standards. Concepts that pass Level 2 screening will be further refined during the engineering process.
2. Review the concepts to make sure they continue to meet basic requirements for roadway design and safety.
3. Evaluate the concepts for costs, logistical considerations, and technological feasibility and determine whether any of the concepts would have substantially greater impacts or costs without having substantially greater benefits.
4. Convert the concepts' footprints to geographic information systems (GIS) format and perform GIS analysis to determine the extent of resource impacts for each concept.
5. Compare the concepts' effects on the resources listed above in Table 2-2 to determine the practicable, feasible, and 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. For more information, see Section 1.3, *Reasons Why a Concept Might Be Eliminated during the Screening Process*.

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 number 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, community resources, and environmental justice concerns. As part of this effort, UDOT will research and use various data sources and tools (for example, the U.S. Environmental Protection Agency's Environmental Justice and Screening Tool) to identify potentially sensitive groups and assess, during Level 2 screening, impacts to these groups.

Compare Impacts and Costs to Benefits. UDOT will use the screening results to determine whether any concepts would have the same or similar benefits as other concepts but would have substantially greater impacts or costs. Those concepts would be considered unreasonable for NEPA purposes and will be eliminated. Additionally, concepts may also be eliminated in Level 2 screening if it is determined that the concept would substantially duplicate or overlap other concepts advanced through Level 2 screening, would have impacts substantially similar to those of other concepts that are advanced through Level 2 screening,

or would substantially duplicate other less harmful or less expensive concepts that are advanced through Level 2 screening.

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

If the impact assessment found 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 fewer adverse impacts to Section 4(f) resources than other concepts, it will be retained for detailed analysis in the EIS.

What is a *de minimis* impact?

For publicly owned 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 *de minimis* impact means that UDOT has determined that either the project would not affect the historic property or the project would have "no adverse effect" on the historic property.

2.3 Development of Initial Concepts

The first phase in the alternatives development and screening process was identifying a list of initial concepts. To be considered an initial concept, a concept needed to be applicable to the study area defined above and needed to present a type of solution that could meet the project's purpose and identified transportation needs. The initial concepts were developed with input from existing transportation plans, the public, local municipal governments, stakeholders, and resource agencies

UDOT developed the initial concepts based on previous planning studies and through input collected during the EIS public scoping period (April 11 to May 13, 2022) and from the input and responses provided during the draft alternatives public comment period (November 10, 2022, to January 13, 2023).

Initial concepts related to bicyclist and pedestrian improvements were identified from existing plans and from the input gathered during the Smart Growth America workshops held in spring 2022. The Smart Growth America workshop attendees included local government officials and other community stakeholders and were focused on identifying bicyclist and pedestrian needs and concepts that could address these needs along the I-15 corridor.

2.3.1 Previous Studies and Plans

UDOT identified potential concepts from the following previous transportation plans and studies (listed in chronological order):

- *I-15 North Corridor Downtown Salt Lake City to Kaysville – Draft Environmental Impact Statement* (UDOT 1998)
- *I-15 North and Commuter Rail Collaborative Design Planning Study* (UDOT and UTA 2009)
- *Salt Lake City Pedestrian and Bicycle Master Plan* (Salt Lake City 2015)
- *Wasatch Front Central Corridor Study* (UDOT et al. 2015)
- *I-15 and Parrish Lane Single-point Urban Interchange (SPUI) Concept Report* (UDOT 2016)
- *I-15; 400 South, SLC and 2600 South, Woods Cross Traffic Study* (UDOT 2018)
- *Future of FrontRunner Final Report* (UTA 2018)
- *I-15 Northbound; I-215 South Interchange Murray and 600 North Traffic Study* (UDOT 2019)
- Wasatch Front Regional Council's *2019–2050 Regional Transportation Plan* (WFRC 2019)
- *Davis County I-15 Study* (UDOT 2020)
- *South Davis County Active Transportation Plan* (APD and TR 2020)
- *600/700 North Mobility, Safety, and Transit Improvements Study* (Salt Lake City 2021)

A summary of prior studies and recommendations is included in Appendix A.2 of the *Draft Purpose and Need* (UDOT 2022b).

2.3.2 Scoping

UDOT used the scoping process to identify and review the purpose of and need for the project and alternatives to consider in the EIS. UDOT used several methods to involve agencies and the public during the development of alternatives, including meetings, a project website, and newsletters to advertise and allow reviews of project materials. In addition, the study team sought engagement that included equitable outreach, affordable-housing interests, and outreach in areas of the study area that historically might have been underserved due to language or other outreach barriers. The team has collaboratively worked with local elected officials and community leaders to build a list of key stakeholders representing local residents, business owners, and other interested participants and to better understand the unique needs, concerns, and makeup of each community within the study area.

What is scoping?

NEPA scoping is a formal EIS outreach and coordination process to determine the scope of issues to be addressed and to identify significant issues related to the proposed action. UDOT conducted an early scoping process in 2020 prior to initiating the EIS. Another formal scoping process was conducted when UDOT published, in March 2022, the Notice of Intent to prepare the I-15 EIS.

Scoping and Notice of Intent

The Notice of Intent (NOI) to prepare the I-15 EIS was published on March 28, 2022, which initiated the formal scoping period. The *Scoping Summary Report* (UDOT 2022c) summarizes public and agency input gathered during the formal scoping period. The NOI and scoping materials presented the following initial concepts for comment:

- No action;
- 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, bicyclist, and pedestrian crossings of I-15;
- Additional or modified bicyclist and pedestrian connections to FrontRunner stations and regional trails;
- Transportation System Management (TSM); and
- Combinations of any of the above.

As part of the scoping process, UDOT conducted an inclusive notification process during spring 2022. This inclusive notification process included efforts such as community canvassing and engagement, virtual flyers, signage, social media, project website notices, and press releases to gather feedback from everyone who may be interested in the project. As discussed in the *Scoping Summary Report* (UDOT 2022c), UDOT received comments during the 24 city council presentations and 2 equity working group meetings, as well as 900 individual comment submissions. Comments addressed a variety of issues, including access to Glovers Lane from I-15 or West Davis Corridor, bicyclist and pedestrian accommodations across I-15, new interchanges or interchange modifications, pavement quality, noise impacts, grade-separating rail lines and local streets, and other concept ideas related to transit, TSM, travel demand management (TDM), tolling, and lane restrictions. A summary of the outreach efforts and comments received is included in the *Scoping Summary Report*.

2.3.3 Consideration of Transit, Travel Demand Management, and Transportation System Management Concepts

UDOT received many comments during the scoping period (summarized in Section 2.3.2, *Scoping*) and the draft alternatives public comment period (summarized in Section 2.3.4, *Draft Alternatives Screening Process*) requesting that UDOT consider standalone (meaning no roadway improvement) transit, TDM, or TSM concepts instead of improvements to I-15. No standalone transit, TDM, or TSM concepts were identified for the I-15 Farmington to Salt Lake City Project because these concepts would not meet the purpose of the project. As standalone options, transit, TDM, or TSM concepts would not address aging infrastructure on I-15, improve safety on I-15, or meet the projected travel demand in 2050.

Why was a transit-only alternative not considered?

A transit-only alternative would not meet the purpose of the project because it would not address aging infrastructure needs on I-15, improve safety on I-15, or meet the projected travel demand in 2050.

The alternatives for the I-15 Farmington to Salt Lake City Project considered by UDOT will accommodate all current and proposed transit projects identified in WFRC's *2019–2050 Regional Transportation Plan* (2019–2050 RTP) (including the planned Utah Transit Authority [UTA] FrontRunner Double Track projects and a new Davis-Salt Lake bus service project). To ensure that the I-15 project's alternatives support all planned transit projects, UDOT's Level 1 screening criteria for this I-15 project include the criterion to "support the planned FrontRunner Double Track projects and enhance access and connectivity to FrontRunner and regional transit." TDM is also included in the 2050 no-action conditions as part of the planned I-15 managed motorways project.

Transit Concepts Comments during the Draft Alternatives Screening Process

Many other commenters requested that UDOT double-track the FrontRunner commuter rail instead of making improvements to I-15. As described in the *Draft Purpose and Need* (UDOT 2022b), the 2050 no-action conditions for the I-15 Farmington to Salt Lake City Project assume that all funded transit and roadway projects in WFRC's 2019–2050 RTP (including the planned UTA FrontRunner Double Track projects and a new Davis–Salt Lake bus service project) would be constructed and operational. Because the planned UTA FrontRunner Double Track projects are already part of the 2050 no-action conditions, a double-tracking project was not considered as a separate transit concept for the I-15 Farmington to Salt Lake City Project. The projected ridership assumptions of the future, funded transit projects are included in WFRC's travel demand model and were reviewed during the alternatives development for I-15 to develop alternatives that can support the 2050 travel demand that is in addition to the projected transit ridership. These assumptions are included in the *Mobility Memorandum* (UDOT 2022e).

The transit-specific concepts listed in Table 2-3 were suggested during the draft alternatives public comment period but did not pass Level 1 Screening. These concepts would not move enough people to remove the need to widen I-15 and do not support the purpose of the I-15 Farmington to Salt Lake City Project, which includes addressing aging infrastructure and safety on I-15.

Although none of these transit concepts passed Level 1 screening, UDOT is supporting existing and planned transit network by working closely with UTA to provide adequate space for the planned double-tracking FrontRunner, improving multimodal connections to the Woods Cross FrontRunner Station, and supporting all existing and planned bus routes that use I-15 or other roads in the I-15 study area.

Table 2-3. Explanation Why Transit Concepts Suggested during the EIS Draft Alternatives Public Comment Period Did Not Pass Level 1 Screening

Concept	Preliminary Evaluation
Double-track FrontRunner	Double-tracking FrontRunner is in WFRC's 2019–2050 RTP and part of the no-action scenario in the travel demand model used for the EIS. UDOT's Level 1 screening criteria for I-15 Farmington to Salt Lake City Project includes the criterion to "support the planned FrontRunner Double Track projects and enhance access and connectivity to FrontRunner and Regional Transit. All I-15 mainline concepts evaluated for the I-15 Farmington to Salt Lake City EIS assume that FrontRunner will have two tracks. The current ridership in 2019 is about 6,000 riders per day, and, with the double-track ridership, the ridership in 2050 is estimated to be between 14,000 and 21,000 riders per day depending on headways. The estimated increase in FrontRunner commuter rail trips would serve future north-south travel demand between Salt Lake and Davis Counties but would not be enough to offset the need to add additional capacity to the system; an additional 140,000 person-trips are expected to occur across the Salt Lake County–Davis County border between 2019 and 2050.
Implement the Rio Grande Plan	The Rio Grande Plan involves burying the Union Pacific and UTA FrontRunner railroad tracks on 500 West between about 900 South and North Temple in Salt Lake City. The Rio Grande Plan is a proposed change in land use and not a regional transportation solution. The Rio Grande Plan does not address the purpose of the I-15 Farmington to Salt Lake City Project. Aging infrastructure on I-15 is one element of the purpose that needs to be satisfied by an alternative. The Rio Grande Plan would not address the maintenance, safety, economic, or mobility needs for I-15. The I-15 project is still needed whether or not the Rio Grande Plan is implemented.
Convert high-occupancy/toll (HOT) lanes to bus only and do not widen I-15	Traffic analysis has shown that at least 5 general-purpose (GP) lanes are still needed in both directions on I-15 regardless of the restrictions put on the managed lanes, HOT lanes. Buses are allowed to use the existing and planned HOT lanes. If the managed lanes were restricted to bus only instead of HOT, it is possible that additional capacity on I-15 (either GP lanes or HOT lanes) might be needed in addition to the I-15 mainline alternatives presented to accommodate projected travel demand.
Remove existing HOT lanes and implement light rail down the center of I-15	There is not currently a plan for a light rail project on I-15 in UTA's long-range plan or in WFRC's 2019–2050 RTP. Both the UTA long-range plan and WFRC's 2019–2050 RTP prioritize double-tracking FrontRunner and the Davis-Salt Lake Community Connector Bus Rapid Transit (BRT) projects for improving regional transit mobility in the EIS study area. The I-15 alternatives support all planned transit projects documented in the UTA long-range plan and WFRC's 2019–2050 RTP.
Build an above-grade high-speed rail system in the Salt Lake Valley	Building an above-grade high-speed rail system is not in UTA's long-range plan or in WFRC's 2019–2050 RTP, and a high-speed rail system does not support the purpose of the I-15 Farmington to Salt Lake City Project, which includes addressing aging infrastructure and safety on I-15. Both the UTA long-range plan and WFRC's 2019–2050 RTP prioritize double-tracking FrontRunner and the Davis-Salt Lake Community Connector BRT projects for improving regional transit mobility in the EIS study area.

Source: UDOT 2023

2.3.4 Draft Alternatives Screening Process

The results of the draft alternatives screening process were published for agency and public review on November 10, 2022. The review and comment period was from November 10, 2022, through January 13, 2023. The process included an online public meeting on November 14, 2022; two in-person public meetings on November 15 and 16, 2022; meetings with three local area working group meetings; and 34 presentations or meetings with agencies or stakeholders. Local area working groups were developed to represent a cross-section of each community in the study area, representing communities of color; local businesses; youth, cycling, and pedestrian advocates; persons with disabilities; and more. A list of these meetings is included in Attachment C, *Public Involvement Materials for Draft Alternatives November 2022*.

The public engagement during the draft alternatives screening process included a focus on equitable outreach and implemented new strategies in parts of the study area that historically might have been underserved due to language, socioeconomic, racial, or other outreach barriers. To help to reduce barriers to participation at the two in-person open house events, the study team provided, at no cost to the attendees, food, a kid's corner with supervised activities, and transportation (rideshare services and UTA On-Demand were both provided as options). All study information was made available in both English and Spanish, and interpretation services were provided at the in-person events. The online comment tools were also provided in both languages, and the open house events were held at locations that meet Americans with Disabilities Act accessibility requirements.

Public and Agency Review

During the draft alternatives public comment period, 2,890 comments were received from the public and agencies. A summary of the public and agency comments in included in Attachment D, *Draft Alternatives Comment Summary*. Full copies of all public and agency comments are provided in *I-15 EIS: Draft Alternatives Comments January 2023* (UDOT 2023). The majority of the comments received were about community impacts, property impacts, impacts to environmental justice communities, air quality impacts, noise impacts, the need for the project, future travel demand, requests for transit, and comments for actions that are outside the jurisdiction of UDOT, such as requests for changes to zoning and land use. To a lesser degree, included among those comments were some new concepts, variations of existing concepts, and comments about the screening process and screening criteria.

Some commentors requested that UDOT work with other agencies such as UTA. UTA and many other State agencies are participating agencies on this EIS as documented in the *Coordination Plan* (UDOT 2022d). Many agencies provided comments during the draft alternatives screening process. Those comments are also included in *I-15 EIS: Draft Alternatives Comments January 2023*.

Comments related to transit concepts are described above in Section 2.3.3, *Consideration of Transit, Travel Demand Management, and Transportation System Management Concepts*.

Comments related to other roadway, pedestrian, and bicycle concepts are described below in Section 2.3.5, *New Concepts Identified during the Draft Alternatives Public Comment Period (November 10, 2022, to January 13, 2023)*.

2.3.5 New Concepts Identified during the Draft Alternatives Public Comment Period (November 10, 2022, to January 13, 2023)

Table 2-4 below describes the new concepts or variations on existing concepts that were identified during the draft alternatives public comment period from November 10, 2022, to January 13, 2023. These public concepts were developed and evaluated to determine whether they would be considered mainline, interchange, or bicyclist and pedestrian concepts and then were evaluated to determine whether they would pass Level 1 and Level 2 screening. As shown in Table 2-4, this evaluation determined that one of the public concepts would meet the purpose of the project and was therefore reviewed in Level 2 screening.

Several other public and agency concepts requested grade-separated railroad crossing improvements at Center Street in North Salt Lake, 2600 South/1100 North in North Salt Lake, and 500 South in Woods Cross. These railroad crossings are separate projects in WFRC's 2019–2050 RTP. The I-15 Farmington to Salt Lake City EIS will be forward-compatible with the planned future projects to grade-separate the Center Street, 2600 South/1100 North, and 500 South railroad crossings.

Several other public and agency concepts requested final design-related comments about turn lanes (number, locations, start/end points, etc.), intersection types (signalized, stop, roundabouts, etc.), bicycle and pedestrian lanes (separation, location, priority, etc.), and landscaping and aesthetics. UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.

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Table 2-4. Preliminary Evaluation of Concepts Suggested during the Draft Alternatives Public Comment Period

Suggested Concept	Part of No-action/ Baseline	Reason for Not Including in the Proposed Alternatives					Evaluated Further in Level 1 Screening	Considered as Part of Alternative Design for Concepts Advanced through Screening to EIS [a]	Additional Information
		Redundant with Other Concepts	Does Not Meet Project Objectives	Outside the EIS Study Area	Outside the Scope of the EIS	Technically and/or Feasibly Prohibitive			
Alternatives to Widening I-15									
Widen Legacy Parkway instead of I-15	✓		✓				No		Widening Legacy Parkway from 2 lanes to 3 lanes in each direction is in WFRC's 2019–2050 RTP and is part of the no-action scenario in the travel demand model used for the EIS.
Widen both Legacy Parkway and Interstate 215 (I-215) instead of I-15	✓		✓				No		Widening Legacy Parkway from 2 lanes to 3 lanes and widening I-215 from 4/5 lanes to 5/6 lanes in each direction are both in WFRC's 2019–2050 RTP and are part of the no-action scenario in the travel demand model used for the EIS.
Remove I-15			✓			✓	No		Removing I-15, even if removing only one segment in the study area, does not support the purpose of the I-15 Farmington to Salt Lake City Project and would have far-reaching impacts for mobility in Utah.
Double-deck I-15		✓				✓	No		The cost of constructing elevated highways is substantially more than the cost of constructing at grade. UDOT has determined that building I-15 completely on structures would not be a reasonable or practical option for any of the I-15 alternatives. In addition, elevated structures are more expensive to maintain and more difficult to operate due to the additional complexities around accessing interchanges and local roads. Elevated structures also tend to develop ice on the roadway surface during winter, causing unnecessary safety issues.
Convert Legacy Parkway to a reversible system with gates at the on- and off-ramps (similar to Seattle)			✓				No		Widening Legacy Parkway from 2 to 3 lanes in each direction is in WFRC's 2019–2050 RTP and is part of the no-action scenario in the travel demand model used for the EIS. WFRC's 2019–2050 RTP shows that additional capacity is needed on both Legacy Parkway and I-15. Adding even more capacity on Legacy Parkway than what is assumed in WFRC's 2019–2050 RTP does not support the purpose of the I-15 Farmington to Salt Lake City Project, which includes addressing aging infrastructure and safety on I-15.
Create a truck bypass west of the Great Salt Lake			✓	✓	✓	✓	No		Constructing a truck bypass on the west side of the Great Salt Lake would be cost-prohibitive and would result in unreasonable out-of-direction travel for commercial trucks. A truck bypass on the west side of the Great Salt Lake does not support the purpose of the I-15 Farmington to Salt Lake City Project, which includes addressing aging infrastructure and safety on I-15.
Create a truck corridor between Ogden and Payson			✓	✓	✓		No		Creating a separate facility just for trucks between Ogden and Payson does not support the purpose of the I-15 Farmington to Salt Lake City Project, which includes addressing aging infrastructure and safety on I-15. Trucks are allowed to use I-15, I-80, I-215, Legacy Parkway, and all other major freeways or arterials on the state road network.
Implement minimum speeds for traffic management			✓			✓	No		Traffic speeds are a function of many variables including signed speed limits, roadway capacity, and congestion. The traffic analysis for the I-15 EIS modeled speed data based off these variables. Assigning speed limits is outside of the scope of an EIS and is developed per Utah State Code Title 41-6a-6 and UDOT policies. Minimum speed is not an alternative and does not support the purpose of the I-15 Farmington to Salt Lake City Project, which includes addressing aging infrastructure and safety on I-15.
Make every lane on I-15 a HOT lane					✓	✓	No		All concepts evaluated for the I-15 Farmington to Salt Lake City EIS use the HOT lane assumptions in WFRC's 2019–2050 RTP, which are currently 1 HOT lane each direction. WFRC's 2019–2050 RTP assumes that, by 2050, I-15 along the broader Wasatch Front (Weber, Davis, Salt Lake, and Utah Counties) will be converted to 4 GP and 2 HOT lanes. However, to maintain consistency of the HOT lanes on I-15 throughout the Wasatch Front, this conversion to 2 HOT lanes would likely occur as part of a larger, regional project for the Wasatch Front (not just for the segment of I-15 included in the EIS study area). Evaluating concepts that would make all lanes HOT lanes is inconsistent with the existing and planned number of GP and HOT lanes on I-15 north and south of the EIS study area in WFRC's 2019–2050 RTP.

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Table 2-4. Preliminary Evaluation of Concepts Suggested during the Draft Alternatives Public Comment Period

Suggested Concept	Part of No-action/ Baseline	Reason for Not Including in the Proposed Alternatives					Evaluated Further in Level 1 Screening	Considered as Part of Alternative Design for Concepts Advanced through Screening to EIS [a]	Additional Information
		Redundant with Other Concepts	Does Not Meet Project Objectives	Outside the EIS Study Area	Outside the Scope of the EIS	Technically and/or Feasibly Prohibitive			
Remove the current HOT lanes on I-15 and make them general purpose					✓	✓	No		All concepts evaluated for the I-15 Farmington to Salt Lake City EIS use the HOT lane assumptions in WFRC's 2019–2050 RTP, which are currently 1 HOT lane each direction. WFRC's 2019–2050 RTP assumes that, by 2050, I-15 along the broader Wasatch Front (Weber, Davis, Salt Lake, and Utah Counties) will be converted to 4 GP and 2 HOT lanes. Evaluating concepts that would remove all HOT lanes is inconsistent with the existing and planned number of GP and HOT lanes on I-15 north and south of the EIS study area in WFRC's 2019–2050 RTP. To maintain consistency of the HOT lanes on I-15 throughout the Wasatch Front, any removal of HOT lanes would need to occur as part of a larger, regional project for the Wasatch Front (not just for the segment of I-15 included in the EIS study area).
I-15 Mainline – General									
Bury, cap and cover, or tunnel I-15 in Salt Lake City						✓	Yes		Four tunnel options were evaluated for the segment of I-15 in Salt Lake City between North Temple and 600 North. For the results of this analysis, see *Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in Salt Lake City* on page 61.
No additional capacity on I-15 with interchange improvements							Yes		This concept was evaluated in Level 1 screening. See Section 3.1.1, *Level 1 Screening for Mainline Concepts*, and Table 3-1, *Level 1 Screening of I-15 Mainline Concepts*, for more information about this concept.
Shift I-15 west in Davis County						✓	No		For all I-15 concepts, UDOT tried to minimize impacts to all resources. In Davis County between 400 North and Farmington, the Union Pacific and UTA FrontRunner railroad tracks are west of I-15. Part of the purpose of the I-15 Farmington to Salt Lake City Project is to "support the planned FrontRunner Double Track projects." In this segment, UDOT is supporting the planned FrontRunner Double Track projects by leaving UTA enough space west of I-15 to construct the planned double track. Relocating the railroad tracks to the west is not a feasible concept. Land is not available on the west side onto which to move the railroad tracks (both one existing and one planned UTA FrontRunner track and two Union Pacific tracks are west of I-15). Moving the four railroad tracks would then require moving the power lines west of the railroad tracks and also moving Legacy Parkway, which is west of the power lines. Moving the railroad tracks, power lines, and Legacy Parkway is not feasible or cost-effective and would also result in substantial impacts to private property on the west side of Legacy Parkway.
I-15 Mainline – Reversible Option B									
Do not widen I-15, and implement the reversible option by converting the existing HOV lanes			✓				No		Traffic modeling for the project showed that additional roadway capacity is needed to improve operations, reduce delay, and improve travel time and average speed on I-15 in 2050. Traffic modeling for the evaluated options is included in Section 3.1, *Level 1 and Level 2 Screening for I-15 Mainline Concepts*. Not adding roadway capacity and converting all lanes to HOV/HOT lanes would reduce capacity lower than the no-action conditions and would not meet the purpose and need for the project.
Implement a flexible reversible system that can adjust for changing conditions						✓	No		UDOT evaluated a reversible lane system as part of the 5 GP each direction and 2 reversible express lanes concept. This concept assumed that the 2 reversible express lanes would operate southbound in the morning period and northbound in the afternoon period to match higher traffic flows in those directions during those time periods. Due to safety and operational considerations related to reversing the directions of travel on the reversible lanes, all existing reversible lane systems assume planned time frames when the reversible lanes operate in specific directions. Given the time required to switch over reversible lanes safely and public expectations about hours of operations, it is not feasible or prudent to have a system with more flexibility.

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Table 2-4. Preliminary Evaluation of Concepts Suggested during the Draft Alternatives Public Comment Period

Suggested Concept	Part of No-action/ Baseline	Reason for Not Including in the Proposed Alternatives					Evaluated Further in Level 1 Screening	Considered as Part of Alternative Design for Concepts Advanced through Screening to EIS [a]	Additional Information
		Redundant with Other Concepts	Does Not Meet Project Objectives	Outside the EIS Study Area	Outside the Scope of the EIS	Technically and/or Feasibly Prohibitive			
Salt Lake City									
Physically separate bike facilities on 600 North								✓	UDOT will consider this concept as part of higher level design for the concepts that are advanced through Level 2 screening to the Draft EIS. This concept will be evaluated along with roadway needs, pedestrian and bicyclist needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.
Add a new pedestrian pathway connection between Warm Springs Park and west side of Salt Lake City at 800 North						✓	No		A new pedestrian crossing near 800 North in Salt Lake City would be cost-prohibitive because it would need to cross over 20 railroad tracks. UDOT is proposing to provide improved bicyclist and pedestrian crossings of I-15 at 600 North and 400 North as part of the alternatives evaluated in the Draft EIS.
Remove eastbound left-turn lane on 600 North at 300 West intersection and replace with vegetated divider								✓	UDOT will consider this concept as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate this concept along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources. Aesthetic improvements will also be subject to funding availability and the requirements of UDOT's aesthetics policy.
Final design-related comments about turn lanes (number, locations, start/end points, etc.), intersection types (signalized, stop, roundabouts, etc.), bicycle and pedestrian lanes (separation, location, priority, etc.), and landscaping and aesthetics on 600 North, 1000 North, and 300 West								✓	UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.
North Salt Lake									
Add a northbound Center Street on-ramp							No		UDOT is proposing to add a new interchange by I-215 in North Salt Lake that would provide northbound access to I-15. Adding a northbound on-ramp at Center Street would result in property impacts to Hatch Park [a Section 4(f) and 6(f) resource] and residential areas north of Hatch Park. Additionally, a northbound on-ramp would cause operational issues with the I-215 northbound on-ramp that also merges onto I-15 in this area. Interchange spacing requirements are typically at least 1 mile between access points. A new northbound Center Street on-ramp would be merging on to the I-215 northbound on-ramp to I-15 and would not meet spacing requirements.
Add an overpass over the railroad tracks at Center Street								✓	The I-15 Farmington to Salt Lake City EIS will be forward-compatible with the planned future project to grade-separate the Center Street railroad crossing. For more information, see *Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in North Salt Lake/Woods Cross* on page 75.

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Table 2-4. Preliminary Evaluation of Concepts Suggested during the Draft Alternatives Public Comment Period

Suggested Concept	Part of No-action/ Baseline	Reason for Not Including in the Proposed Alternatives					Evaluated Further in Level 1 Screening	Considered as Part of Alternative Design for Concepts Advanced through Screening to EIS [a]	Additional Information
		Redundant with Other Concepts	Does Not Meet Project Objectives	Outside the EIS Study Area	Outside the Scope of the EIS	Technically and/or Feasibly Prohibitive			
Add an overpass over the railroad tracks at 2600 South	✓							✓	There is a separate project in WFRC's 2019–2050 RTP to provide a grade-separated crossing of the railroad tracks on 2600 South/1100 North. The I-15 Farmington to Salt Lake City EIS will be forward-compatible with the planned future project to grade-separate the 2600 South/1100 North railroad crossing.
Connect Legacy Parkway to U.S. 89/ Beck Street	✓		✓			✓	No	✓	North Salt Lake/Woods Cross Options A and B, proposed by this study, would connect I-15 with I-215 in all directions and ultimately would provide drivers with a way to access Legacy Parkway and Beck Street (U.S. 89) with fewer impacts and at substantially less cost. There is also a separate project in WFRC's 2019–2050 RTP to provide a full-access interchange at I-215 and Legacy Parkway. Once this future project is complete, it would be possible to get to or from Legacy Parkway to or from U.S. 89.
Final design–related comments about turn lanes (number, locations, start/end points, etc.), intersection types (signalized, stop, roundabouts, etc.), bicycle and pedestrian lanes (separation, location, priority, etc.), and landscaping and aesthetics on 2600 South, 800 West, Wildcat Way, and U.S. 89								✓	UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.
Bountiful and Woods Cross									
Add an overpass over the railroad tracks at 500 South	✓							✓	There is a separate project in WFRC's 2019–2050 RTP to provide a grade-separated crossing of the railroad tracks on 500 South. The I-15 Farmington to Salt Lake City EIS will be forward-compatible with the planned future project to grade-separate the 500 South railroad crossing.
Final design-related comments about turn lanes (number, locations, start/end points, etc.), intersection types (signalized, stop, roundabouts, etc.), bicycle and pedestrian lanes (separation, location, priority, etc.), and landscaping and aesthetics on 500 South, 400 North, and 500 West								✓	UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.

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Table 2-4. Preliminary Evaluation of Concepts Suggested during the Draft Alternatives Public Comment Period

Suggested Concept	Part of No-action/ Baseline	Reason for Not Including in the Proposed Alternatives					Evaluated Further in Level 1 Screening	Considered as Part of Alternative Design for Concepts Advanced through Screening to EIS [a]	Additional Information
		Redundant with Other Concepts	Does Not Meet Project Objectives	Outside the EIS Study Area	Outside the Scope of the EIS	Technically and/or Feasibly Prohibitive			
Centerville									
Improve access near Parrish Lane and CenterPoint Legacy Theater on 400 West								✓	UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.
Final design-related comments about turn lanes (number, locations, start/end points, etc.), intersection types (signalized, stop, roundabouts, etc.), bicycle and pedestrian lanes (separation, location, priority, etc.), and landscaping and aesthetics on Parrish Lane, Market Place Drive, and 400 West								✓	UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.
Farmington									
Add an on-ramp and off-ramp near 1470 South, near South Park						✓	No		The West Davis Corridor connection to I-15 is currently under construction near 1600 South. Interchange spacing requirements are typically at least 1 mile between access points. A new local interchange connection near 1470 South would be less than 0.25 mile from the West Davis Corridor ramps and would not meet spacing requirements.
Add a partial or full interchange at Glovers Lane on West Davis Corridor instead of I-15	✓							✓	There is a separate project in WFRC's 2019–2050 RTP to provide a full-access interchange on West Davis Corridor at 1525 West that would improve roadway access to I-15 and Legacy Parkway for residents of western Farmington. The West Davis Corridor is being constructed to be forward-compatible with this planned future interchange at 1525 West.
Final design-related comments about turn lanes (number, locations, start/end points, etc.), intersection types (signalized, stop, roundabouts, etc.), bicycle and pedestrian lanes (separation, location, priority, etc.), and landscaping and aesthetics on Glovers Lane, 200 West, State Street, the frontage road, and 400 West								✓	UDOT will consider these comments as part of higher-level design for the concepts that are advanced through Level 2 screening to the Draft EIS. UDOT will evaluate these comments along with roadway needs, bicyclist and pedestrian needs, and safety needs for all users while trying to minimize impacts to adjacent properties and other resources.

[a] This column applies to alternatives that pass screening and are evaluated in detail in the Draft EIS. The suggestion might be incorporated into the alternatives that are evaluated in detail.

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3.0 Concept Evaluation

Section 3.0 describes all of the concepts that were evaluated during the screening process and the results of this process. A summary of the results of this process is provided at the beginning of this section; details regarding all of the concepts evaluated are provided after the summary.

Summary of Results. Based on the results of the screening process, UDOT advanced the following alternatives for further study in the EIS:

- No-action Alternative
- Action Alternative

The Action Alternative includes the 5 general-purpose (GP) + 1 high-occupancy/toll (HOT) lane mainline concept combined with the concepts for each of the five geographic areas that passed Level 1 and Level 2 screening (Salt Lake Option A, North Salt Lake Woods Cross Option B, Bountiful/West Bountiful Option A, Centerville Option B, and Farmington Option A).

The Action Alternative also includes the following subarea options:

- Salt Lake City 1000 North – Northern Option
- Salt Lake City 1000 North – Southern Option
- Bountiful 500 South – Northern Option
- Bountiful 500 South – Southern Option
- Bountiful 400 North – Northern Option
- Bountiful 400 North – Southern Option
- Farmington 400 West Option
- Farmington State Street Option

Section 4.0, *Summary of the Results of the Alternatives Development and Screening Process*, provides figures and more details regarding the features and components of the Action Alternative.

Overview. The initial concepts were developed for the I-15 mainline, interchanges, and bicyclist and pedestrian crossings to provide facilities that benefit all users and address the needs for the project. UDOT first evaluated the I-15 mainline concepts for the entire study area. Section 3.1, *Level 1 and Level 2 Screening for I-15 Mainline Concepts*, provides the Level 1 and Level 2 screening evaluation and results for the I-15 mainline concepts.

UDOT then evaluated the interchange and bicyclist and pedestrian crossing concepts for each geographic area. The interchanges and bicyclist and pedestrian crossing concepts were evaluated for five separate geographic areas in the study area:

- Salt Lake County (400 South to Davis County boundary)
- North Salt Lake/Woods Cross (Salt Lake County boundary to 1500 South)
- Bountiful/West Bountiful (1500 South to 1600 North/Pages Lane)
- Centerville (1600 North/Pages Lane to Farmington boundary)
- Farmington (Centerville boundary to U.S. 89)

Section 3.2, *Level 1 and Level 2 Screening for I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts*, provides the Level 1 and Level 2 screening evaluation and results for the interchange and bicyclist and pedestrian crossing concepts for each of the five geographic areas.

The I-15 mainline concepts that passed Level 1 and Level 2 screening were combined with the interchange and bicyclist and pedestrian crossing concepts that passed Level 1 and Level 2 screening for each of the five geographic areas to become alternatives that will be studied in detail in the Draft EIS. The results of this process are summarized in Section 4.0, *Summary of the Results of the Alternatives Development and Screening Process*.

3.1 Level 1 and Level 2 Screening for I-15 Mainline Concepts

The existing I-15 mainline in the study area generally has three GP lanes and one HOT lane in Salt Lake County and four GP lanes and one HOT lane in Davis County in each direction. In addition to the through travel lanes, there are also auxiliary lanes (lanes that start at an on-ramp and continue to the next off-ramp) in several locations in the project study area.

What is a high-occupancy/toll (HOT) lane?

A HOT lane is a traffic lane or road that is available to high-occupancy vehicles and other exempt vehicles without charge. Other vehicles must pay a variable fee (toll) that is adjusted in response to demand.

3.1.1 Level 1 Screening for Mainline Concepts

Six concepts for the I-15 mainline were considered by UDOT in Level 1 screening. These concepts considered the project needs to address aging infrastructure, safety, and travel demand in 2050. The mainline concepts included designs with GP and HOT lanes and designs with express lanes (including reversible express lanes). Table 3-1 below summarizes the I-15 mainline concepts and relevant Level 1 screening criteria, such as measures for safety and traffic operations, that were evaluated for each mainline concept. Figure 3-1 through Figure 3-5 following the table show the typical sections of the concepts.

Future Travel Demand Assumptions in the Travel Demand Model. UDOT used the regional travel demand model jointly maintained by WFRC and the Mountainland Association of Governments to forecast future travel demand. This model has been reviewed by FHWA and the Federal Transit Administration for use in transportation planning. The model predicts future travel demand based on projections for land use (from city, county, and region master plans), socioeconomic patterns such as population and employment growth, and transportation system characteristics—including the increased traffic demand that comes along with a higher-capacity transportation system (new and widened highways, planned transit improvements, etc.).

Travel demand between Salt Lake, Davis, and Weber Counties will continue to increase as growth occurs in population and employment. The model predicts that an additional approximately 140,000 daily person-trips will occur between Salt Lake and Davis Counties between now and 2050. Widening I-15 by itself cannot satisfy the expected increase in regional travel demand but is one of several projects currently planned to accommodate future travel. Eliminating any of those planned projects puts additional pressure on parallel road and transit corridors.

In 2050, under a no-action scenario, there is significant amount of demand on I-15 from traffic that would like to use I-15 but does not due to congestion. When the capacity of I-15 is increased, some of that traffic will choose to use I-15, resulting in additional traffic on the freeway but reduced traffic on parallel corridors. As

shown below in Table 3-1, modeling has shown that, even under the action conditions, I-15 is projected to experience congested conditions in 2050 but at a lesser amount than would occur with the no-action scenario.

Network Delay. Daily network delay includes delay on roads near the project study area (I-15, I-215, U.S. 89, Legacy Parkway, and connecting arterial roads). The travel demand model shows a large reduction in overall network delay with any of the five I-15 mainline concepts that would add additional capacity to I-15 compared to the 2050 no-action conditions. Because this metric is looking at a large transportation network and high vehicle volumes, the model did not show meaningful differences in daily network delay among the five I-15 mainline concepts that would add additional capacity to I-15.

Level 1 Screening for Mainline Concepts Results

As shown below in Table 3-1, one I-15 mainline concept, the I-15 No Additional Capacity with Interchange Improvements concept, was screened out in Level 1 screening. Increasing the capacity of the surrounding transportation network along with allowing more traffic to access I-15 would increase travel demand on I-15 without providing any additional capacity to accommodate this increase in travel demand. In general, daily traffic volumes on I-15 would increase by roughly 3% with this concept compared to the No-action Alternative. Projected morning and afternoon peak-hour volumes would increase by between 1% and 5% compared to the No-action Alternative. Operations would be slightly worse on I-15 compared to the No-action Alternative with this increased travel demand. The average speeds and average travel times and daily network delay would be similar to the No-action Alternative for Level 1 screening. Therefore, the I-15 No Additional Capacity with Interchange Improvements concept was screened out in Level 1 screening because it would not reduce daily hours of delay on I-15, interchanges, and cross streets in 2050; it would not decrease through-traffic travel time on I-15 during the morning and evening peak periods; and it would not improve average speed on I-15 during the morning and evening peak periods.

The five I-15 mainline concepts that would add new capacity to I-15 would reduce travel time by 49% to 72% and improve average speed by 95% to 275% compared to 2050 no-action conditions. Additionally, the five I-15 mainline concepts that would add new capacity to I-15 meet safety and operational needs and could be designed to accommodate the planned FrontRunner Double Track projects. Therefore, the five I-15 mainline concepts that would add new capacity to I-15 described in Table 3-1 below passed Level 1 screening and were advanced to Level 2 screening.

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Table 3-1. Level 1 Screening of I-15 Mainline Concepts

Concept	Description	Typical Section Pavement Width	Meets Safety Standards?	Meets Operational Standards?	Space for FrontRunner Double Track Projects?	Average Speed SB [a] (mph)	Average Speed NB [a] (mph)	Average Travel Time SB [b] (minutes)	Average Travel Time NB [b] (minutes)	Daily Network Delay? [c] (hours)	Advance to Level 2 Screening?
Existing conditions (2019)	The existing configuration is 3 GP lanes and 1 HOT lane in Salt Lake County and 4 GP lanes and 1 HOT lane in Davis County in each direction.	180 to 205 feet	Meets previous standards	Approaching failing conditions	Yes	60	57	18	19	18,000	Not applicable
I-15 no-action (2050)			No	No	Yes	20	16	55	66	95,000 [c]	No-action Alternative is evaluated in the EIS pursuant to NEPA requirements
No Additional Mainline I-15 Capacity Concept											
I-15 No Additional Capacity with Interchange Improvements (2050)	This concept would maintain the same number of lanes on I-15 as existing conditions but would make interchange, pedestrian, and bicyclist improvements.	180 to 205 feet	Yes	No	Yes	20 [e]	16 [e]	55 [e]	66 [e]	95,000 [c, e]	No. This alternative would be worse than the No-action Alternative.
Express Lane and Reversible Express Lane Concepts											
Widen I-15 to 3 Express Lanes and 3 to 4 GP Lanes [d] (Figure 3-1)	Widen I-15 to 3 express lanes and 3 to 4 GP lanes in each direction. I-15 in Salt Lake County would have 3 GP lanes, and I-15 in Davis County would have 4 GP lanes.	286 feet (widest option reviewed)	Yes	Yes	Yes	61	60	18	18	50,000 [c]	Yes
I-15 5 GP Lanes Each Direction and 2 Reversible Lanes [d] (Figure 3-2)	Widen I-15 to 5 GP lanes in each direction. Widening includes 2 reversible lanes from 400 South in Salt Lake City to just north of Parrish Lane in Centerville (no intermediate access to the reversible lanes in between). The reversible lanes would allow SB travel in the morning and NB travel in the afternoon.	242 feet	Yes	Yes	Yes	51	49	21	22	50,000 [c]	Yes
General Widening Concepts											
Widen I-15 to 5 GP Lanes and 1 HOT Lane [d] (Figure 3-3)	Widen I-15 to a roadway cross section of 5 GP lanes and 1 HOT lane (5+1) in each direction. This is consistent with the project proposed in Utah's long-range plan.	226 feet (narrowest option reviewed)	Yes	Yes	Yes	39	36	28	30	50,000 [c]	Yes
Widen I-15 to 5 GP Lanes and 2 HOT Lanes [d] (Figure 3-4)	Widen I-15 to a roadway cross section of 5 GP lanes and 2 HOT lanes (5+2) in each direction.	250 feet	Yes	Yes	Yes	47	43	23	25	50,000 [c]	Yes
Widen I-15 to 6 GP Lanes and 1 HOT Lane [d] (Figure 3-5)	Widen I-15 to a roadway cross section of 6 GP lanes and 1 HOT lane (6+1) in each direction.	250 feet	Yes	Yes	Yes	47	40	23	27	50,000 [c]	Yes

[a] Average speed is calculated over a 4-hour peak period for both southbound (SB) and northbound (NB) travel. Southbound peak period is the morning, and northbound peak period is in the evening.

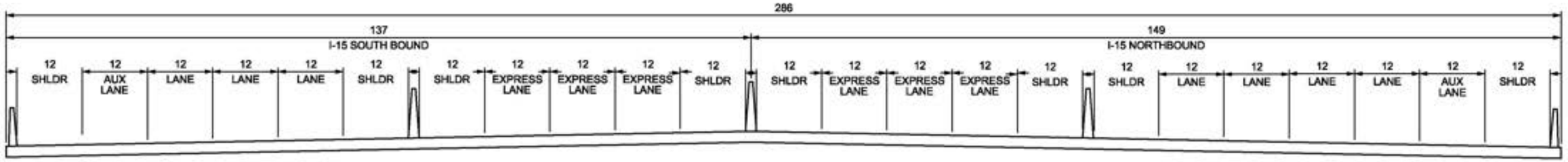
[b] Average travel time is calculated over a 4-hour peak period for both southbound and northbound travel. Southbound peak period is the morning, and northbound peak period is in the evening.

[c] Daily network delay includes delay on roads in the vicinity surrounding the project (I-15, I-215, U.S. 89, Legacy Parkway, and connecting arterial roads). The travel demand model shows a large reduction in overall network delay with any of the five I-15 mainline concepts compared to the 2050 no-action conditions. Because this metric is looking at a large transportation network and high vehicle volumes, the travel demand model did not show meaningful differences in daily network delay among the five I-15 mainline concepts.

[d] All five I-15 mainline concepts with additional capacity on I-15 passed Level 1 screening.

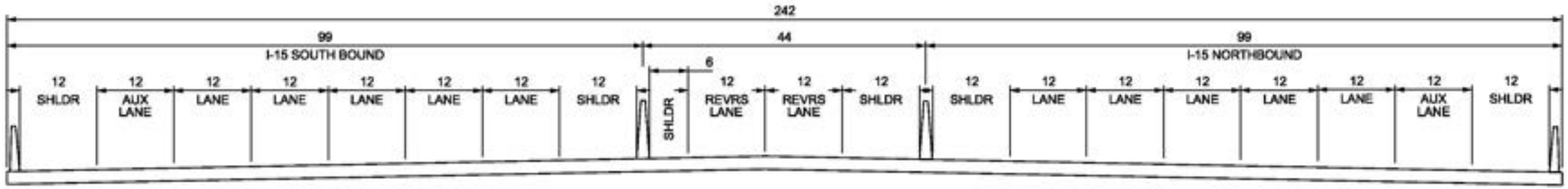
[e] The mainline concept with no additional capacity on I-15 with interchange improvements would increase projected daily traffic volumes on I-15 by about 3% overall. The average speeds, average travel times, and daily network delay would be similar to these conditions with the No-action Alternative. For more information, see the discussion above this table.

Figure 3-1. I-15 Mainline Express Lane Option Typical Section



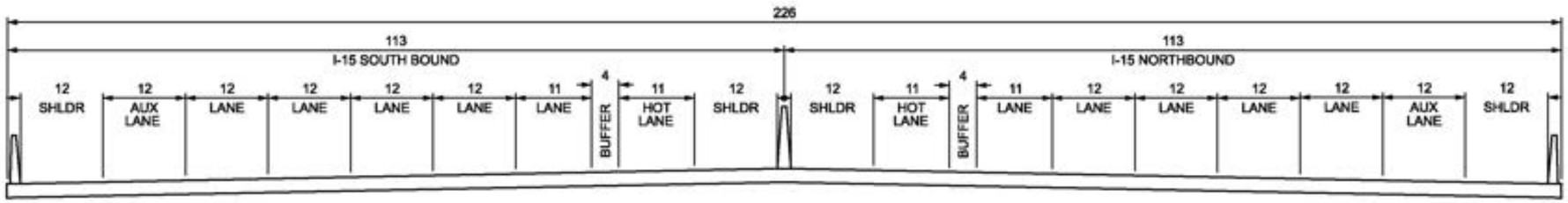
EXPRESS LANE OPTION
3 EXPRESS + 3/4 GP + 1 AUX

Figure 3-2. I-15 Mainline Reversible Lane Typical Section



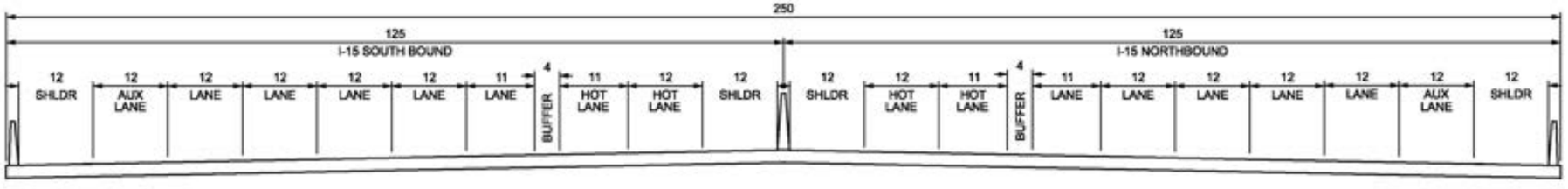
REVERSIBLE LANE OPTION
2 REVERSIBLE + 5 GP + 1 AUX

Figure 3-3. I-15 Mainline General Widening, 5 GP and 1 HOT Typical Section



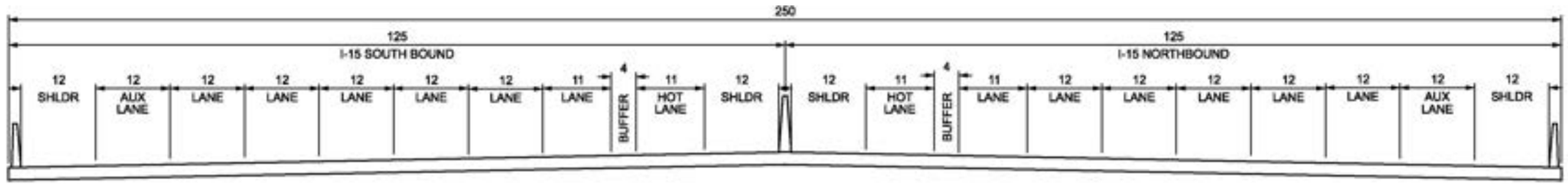
6 LANE OPTION
1 HOT + 5 GP + 1 AUX

Figure 3-4. I-15 Mainline General Widening, 5 GP and 2 HOT Typical Section



7 LANE OPTION
2 HOT + 5 GP + 1 AUX

Figure 3-5. I-15 Mainline General Widening, 6 GP and 1 HOT Typical Section



7 LANE OPTION
1 HOT + 6 GP + 1 AUX

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3.1.2 Level 2 Screening for Mainline Concepts

As shown above in Table 3-1, the I-15 mainline concepts that passed Level 1 screening would have different pavement widths and result in different levels of improvements to travel times and average speeds compared to the 2050 no-action conditions. UDOT relied primarily on a GIS analysis of pavement widths for Level 2 screening of the I-15 mainline concepts that passed Level 1 screening to evaluate the potential impacts to key resources adjacent to I-15 and costs associated with such impacts. Generally speaking, a wider pavement width and/or mainline section would result in more impacts to the key resources such as homes, businesses, environmental justice communities, historic properties, Section 4(f) resources, Section 6(f) resources, and wetlands. As an example, every 10 additional feet needed to widen I-15 to the outside of the existing right-of-way would cause 1.2 acres (52,800 square feet) of additional impact for each mile of length. For the entire project corridor, this extra 10 feet of width would equate to over 20 acres of additional impact to adjacent resources.

Concepts were screened out in Level 2 screening for either having more impacts without providing more benefit or for having similar levels of benefits while having more impacts. For example, concepts could also be eliminated in Level 2 screening if UDOT determines that the concept would substantially duplicate other concepts advanced through Level 2 screening, would have impacts substantially similar to those of other concepts that are advanced through Level 2 screening, or would substantially duplicate other less harmful or less expensive concepts that are advanced through Level 2 screening.

As shown above in Table 3-1, the typical section pavement widths for the five concepts that passed Level 1 screening ranged from 226 feet with the 5 GP and 1 HOT lane concept (Figure 3-3) to 286 feet with the 3 express lanes and 3/4 GP lanes concept (Figure 3-1). Of the five concepts that passed Level 1 screening, the 3 express lanes and 3/4 GP lanes concept and the 5 GP and 2 reversible lanes concept (Figure 3-2) provided the best improvements in average speed and reductions in travel time during both the morning and evening peak periods. All three of the express lane and reversible express lane concepts provided better improvements in average speed and reductions in travel time during both the morning and evening peak periods compared to any of the three general widening concepts.

What are peak periods?

Peak periods are the periods of the day with the greatest amounts of traffic. For the I-15 project, the morning peak period is from 6 AM to 10 AM, and the evening peak period is from 3 PM to 7 PM.

A discussion of the Level 2 screening evaluation for each I-15 mainline concept is provided below. Some of the impacts summarized in Table 3-2 below may overlap with the impacts discussed for each interchange in Section 3.2.3, *Level 2 Screening for Interchange and Bicyclist and Pedestrian Crossing Concepts*.

Table 3-2. I-15 Mainline Concepts Level 2 Screening Data

Resource [a]	Express Lanes	Reversible Lanes	5+1	5+2	6+1
Acres of aquatic resources potentially impacted (emergent marsh, playa, and wet meadow wetland types)	22.78 acres	20.15 acres	19.97 acres	21.21 acres	21.21 acres
Number of connections to regional transit facilities and regional trails	7 trails	7 trails	7 trails	7 trails	7 trails
Number of Section 4(f) parks or recreational properties potentially impacted	8 • Centerville Community Park • Ezra T. Clark Park • Hatch Park • Rosewood Park • South Park • Woods Cross Elementary School playing fields • Woods Cross High School playing fields • Farmington Junior High School playing fields	7 • Centerville Community Park • Ezra T. Clark Park • Hatch Park • South Park • Woods Cross Elementary School playing fields • Woods Cross High School playing fields • Farmington Junior High School playing fields	6 • Centerville Community Park • Ezra T. Clark Park • South Park • Woods Cross Elementary School playing fields • Woods Cross High School playing fields • Farmington Junior High School playing fields	7 • Centerville Community Park • Ezra T. Clark Park • Hatch Park • South Park • Woods Cross Elementary School playing fields • Woods Cross High School playing fields • Farmington Jr. High School playing fields	7 • Centerville Community Park • Ezra T. Clark Park • Hatch Park • South Park • Woods Cross Elementary School playing fields • Woods Cross High School playing fields • Farmington Jr. High School playing fields
Number of Section 6(f) parks potentially impacted	3 • Centerville Community Park • Hatch Park • Rosewood Park	2 • Centerville Community Park • Hatch Park	1 • Centerville Community Park	2 • Centerville Community Park • Hatch Park	2 • Centerville Community Park • Hatch Park
Number of residential properties potentially relocated [b]	134	52	43	63	63
Number of commercial properties potentially relocated [b]	43	39	27	39	39
Number of historic buildings with potential adverse effect [b]	20	15	7	15	15

(*continued on next page*)

Table 3-2. I-15 Mainline Concepts Level 2 Screening Data

Resource [a]	Express Lanes	Reversible Lanes	5+1	5+2	6+1
Potential impacts or benefits to low-income or minority populations?	Yes; areas along I-15 have potential low-income and minority populations, and there could be property impacts to these populations.	Yes; areas along I-15 have potential low-income and minority populations, and there could be property impacts to these populations.	Yes; areas along I-15 have potential low-income and minority populations, and there could be property impacts to these populations. The 5+1 option is the narrowest option and is the least impactful to communities.	Yes; areas along I-15 have potential low-income and minority populations, and there could be property impacts to these populations.	Yes; areas along I-15 have potential low-income and minority populations, and there could be property impacts to these populations.
Passes Level 2 screening?	**No**	**No**	**Yes**	**No**	**No**

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

[b] The number of residential properties, commercial properties, and historic buildings potentially relocated is based on a review of the structures (residential, commercial, and historic) that are within the 25-foot buffer of the options. Additional detail regarding the locations and types of property impacts for the Draft EIS alternative(s) will be determined in the Draft EIS analysis after additional design and impact minimization are completed.

The impact numbers described above in Table 3-2 include only a preliminary GIS estimate based on the additional typical section width for the mainline segments (using the 5 GP and 1 HOT lane concept as a baseline). More detailed engineering for the interchange areas and cross streets was not conducted, and it is likely that the residential and business impact numbers for the 5 GP and 2 HOT lanes concept, 6 GP and 1 HOT lane concept, and 3 express lanes and 3/4 GP lanes concept are underestimated. The impact table above shows these estimated impact results for comparison purposes for Level 2 screening purposes.

5 GP and 1 HOT Lane Concept Evaluation

The typical section pavement width for the 5 GP and 1 HOT lane concept is 226 feet, which is the smallest width of the I-15 mainline concepts evaluated (Figure 3-3).

Improvements to Travel Time and Average Speed. The 5 GP and 1 HOT lane concept would reduce travel time by 49% to 55% and increase average speeds by 95% to 125% during both the morning and evening peak periods compared to the 2050 no-action conditions.

Level 2 Screening Impacts. The 5 GP and 1 HOT lane concept would have the fewest impacts to any of the resources compared to any of the other I-15 mainline concepts evaluated in Level 2 screening.

Consistency with the WFRC 2019–2050 RTP. The 5 GP and 1 HOT lane concept is also consistent with the WFRC 2019–2050 RTP's assumptions for I-15, which are 4 GP and 2 HOT lanes. The 5 GP and 1 HOT lane concept would have the same width as a 4 GP and 2 HOT lane typical section.

WFRC's 2019–2050 RTP assumes that, by 2050, I-15 along the broader Wasatch Front (Weber, Davis, Salt Lake, and Utah Counties) will be converted to 4 GP and 2 HOT lanes. However, to maintain consistency of the HOT lanes on I-15 throughout the Wasatch Front, this conversion to 2 HOT lanes would likely occur as part of a larger, regional project for the Wasatch Front (not just for the segment of I-15 included in the EIS study area). The 5 GP and 1 HOT lane concept is consistent with the existing and planned number of GP and HOT lanes on I-15 north and south of the EIS study area and is forward-compatible with a conversion to 4 GP and 2 HOT lanes when UDOT decides to move forward with this conversion.

Level 2 Screening Summary. The 5 GP and 1 HOT lane concept was advanced through Level 2 screening because it would have the fewest impacts to any of the resources evaluated in Level 2 screening, it is consistent with the WFRC 2019–2050 RTP's assumptions for I-15, and it is consistent with the planned improvements to I-15 north and south of the project area.

Reversible Express Lanes Concept Evaluation

The 5 GP and 2 reversible lanes concept would have a 242-foot-wide typical section pavement width and would provide the second-best improvements to average speed and reductions in travel time out of the five I-15 mainline concepts evaluated (Figure 3-2).

Improvements to Travel Time and Average Speed. The 5 GP and 2 reversible lanes concept would reduce travel time by 62% to 67% and would increase average speeds by 15% to 206% during both the morning and evening peak periods compared to the 2050 no-action conditions. Compared to the 5 GP and 1 HOT lane concept, it would require 16 more feet of width, but it would reduce travel time by 25% to 27% and increase average speeds by 31% to 36% during both the morning and evening peak periods.

Level 2 Screening Impacts. UDOT determined that the 5 GP and 2 reversible lanes concept did not pass Level 2 screening because the additional 16 feet of width would potentially relocate 9 more residential households (about 20% more), would potentially relocate 12 more businesses (about 44% more); would have additional impacts to environmental justice communities; would have potential adverse effects to 8 more historic properties (over 100% more); would impact one more Section 4(f) park and one more Section 6(f) park; and would impact an additional 0.2 acre of wetlands compared to the 5 GP and 1 HOT lane concept. As described above, several of these categories of additional impacts are to resources with additional regulatory considerations such as Section 4(f), Section 6(f), and wetlands.

Operational Considerations. Compared to the 5 GP and 1 HOT lane concept, the 5 GP and 2 reversible lanes concept would also require more costs related to operations (for example, changing over gates and clearing out traffic before changing direction), snow plowing, street sweeping, and other maintenance activities due to the limited access points. The limited access points and long distances between access points were also identified as a concern for emergency service providers.

Consistency with the WFRC 2019–2050 RTP. The 5 GP and 2 reversible lanes concept would not be consistent with the WFRC 2019–2050 RTP's assumptions for I-15, and the reversible lanes would be inconsistent with the segments of I-15 to the north and south of the project area (which do not currently have reversible lanes and are not currently planned to have reversible lanes in the future). To maintain

consistency of the HOT lanes on I-15 throughout the Wasatch Front, a conversion to 2 reversible lanes would need to occur as part of a larger, regional project for the Wasatch Front (not just for the segment of I-15 included in the EIS study area).

Level 2 Screening Summary. The 5 GP and 2 reversible lanes concept was screened out in Level 2 screening for the additional resource impacts; the additional operational, maintenance, and emergency response considerations for the reversible lanes; and for the inconsistency with the HOT lanes on I-15 north and south of the project area.

5 GP and 2 HOT Lanes and 6 GP and 1 HOT Lane Concepts Evaluation

The 5 GP and 2 HOT lanes and 6 GP and 1 HOT lane concepts are reviewed together because these concepts have the same number of lanes (7 in each direction) and the same width. The 5 GP and 2 HOT lane concept and the 6 GP and 1 HOT lane concept would have much wider pavement (250 feet compared to 226 feet) (Figure 3-5) compared to the 5 GP and 1 HOT lane concept.

Improvements to Travel Time and Average Speed. Compared to no-action conditions, the 5 GP and 2 HOT lanes concept would reduce travel time by 58% to 62% and would increase average speeds by 135% to 169%. The 6 GP and 1 HOT lane concept would reduce travel time by 58% to 59% and would increase average speeds by over 135% to 150% compared to no-action conditions. Compared to the 5 GP and 1 HOT lane concept, the 5 GP and 2 HOT lanes concept and the 6 GP and 1 HOT lane concept would provide 10 to18% reductions in travel time and 1% to 21% improvements in average speed during both the morning and evening peak periods.

Level 2 Screening Impacts. The 5 GP and 2 HOT lanes concept and the 6 GP and 1 HOT lane concept would have substantially more impacts to the resources evaluated in Level 2 screening than the 5 GP and 1 HOT lane concept. The 5 GP and 2 HOT lanes concept and the 6 GP and 1 HOT lane concept would potentially relocate 20 more residential households (about 46% more); would potentially relocate 12 more businesses (about 44% more); would have additional impacts to environmental justice communities; would have potential adverse effects on 8 more historic properties, one more Section 4(f) park, and one more Section 6(f) park; and would impact an additional 1.2 acres of wetlands compared to the 5 GP and 1 HOT lane concept. As described above, several of these categories of additional impacts are to resources with additional regulatory considerations such as Section 4(f), Section 6(f), and wetlands.

Consistency with the WFRC 2019–2050 RTP. The additional lanes proposed in the 5 GP and 2 HOT lanes concept and the 6 GP and 1 HOT lane concept are not consistent with the WFRC 2019–2050 RTP's assumptions for I-15 (which are 6 lanes each direction).

Level 2 Screening Summary. The 5 GP and 2 HOT lanes concept and the 6 GP and 1 HOT lane concept were screened out in Level 2 screening for the additional resource impacts that were substantially more than the 5 GP and 1 HOT lane concept. The additional lanes proposed in these concepts were also not consistent with the WFRC 2019–2050 RTP's assumptions for I-15.

3 Express Lanes and 3/4 GP Lanes Concept Evaluation

The 3 express lanes and 3/4 GP lanes concept would have a typical section pavement width of 286 feet, which is the widest, most impactful footprint out of all five mainline I-15 options evaluated (Figure 3-1). This concept would propose 3 express lanes and 3 GP lanes in Salt Lake County, and 3 express lanes and 4 GP

lanes in Davis County. 3/4 GP lanes refers to the concept having 3 GP lanes in Salt Lake County and 4 GP lanes in Davis County.

Improvements to Travel Time and Average Speed. Compared to no-action conditions, the 3 express lanes and 3/4 GP lanes concept would provide the best reduction in travel time at 67% to 73% and would increase average speeds by 205% to 275%. Compared to the 5 GP and 1 HOT lane concept, the 3 express lanes and 3/4 GP lanes concept would provide 36% to 40% reductions in travel time and 56% to 67% improvements in average speed during both the morning and evening peak periods.

Level 2 Screening Impacts. The 3 express lanes and 3/4 GP lanes concept would have substantially more impacts to the resources evaluated in Level 2 screening than the 5 GP and 1 HOT lane concept. The 3 express lanes and 3/4 GP lanes concept would potentially relocate 91 more residential households (about 211% more); would potentially relocate 16 more businesses (about 60% more); would have additional impacts to environmental justice communities; would have potential adverse effects to 13 more historic properties, two more Section 4(f) parks, and two more Section 6(f) parks; and would impact an additional 2.8 acres of wetlands compared to the 5 GP and 1 HOT lane concept. As described above, several of these categories of additional impacts are to resources with additional regulatory considerations such as Section 4(f), Section 6(f), and wetlands.

Consistency with the WFRC 2019–2050 RTP. The additional lanes proposed in the 3 express lanes and 3/4 GP lanes concept are not consistent with the WFRC 2019–2050 RTP's assumptions for I-15 (which are 6 lanes each direction).

Level 2 Screening Summary. The 3 express lanes and 3/4 GP lanes concept was screened out in Level 2 screening for the additional resource impacts that were substantially more than the 5 GP and 1 HOT lane concept. The additional lanes proposed in this concept was also not consistent with the WFRC 2019–2050 RTP's assumptions for I-15.

Level 2 Screening for Mainline Concepts Results

When evaluating the five I-15 mainline concepts' travel times, average speeds, and pavement widths, UDOT determined that the **5 GP and 1 HOT lane concept** was the I-15 mainline concept that met the purpose of the project while minimizing the impacts to Level 2 screening resources adjacent to I-15 and maintaining consistency with the WFRC 2019–2050 RTP's assumptions for I-15. **The 5 GP and 1 HOT lane concept was advanced through Level 2 screening for consideration in the EIS.**

3.1.3 Concepts Eliminated in Screening

One I-15 mainline concept was eliminated during Level 1 screening and four I-15 mainline concepts were eliminated during Level 2 screening. The eliminated mainline concepts are summarized in Table 3-3.

Table 3-3. Initial Mainline Concepts Eliminated in Screening

Concept Name and Description	Reason for Elimination
No Additional Mainline I-15 Capacity Concept	
I-15 No Additional Capacity with Interchange Improvements	This concept was screened out in Level 1 screening because it would not reduce daily hours of delay on I-15, interchanges, and cross streets in 2050; it would not decrease through-traffic travel time on I-15 during the morning and evening peak periods; and it would not improve average speed on I-15 during the morning and evening peak periods.
I-15 Mainline General Widening Concepts	
Widen I-15 to 5 GP Lanes and 2 HOT Lanes	This concept was screened out in Level 2 screening for the additional resource impacts that were substantially more than the 5 GP and 1 HOT lane concept. The additional lanes proposed in these concepts were also not consistent with the WFRC 2019–2050 RTP's assumptions for I-15.
Widen I-15 to 6 GP Lanes and 1 HOT Lane	This concept was screened out in Level 2 screening for the additional resource impacts that were substantially more than the 5 GP and 1 HOT lane concept. The additional lanes proposed in these concepts were also not consistent with the WFRC 2019–2050 RTP's assumptions for I-15.
I-15 Mainline Express Lane and Reversible Express Lane Concepts	
Widen I-15 to 3 Express Lanes and 3 to 4 GP Lanes	This concept was screened out in Level 2 screening for the additional resource impacts that were substantially more than the 5 GP and 1 HOT lane concept. The additional lanes proposed in these concepts were also not consistent with the WFRC 2019–2050 RTP's assumptions for I-15.
I-15 5 GP Lanes Each Direction and 2 Reversible Lanes	This concept was screened out in Level 2 screening for the additional resource impacts; for the additional operational, maintenance, and emergency response considerations for the reversible lanes; and for the inconsistency with the HOT lanes on I-15 north and south of the project area.

3.2 Level 1 and Level 2 Screening for I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts

3.2.1 Design Considerations for Bicyclist and Pedestrian Crossings at Interchanges

Two of the primary project purposes (and the basis for Level 1 screening criteria) are to "better connect communities" and "improve mobility for all users." To understand these needs in the study area, UDOT hosted walking tours and held workshops in 2021 and 2022 to identify bicyclist and pedestrian needs along

I-15. UDOT also analyzed data to determine trip mode, origins and destinations of bicyclist and pedestrian travel, demographics such as the ethnicity or income level of users, trip directness, short vehicle trips to FrontRunner stations, and frequency of use at each I-15 crossing. Travel patterns were different for each crossing of I-15. This effort and information are summarized in the *Mobility Memorandum* (UDOT 2022e).

Each concept UDOT considered was reviewed for its ability to meet these project purposes in addition to the traditional, vehicle-focused purposes. Bicyclist and pedestrian crossing design accommodations were reviewed prior to the alternatives design phase to identify comfortable facility types and accommodations for bicyclists and pedestrians. These design accommodations, which were used to guide the preliminary evaluation of concepts in screening, included:

- **Design considerations to improve bicyclist and pedestrian crossings:**
  - Incorporated stop-controlled movements for vehicles; that is, no “free right-hand turn” movements at the ends of ramps where bicyclists and pedestrians are present. Free turning movements do not slow vehicles down as they enter the neighborhood streets and therefore reduce drivers’ ability to see slower-moving bicyclists and pedestrians.
  - Incorporated “squared-up” intersections to increase visibility between bicyclists and pedestrians and vehicles exiting I-15 where bicyclists and pedestrians are present; that is, ramps and intersections are not skewed, which would encourage higher speeds by vehicles, but instead they intersect at 90-degree angles and therefore encourage slower vehicle speeds.
  - Incorporated bicyclist and pedestrian facilities at interchanges and between project interchanges to increase the permeability across I-15 for residents. Many of these locations were identified during the community workshops during the summer of 2021.
  - Designed bicyclist and pedestrian crossing connections to be as direct as possible between destinations to encourage more use.
  - Incorporated wider sidewalks, shared-use paths, and buffered or barrier-separated bicycle lanes. UDOT will continue to work with Cities and stakeholders during final design on bicyclist and pedestrian considerations and designs.
- **Interchange type considerations:**
  - Diamond interchanges are the most bicyclist- and pedestrian-friendly because they consolidate crossings and support stop-controlled movements for vehicles. In a typical diamond interchange, pedestrians must make two crossings, one at an on-ramp and one at an off-ramp, to get to the other side of the interchange. The pedestrian crossings of the diamond interchange on- and off-ramps are also typically shorter in distance because the ramps are perpendicular to the cross street. This interchange type is the least efficient for vehicles and has the lowest vehicle capacity of the options considered for I-15. All interchanges were designed as tight diamonds first and then reviewed for traffic.
  - An example of a diamond interchange is the interchange at Rosa Parks Way and Interstate 5 in Portland, Oregon (Figure 3-6 and Figure 3-7).

Figure 3-6. Aerial View of Diamond Interchange Example from Portland, Oregon

Figure 3-7. Street View of Diamond Interchange Example from Portland, Oregon

- Single-point urban interchanges (SPUI) are the second best for bicyclists and pedestrians (after a tight diamond interchange). In a typical SPUI, pedestrians might need to make three or more crossings of ramps to get to the other side of the interchange. A SPUI moves more vehicle traffic than a tight diamond interchange and often has a more compact design (smaller footprint) than a diamond interchange. Where it would be difficult to incorporate at-grade crossings through a SPUI due to local constraints, separated paths were designed by UDOT. If a diamond interchange did not work at a location for the projected travel demand in 2050, a SPUI was then considered.
  - An example is the interchange at Bangerter Highway and 11400 South in South Jordan, Utah (Figure 3-8 and Figure 3-9).

Figure 3-8. Aerial View of SPUI Example on Bangerter Highway and 11400 South in South Jordan

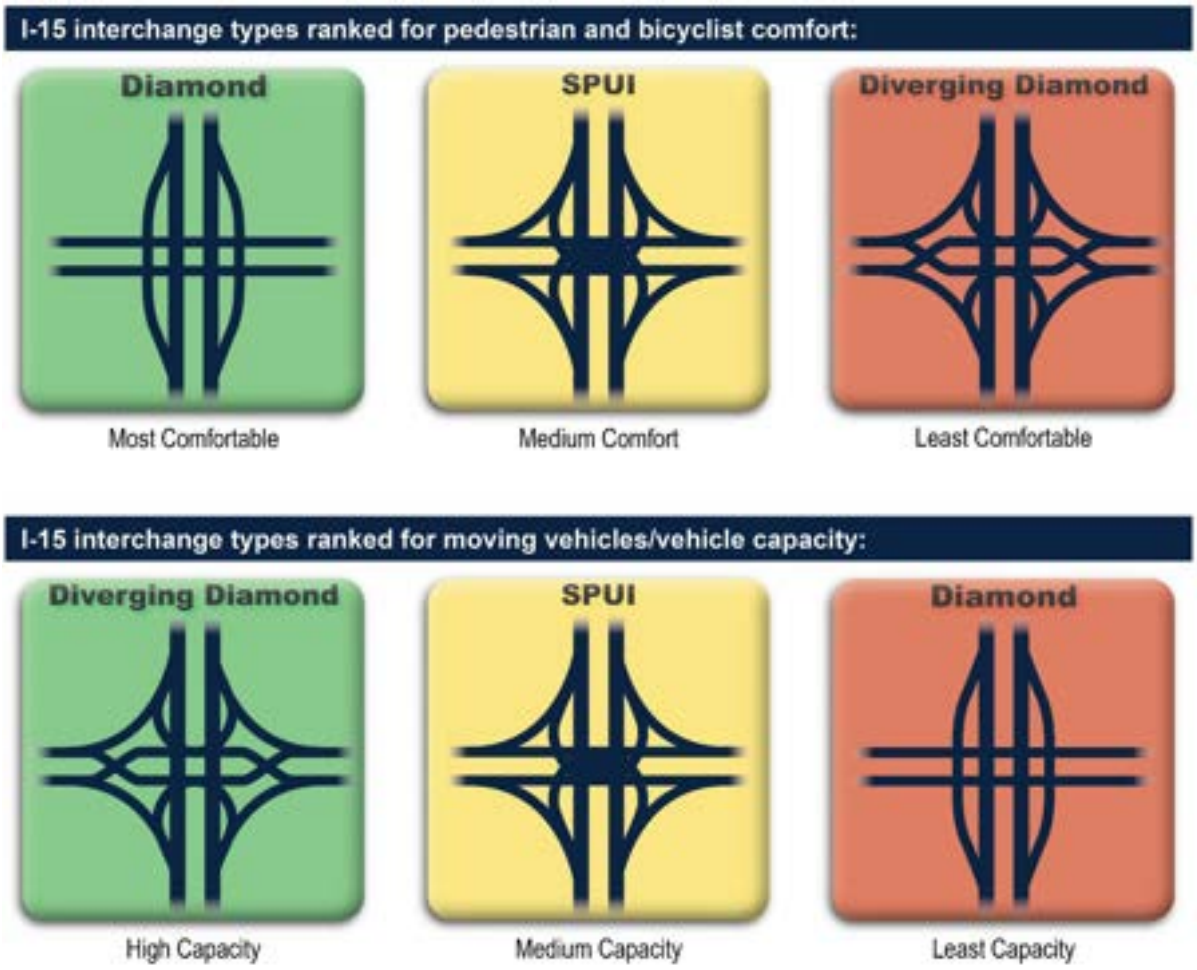
Figure 3-9. Street View of SPUI Example at Bangerter Highway and 11400 South in South Jordan

- Diverging diamond interchanges (DDI) are the most difficult for bicyclists and pedestrians and were considered only if a tight diamond interchange or SPUI could not work at the location due to high vehicle traffic. In a typical DDI, pedestrians might need to make four crossings to get to the other side of the interchange. In addition, pedestrians are sometimes directed to a sidewalk in the center of the street before crossing again to a sidewalk on the side of the street.
  - 500 South in West Bountiful, within the study area, is an example of a DDI (Figure 3-10). At 500 South, pedestrians must make four crossings and traverse a sidewalk at the center of 500 South to get to the other side of the interchange. Each additional crossing that a pedestrian makes adds time to their travel and is a possible deterrent to walking (Figure 3-11).

Figure 3-10. Existing DDI at 500 South in Bountiful and West Bountiful

Pedestrians must traverse to the center of the DDI on 500 South and then cross again to reach the outside of 500 South where sidewalks are typically available.

Figure 3-11. I-15 Interchange Types Ranked for Pedestrians, Bicyclists, and Vehicles for this EIS



3.2.2 Level 1 Screening for Interchange and Bicyclist and Pedestrian Crossing Concepts

UDOT considered several interchange concepts for I-15 in Level 1 screening (Table 3-4 below). Before design began, the design team considered bicyclist and pedestrian crossing connections through and around the interchanges as well as the projected travel demand in 2050.

Although diamond interchanges were preferred from a bicyclist and pedestrian perspective, SPUIs and diamonds were both considered in locations where there were meaningful advantages and disadvantages for both interchange types (for example, when a SPUI would provide more traffic capacity and a smaller footprint with fewer property impacts when compared to a diamond interchange).

Through the concept development process, traffic modeling found that the 2050 interchange travel demand throughout the study area could be handled through diamond interchanges or SPUIs with a new interchange at I-215 and an improved, full-access interchange at Warm Springs Road (at either 1800 North or 2100 North in Salt Lake City). Traffic modeling showed that the I-215 and Warm Springs Road interchange improvements decreased future traffic volumes at the adjacent 600 North interchange in Salt Lake City and 2600 South interchange in North Salt Lake/Woods Cross. These reduced 600 North and 2600 South interchange traffic volumes could be accommodated with either diamond interchanges or SPUIs.

What does full access mean?

Full access refers to all four movements of travel onto and off of I-15 (southbound off-ramp, southbound on-ramp, northbound off-ramp, and northbound on-ramp) are accommodated by the interchange for travelers coming from both the east and west sides of I-15.

Because diamond interchanges or SPUIs could accommodate traffic at all interchanges, there was no need to include DDIs (which are the most difficult for bicyclists and pedestrians).

By considering only diamond interchanges and SPUIs throughout the study area, UDOT also increases interchange consistency for all users (motorists, bicyclists, and pedestrians) through the I-15 corridor, improves connectivity, and enhances the level of comfort for bicyclists and pedestrians.

Table 3-4 below describes the interchange concepts analyzed in Level 1 screening. All interchange concepts were designed to work with the 5 GP and 1 HOT lane concept for the I-15 mainline that passed Level 1 and Level 2 screening (see Section 3.1, *Level 1 and Level 2 Screening for I-15 Mainline Concepts*, for a description of this mainline concept).

Which I-15 mainline concept were the interchange concepts designed to match?

All interchange concepts were designed to work with the 5 GP and 1 HOT lane concept that passed Level 1 and Level 2 screening.

The interchanges and bicyclist and pedestrian crossing improvements were evaluated for five separate geographic areas in the study areas described in Section 3.0, *Concept Evaluation*, and shown in Figure 3-12. Figures for the options that passed Level 1 screening and were made available for public review in November 2022 are included in Attachment A, *Draft Alternative Concept Figures – November 2022*.

The evaluated interchange and bicyclist and pedestrian crossing options are described in Table 3-4.

Figure 3-12. Five Geographic Areas and Interchange Cross Streets

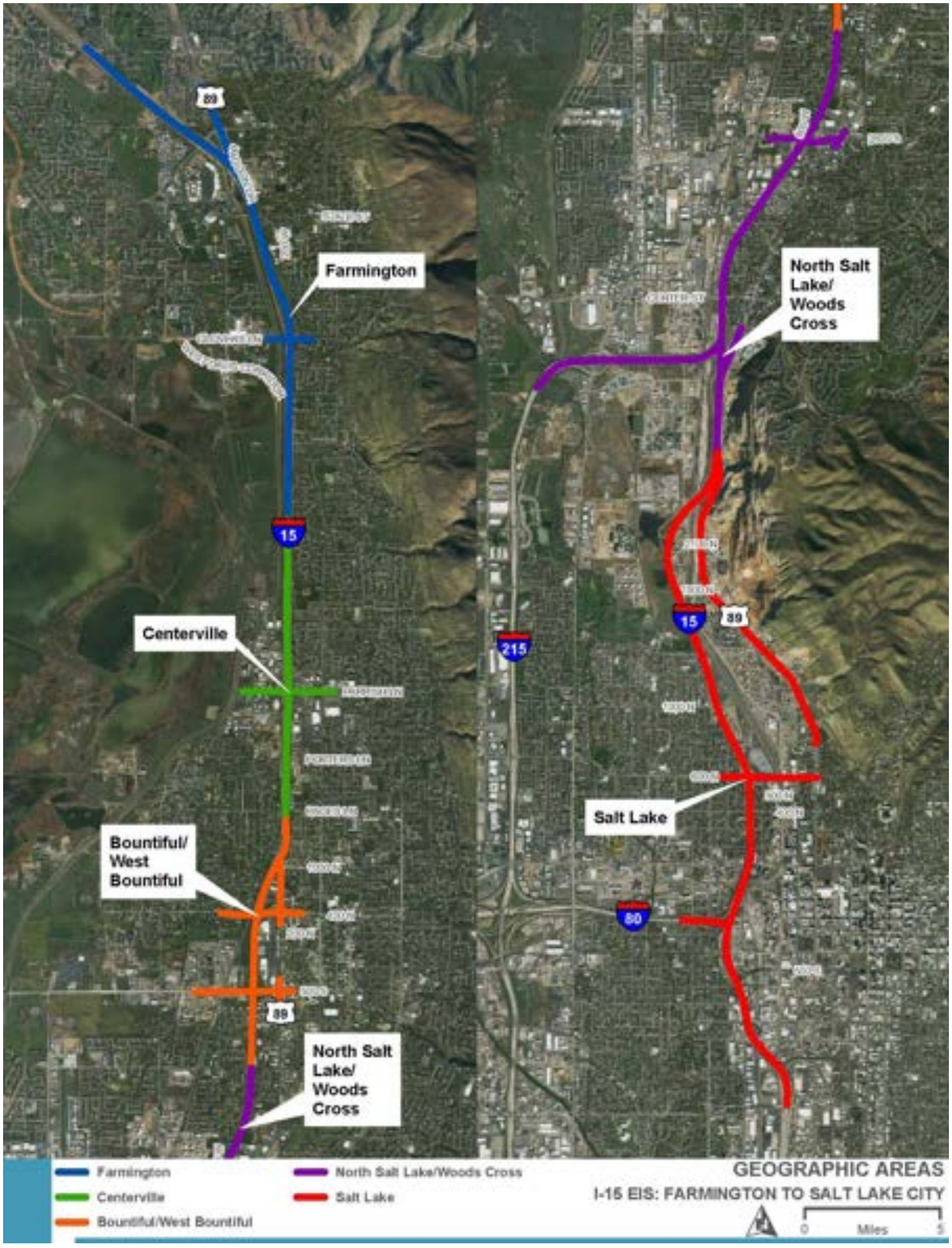


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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
Salt Lake Area Interchange Concepts								
600 North and 1000 North	CD Interchange at 600 North and 1000 North	A collector-distributor (CD) interchange divides access to I-15 between 600 North and 1000 North and connects the access points with a collector and distributor road system. This interchange design is paired with a new full-access interchange at Warm Springs Road (2100 North) to provide the best traffic operations.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes with an additional 4-foot buffer and 8-foot-wide sidewalks on both sides of 600 North. • 12-foot-wide shared-use path (SUP) on 1000 North that crosses under I-15 and connects to Warm Springs Road east of I-15.	Yes	Yes, improves connections at 1000 North by providing all movements to I-15.	Yes	Yes, if paired with an interchange at 2100 North.	Yes, combined with 2100 North and 1000 North Option. See Level 2 screening evaluation for Salt Lake Option A.
600 North	Tight Diamond Interchange at 600 North	Tight diamond interchange with full access at 600 North. This concept does not include additional connections to 1000 North.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes and 8-foot-wide sidewalks on both sides of 600 North.	Yes	No, does not improve access to I-15 at 1000 North.	Yes	No. Requires a connection at 1000 North to work for traffic. See CD option in row above.	No
600 North	Three-lane SPUI at 600 North	Rebuild the SPUI at 600 North without adding a full interchange at 2100 North. Without a full interchange at 2100 North, the SPUI at 600 North requires triple left-hand turning movements.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 600 North. • 8-foot-wide sidewalk on the south side of 600 North. • Grade-separated pathway on the north side of 600 North.	No. Crossing three lanes of traffic at intersections is not comfortable for bicyclists and pedestrians.	No, does not improve access to I-15 at 1000 North.	Yes	Yes	No
600 North	Two-lane SPUI at 600 North and West Side Frontage Road Connection to 1800 North	SPUI at 600 North with west side frontage road connecting the new Warm Springs Road full interchange at 1800 North. Adding a full interchange at Warm Springs Road allows a two-lane SPUI (instead of a three-lane SPUI) at 600 North.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 600 North. • 8-foot-wide sidewalk on the south side of 600 North. • 14-foot-wide grade-separated pathway on the north side of 600 North.	No. A SPUI interchange configuration would provide out of direction travel for bicyclists and pedestrians at 600 North.	No, does not improve access to I-15 at 1000 North.	Yes	Yes, if paired with an interchange at 1800 North.	No. 600 North SPUI does not sufficiently improve safety and mobility for pedestrians and bicyclists at 600 North.

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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
1800 North	Tight Diamond Interchange at 1800 North	New tight diamond interchange at 1800 North. This interchange is paired with the two-lane SPUI (600N-SPUI-3) at 600 North. This interchange does not pair with the 600 North and 1000 North CD interchange. This concept reduces truck traffic at 600 North.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • New 12-foot-wide SUP between 1000 North and 1800 North on new frontage road on the west side of I-15. New 12-foot-wide grade-separated SUP on the north side of 1800 North that crosses I-15 and the railroad lines to connect to SUP along U.S. 89.	Yes	No, does not improve access to I-15 at 1000 North. Full access to I-15 is provided at 1800 North, but this requires out-of-direction travel for residents in the 1000 North area, impacting community travel patterns.	Yes	No. An interchange at 1800 North works only if paired with a SPUI interchange at 600 North. All SPUIs at 600 North were screened out.	No
2100 North	Tight Diamond Interchange at 2100 North	New tight diamond interchange at 2100 North. This concept reduces truck traffic at 600 North.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • 12-foot-wide SUP on 1000 North that crosses under I-15 and connects to Warm Springs Road east of I-15.	Yes	Yes, new interchange provides better access for trucks to access industrial areas in north Salt Lake City and reduces truck traffic at the 600 North interchange.	Yes	Yes, if paired with an interchange at 600 North.	Yes, combined with CD interchange at 600 North and 1000 North. See Level 2 screening evaluation for Salt Lake Option A.
2100 North	Rebuild Existing 2100 North Interchange	Existing interchange configuration rebuilt to support a wider I-15 mainline.	• SUP along U.S. 89 on the east side of the road connecting 800 North in Salt Lake City to the existing pathway near Eaglegate Drive.	No, because this option would not improve access at 2100 North, it would not reduce truck traffic and overall traffic volumes at the adjacent 600 North interchange. These higher truck and overall traffic volumes at 600 North would require a larger SPUI interchange at 600 North and would not enhance bicyclist and pedestrian access across I-15 at 600 North.	No, because this option would not improve access at 2100 North, it would not reduce truck traffic and overall traffic volumes at the adjacent 600 North interchange.	Yes	No, because this option would not improve access at 2100 North, it would not reduce truck traffic and overall traffic volumes at the adjacent 600 North interchange. These higher truck and overall traffic volumes at 600 North would not be consistent with the Salt Lake City goal to reduce truck traffic on 600 North.	No
North Salt Lake/Woods Cross Interchange Concepts								
U.S. 89	Rebuild Existing U.S. 89 Interchange	Existing interchange configuration rebuilt to support a wider I-15 mainline.	• SUP along U.S. 89.	Yes	No, because it would not provide access to I-215 for traffic coming from Bountiful and North Salt Lake.	Yes	No, because it would not provide access to I-215 for traffic coming from Bountiful and North Salt Lake, it would not improve operations at the adjacent 2600 South interchange.	No
I-215	Full SPUI at I-215	New, full SPUI with access to I-15 and I-215 from U.S. 89. This option has a T intersection on U.S. 89 and no Center Street southbound off-ramp.	• SUP along U.S. 89.	Yes	Yes, new interchange provides new and improved access to I-215 for residents of North Salt Lake and Bountiful.	Yes	Yes, if paired with the interchange at 2600 South.	Yes, combined with options at 2600 South. See Level 2 screening evaluation for North Salt Lake/Woods Cross Options A and B.

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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
I-215	Tight Diamond Interchange at I-215	New tight diamond interchange without access to I-215 from U.S. 89. Includes new flyover ramps.	• SUP along U.S. 89.	Yes	No, tight diamond does not provide access to I-215.	Yes	No, the tight diamond does not provide access to I-215. Tight diamond ramp spacing could not be accommodated in this location due to vertical and horizontal constraints and topography.	No
Center Street Interchange Concepts								
Center Street	Quarter Interchange at Center Street	Quarter interchange at Center Street with southbound off-ramp.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes and 8-foot-wide sidewalks on both sides of Center Street.	No, keeping the Center Street southbound off-ramp would keep a conflict for bicyclists and pedestrians on the north side of Center Street.	Yes, new interchange at I-215 provides new and improved access to I-215 for residents of North Salt Lake and Bountiful.	Yes	No, the Center Street southbound off-ramp would be located between the 2600 South, I-215, and new I-215/U.S. 89 local interchange. Traffic analysis shows that adequate access to North Salt Lake (both east and west of I-15) can be provided with the improvements at 2600 South and the new I-215/U.S. 89 local interchange.	No. See discussion after this table for more information.
Center Street	I-15 Overpass (no access)	I-15 would go over Center Street with no access. Southbound I-15 access to North Salt Lake would be provided with the new I-215 interchange or 2600 South interchange.	• Upgrade to existing SUP on the south side of Center Street between I-15 and 400 West. • Buffered or barrier-separated bike lanes and 8-foot-wide sidewalks on both sides of Center Street. • Removing the off-ramp eliminates an at-grade intersection, thereby improving the corridor for bicyclists and pedestrians.	Yes, removing the Center Street southbound off-ramp would improve the use of Center Street for bicyclists and pedestrians.	Yes, new interchange at I-215 provides new and improved access to I-215 for residents of North Salt Lake and Bountiful.	Yes	Yes, adjacent 2600 South and I-215/U.S. 89 interchanges support travel demand with closure of the off-ramp.	Yes. See Level 2 screening evaluation for North Salt Lake/Woods Cross Options A and B.
2600 South/1100 North Interchange Concepts (Woods Cross/North Salt Lake/Bountiful)								
2600 South	Tight Diamond Interchange at 2600 South	Tight diamond interchange at 2600 South.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes with an 8-foot-wide sidewalk on the north side of 2600 South and 12-foot-wide SUP on the south side of 2600 South.	Yes	Yes	Yes	Acceptable, if paired with the new interchange at I-215. SPUI operates better.	Yes, combined with full SPUI at I-215. See Level 2 screening evaluation for North Salt Lake/Woods Cross Option A.
2600 South	Three-lane SPUI at 2600 South	SPUI at 2600 South without new SPUI at I-215. Without a SPUI at I-215, the SPUI at 2600 South requires triple left-hand turning movements.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 2600 South. • Sidewalk on the north side of 2600 South. • Grade-separated pathway on the north side of 2600 South.	No. Crossing three lanes of traffic at intersections is not comfortable for bicyclists and pedestrians.	Yes	Yes	Yes	No

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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
2600 South, 800 West, and I-215	Two-lane SPUI at 2600 South and 800 West Connection	SPUI at 2600 South with a new SPUI at I-215 and a grade-separated bicyclist and pedestrian crossing parallel to the interchange. Adding a new SPUI at I-215 allows for a two-lane SPUI (instead of a three-lane SPUI) at 2600 South.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 2600 South. • 8-foot-wide sidewalk on the north side of 2600 South. • 14-foot-wide grade-separated SUP on the south side of 2600 South. • 12-foot-wide SUP on the south side of 800 West and 5-foot-wide sidewalk on the north side of 800 West crossing underneath I-15.	Yes	Yes	Yes	Yes, if paired with the interchange at I-215. Operates better than the tight diamond.	Yes, combined with full SPUI at I-215. See Level 2 screening evaluation for North Salt Lake/Woods Cross Option B.
2600 South	Rebuild Existing DDI	Existing interchange configuration rebuilt to support a wider I-15 mainline.	• Buffered or barrier-separated bike lanes and 8-foot-wide sidewalks on both sides of 2600 South.	No. DDIs are not comfortable for bicyclists and pedestrians to navigate.	Yes	Yes	Yes	No
Bountiful/West Bountiful 500 South Interchange Concepts								
500 South	Tight Diamond Interchange at 500 South	Tight diamond interchange at 500 South.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • 12-foot-wide SUP on both sides of 500 South. • New SUP connection from 500 South to Woods Cross FrontRunner Station west of I-15.	Yes	Yes	Yes	Yes	Yes, combined with options at 500 West and 400 North. See Level 2 screening evaluation for Bountiful/West Bountiful Options A, B, and C.
500 South	SPUI at 500 South	SPUI at 500 South with pedestrian corridors on both sides of 500 South.	• No free right-hand turns for vehicles and better sight lines, thereby enhancing safety for bicyclists and pedestrians. • 12-foot-wide SUP on both sides of 500 South.	Yes	Yes	Yes	Yes	No; since a tight diamond is sufficient for traffic and preferable for bicyclists and pedestrians, the SPUI was not advanced to Level 2.
500 South	DDI at 500 South	DDI at 500 South.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • SUP on both sides of 500 South.	No. DDIs are not comfortable for bicyclists and pedestrians to navigate.	Yes	Yes	Yes	No
500 South	Roundabout on 500 South	Roundabouts on 500 South and the existing interchange configuration rebuilt to support a wider I-15 mainline.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • SUP on both sides of 500 South.	No. Roundabouts can limit sight distance for vehicles and introduce out-of-direction travel for bicyclists and pedestrians.	Yes	Yes	No, the roundabouts would require 3 lanes to provide sufficient capacity.	No

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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
400 North/500 West Interchange Concepts (Bountiful/West Bountiful)								
400 North	Tight Diamond Interchange at 400 North	Tight diamond interchange at 400 North and eliminate ramps at 500 West.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 400 North. • SUP on the north side of 400 North.	Yes	Yes	Acceptable. Weaving issues remain on I-15 mainline.	Acceptable. Requires more improvements to 400 North and 500 West intersection to accommodate traffic demand.	No. Other options at this location better accommodate traffic and bicyclist and pedestrian users.
400 North and 500 West	3/4 Partial Diamond Interchange at 400 North	Partial diamond interchange at 400 North. The interchange at 400 North would accommodate southbound on- and off-ramps and the northbound off-ramp. The northbound on-ramp would be at 500 West.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 400 North. • 12-foot-wide SUP on the north side of 400 North. Wider bridge over 1600 North/Pages Lane to accommodate future bicyclist and pedestrian improvements.	Yes	Yes	Yes	Yes	Yes, combined with tight diamond interchange at 500 South. See Level 2 screening evaluation for Bountiful/West Bountiful Option B.
400 North and 500 West	Split Diamond Interchange at 400 North and 500 West	A split diamond interchange divides access to I-15 between 400 North and 500 West. The northbound off-ramp and southbound on-ramp would be at 400 North, and the southbound off-ramp and northbound on-ramp at 500 West. Southbound off-ramp would exit on right side instead of left side.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 400 North. • 12-foot-wide SUP on the north side of 400 North. Wider bridge over 1600 North/Pages Lane to accommodate future bicyclist and pedestrian improvements.	Yes	Yes	Yes	Yes	Yes, combined with tight diamond interchange at 500 South. See Level 2 screening evaluation for Bountiful/West Bountiful Option A.
400 North and 500 South	CD between 500 South and 400 North	CD concept combined with a full diamond interchange at 500 South, full diamond interchange at 400 North, and northbound on-ramp at 500 West.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 400 North. • 12-foot-wide SUP on the north side of 400 North. Wider bridge over 1600 North/Pages Lane to accommodate future bicyclist and pedestrian improvements.	Yes	Yes	Yes. Enhances I-15 mainline operations and reduces weaving between 500 South and 400 North.	Yes	Yes, combined with NB on-ramp at 500 West. See Level 2 screening evaluation for Bountiful/West Bountiful Option C.

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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
Centerville and Parrish Lane Interchange Concepts								
Parrish Lane	Tight Diamond Interchange at Parrish Lane and Frontage Road Connection	Tight diamond interchange at Parrish Lane with northbound off-ramp that connects directly to frontage road on north side of Parrish Lane. East-side Frontage Road connection for north-south travel.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • 12-foot-wide SUP on both sides of Parrish Lane. • Grade-separated 14-foot-wide SUP crossing over I-15 and railroad lines at 400 South/Porter Lane. • New grade-separated 14-foot-wide SUP crossing at Centerville Park over I-15/railroad lines/Legacy Parkway.	Yes	Yes	Yes	Yes	Yes. See Level 2 screening evaluation for Centerville Option A.
Parrish Lane and 200 North	SPUI at Parrish Lane and Frontage Road Connection	SPUI with northbound off-ramp that connects directly to frontage road on north side of Parrish Lane. Includes grade-separated bicyclist and pedestrian crossing at 200 North. East-side Frontage Road connection for north-south travel.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • 14-foot-wide SUP on the north side of Parrish Lane. • Grade-separated 14-foot-wide SUP crossing of I-15 and railroad lines at 200 North. • New grade-separated 14-foot-wide SUP crossing at Centerville Park over I-15/railroad lines/Legacy Parkway.	Yes	Yes	Yes	Yes	Yes. See Level 2 screening evaluation for Centerville Option B.
200 West/Glovers Lane/500 South Interchange Concepts (Farmington)								
200 West	Rebuild Existing Half Diamond Interchange at 200 West	Existing interchange configuration rebuilt to support a wider I-15 mainline. Includes safety improvements to bring the interchange up to current UDOT design standards.	• Glovers Lane bridge over I-15 and the railroad lines is widened to include a 10-foot-wide sidewalk on the north side, a 6-foot-wide sidewalk on the south side, and buffered or barrier-separated bike lanes on both sides to match the facilities going over Legacy Parkway. • State Street/Clark Lane bridge over I-15 and the railroad lines is widened to include buffered or barrier-separated bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway.	Yes	Yes	Yes	Yes	Yes. See Level 2 screening evaluation for Farmington Option A.

(*continued on next page*)

Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
200 West	Half Diamond Interchange at 200 West with Roundabout	Existing interchange configuration rebuilt to support a wider I-15 mainline with an added roundabout on the east side of I-15. Includes safety improvements to bring the interchange up to current UDOT design standards.	• SUP connections on 200 West and Frontage Road. • Glovers Lane bridge over I-15 and the railroad lines is widened to include a 10-foot-wide sidewalk on the north side, a 6-foot-wide sidewalk on the south side, and buffered or barrier-separated bike lanes on both sides to match the facilities going over Legacy Parkway. • State Street/Clark Lane bridge over I-15 and the railroad lines is widened to include buffered or barrier-separated bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway.	Yes	Yes	Yes	No, the roundabout does not have sufficient capacity to accommodate expected traffic.	No
200 West	New Full-access Interchange at 200 West	Full-access interchange at 200 West. Interchange would add a northbound on-ramp and a southbound off-ramp to 200 West near the current alignment.	• SUP connections on 200 West and Frontage Road. • Glovers Lane bridge over I-15 and the railroad lines is widened to include a 10-foot-wide sidewalk on the north side, a 6-foot-wide sidewalk on the south side, and buffered or barrier-separated bike lanes on both sides to match the facilities going over Legacy Parkway. • State Street/Clark Lane bridge over I-15 and the railroad lines is widened to include buffered or barrier-separated bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway.	Yes	Yes	Yes	Yes	Yes. See Level 2 screening evaluation for Farmington Option C.
Glovers Lane	Tight Diamond Interchange at Glovers Lane	New tight diamond interchange with full access to I-15 at Glovers Lane. This option removes the 200 West ramp connections.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians.	Yes	Yes	Yes	No, the tight diamond does not have sufficient capacity to accommodate expected traffic. Tight diamond ramp spacing would have more impacts to local road network and neighborhoods east of I-15.	No

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Table 3-4. I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts Evaluated in Level 1 Screening

Cross Street(s) and Concept Name		Concept Description	Bicyclist and Pedestrian Crossing Features	Supports Bicyclists and Pedestrians?	Better Connects Communities?	Meets Operational and Safety Standards?	Supports Travel Demand?	Advance to Level 2 Screening?
Glovers Lane	SPUI at Glovers Lane	New SPUI with full access to I-15 at Glovers Lane. Includes 200 West northbound off-ramp and southbound on-ramp.	• Perpendicular intersections with no free right-hand turns reduce the speed of traffic and provide better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • New grade-separated 14-foot-wide SUP on the north side of Glovers Lane. • Buffered or barrier-separated bike lanes on both sides and an 8-foot-wide sidewalk on north side of Glovers Lane. • State Street/Clark Lane bridge over I-15 and the railroad lines is widened to include buffered or barrier-separated bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway.	Yes	Yes	Yes	Yes	Yes. See Level 2 screening evaluation for Farmington Option B.

Interchange Concepts Eliminated in Level 1 Screening

Sixteen interchange concepts were eliminated in Level 1 screening for not meeting the purpose of the project. Table 3-4 above details the results of this analysis.

The two sections below provide additional information about the evaluation and elimination of the North Salt Lake Center Street and the Salt Lake City 600 North SPUI and 1800 North Interchange. This additional information is provided because there were several city and stakeholder comments related to the North Salt Lake Center Street southbound off-ramp and because the Salt Lake City 600 North SPUI and 1800 North Interchange was initially advanced the 600 North SPUI and 1800 North interchange to Level 2 screening in November 2022 and now is being eliminated in Level 1 screening.

Elimination of the Quarter Interchange at Center Street in North Salt Lake. During the draft alternatives public comment period, UDOT received multiple comments, including comments from the City of North Salt Lake, requesting that the existing quarter interchange at Center Street in North Salt Lake be maintained as part of any I-15 alternative in North Salt Lake. More discussion is provided below about the reasons why this concept was not advanced.

The quarter interchange at Center Street (with the southbound off-ramp) was eliminated for the following reasons. There is a planned project in the RTP for Center Street to cross over or under the UTA FrontRunner and Union Pacific railroad tracks at 300 West. The I-15 project would be forward-compatible with either option. Removing the Center Street southbound off-ramp would improve operations on I-15 by reducing the number of off-ramps in North Salt Lake between the 2600 South on-ramp and the I-215 off-ramp. Removal of the Center Street southbound off-ramp would improve operations on I-15 by reducing conflicts between the southbound 2600 South on-ramp (which merges about 0.75 mile north of Center Street) and the southbound Center Street off-ramp, and the southbound I-215 off-ramp, which is about 0.5 mile south of the Center Street southbound off-ramp. Having a longer distance between the southbound 2600 South on-ramp and the I-215 southbound off-ramp reduces the number and density of traffic changing lanes or slowing down to exit I-15. Depending on whether Center Street is elevated or depressed to cross the railroad tracks, the tie-in of the I-15 southbound off-ramp to Center Street would be significantly higher or lower than it is at the existing location with Center Street at grade. Elevating or depressing Center Street to cross the railroad tracks would require constructing retaining walls up to 50 to 60 feet high (either higher or lower depending on whether Center Street goes over or under the railroad tracks). Complete reconstruction of the southbound off-ramp would be required and would likely require moving the exit point (ramp gore) where the southbound off-ramp leaves mainline I-15. A new southbound off-ramp at Center Street would be best evaluated as part of the future Center Street grade-separated railroad crossing project to ensure that the southbound off-ramp is compatible with the selected Center Street option for crossing the railroad tracks.

Elimination of the 600 North SPUI and 1800 North Interchange in Salt Lake City. During the draft alternatives public comment period in November 2022 to January 2023, UDOT had also initially advanced the 600 North SPUI and 1800 North interchange to Level 2 screening. However, based on input from Salt Lake City and the community received during the public comment period, UDOT determined that the 600 North SPUI would not meet the Level 1 screening criteria of better connecting communities and supporting bicyclists and pedestrians.

The input from Salt Lake City and the community emphasized that the 600 North SPUI and 1800 North interchange would not improve the community connections to I-15 because it would remove the existing southbound off-ramp, southbound on-ramp, and northbound on-ramp at 1000 North and require any traffic

from the Rose Park area by 1000 North area to make out-of-direction travel movements at either 600 North or 1800 North to access the Rose Park neighborhood. This out-of-direction travel would also result in more traffic coming through neighborhood streets.

Additionally, Salt Lake City and the community provided feedback that the bicyclist and pedestrian shared-use path proposed as part of the 600 North SPUI would not improve the transportation network for bicyclists and pedestrians because it would require a lot of out-of-direction travel for pedestrians and bicyclists through the 600 North SPUI area. Salt Lake City also provided input that the 600 North SPUI would not be consistent with the Salt Lake City planned bicycle and pedestrian facilities on 600 North to the west and east of I-15.

Because the 600 North SPUI and 1800 North interchange would not meet the Level 1 screening criteria of better connecting communities and supporting bicyclists and pedestrians, UDOT eliminated this alternative during Level 1 screening.

Bicyclist and Pedestrian Crossings Evaluated with Interchange Concepts

In addition to the bicyclist and pedestrian crossings evaluated at interchange locations in Table 3-4 above, there were also 10 bicyclist and pedestrian crossing concepts in the study area that would reduce conflicts between travel modes, improve bicyclist and pedestrian accommodations, and pass Level 1 screening. These 10 bicyclist and pedestrian concepts would work with any of the interchange concepts in each geographic area, would better connect communities, and would improve mobility and safety. A list of these bicyclist and pedestrian concepts is included below (from south to north) and shown in the figures in Section 4.0, *Summary of the Results of the Alternatives Development and Screening Process*.

- Salt Lake City
  - 400 North new underpass for bicyclists, pedestrians, and vehicles
- North Salt Lake/Salt Lake City
  - New shared-use path (SUP) connecting U.S. 89 from Eagle Ridge Drive in North Salt Lake to Wall Street/200 West in Salt Lake City
- North Salt Lake/Woods Cross
  - Center Street SUP improvements between I-15 and 400 West
  - Wider I-15 bridge over Main Street to accommodate future bicyclist and pedestrian improvements
  - 800 West – new underpass of I-15 with new bicyclist and pedestrian facilities that connect to Wildcat Way; new sidewalk/SUP connections between 800 West and 2600 South on west side of I-15
  - Wider I-15 bridge over 1500 South to accommodate future bicyclist and pedestrian improvements
- Bountiful/West Bountiful
  - New SUP connection between 500 South and the Woods Cross FrontRunner Station on the west side of I-15
  - Wider I-15 bridge over 1600 North/Pages Lane to accommodate future bicyclist and pedestrian improvements

- Centerville
  - New SUP crossing of I-15, the railroad lines, and Legacy Parkway by Centerville Community Park; this pedestrian crossing would connect with the Legacy Parkway Trail and Denver and Rio Grande Western Rail (D&RGW) Trail on the west side of Legacy Parkway
- Farmington
  - State Street/Clark Lane bridge over I-15 and the railroad lines is widened to include buffered or barrier-separated bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway

The combined interchange and bicyclist and pedestrian crossing concepts in Table 3-4 above that passed Level 1 screening, and the 10 bicyclist and pedestrian improvements listed above, were further analyzed in Level 2 screening for each of the geographic areas.

3.2.3 Level 2 Screening for Interchange and Bicyclist and Pedestrian Crossing Concepts

UDOT determined the Level 2 screening impacts to each resource by estimating the right-of-way needed for each concept. The right-of-way areas were based on UDOT's design standards and also included a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s). **UDOT will continue to coordinate efforts to refine the designs of the Draft EIS Action Alternative with the Cities and other stakeholders during the design refinement process, especially design features that increase and improve connectivity to the cities in the project area.**

Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in Salt Lake City

Options Advanced to Level 2 Screening. UDOT advanced one main option (Salt Lake Option A) to Level 2 screening for the Salt Lake City section (Table 3-5 below). Salt Lake Option A was part of the draft alternatives published for public and agency review during the draft alternatives public comment period from November 10, 2022, to January 13, 2023. As discussed below, UDOT also evaluated seven sub-area options in the Salt Lake area.

New Options Identified during the Draft Alternatives Public Comment Period. As previously discussed in Section 2.3.5, *New Concepts Identified during the Draft Alternatives Public Comment Period (November 10, 2022, to January 13, 2023)*, during the draft alternatives public comment period, UDOT received several comments from Salt Lake City and others requesting that UDOT consider options that would bury I-15 in Salt Lake City between North Temple and 600 North. Based on comments and requests

received during the draft alternatives public comment period, UDOT also evaluated burying I-15 in Salt Lake City between North Temple and 600 North. Four different versions of a buried tunnel option for I-15 in Salt Lake City were evaluated. All four of these tunnel options were evaluated with the 5 GP + 1 HOT mainline concept for I-15 that passed Level 1 and Level 2 screening.

UDOT also received comments from Salt Lake City and others requesting that UDOT consider a roundabout on 600 North, west of the interchange, to calm traffic as it enters the neighborhood. In response to this comment, UDOT evaluated a roundabout on 600 North and 800 West.

UDOT also developed and evaluated two options at 1000 North for Salt Lake Option A.

Table 3-5. Salt Lake City Interchange Concepts Advanced to Level 2 Screening

Cross Street(s) and Concept Name	Source	Description
Interchange Concepts (full extent from 400 South to Warm Springs Road)		
Salt Lake Option A 600 North, 1000 North, and 2100 North	Scoping	Salt Lake Option A is a CD interchange at 600 North and 1000 North; bicycle lanes and shared-use path improvements at 600 North and 1000 North; a full-access interchange at 2100 North/Warm Springs Road; a new roadway, bicyclist, and pedestrian crossing at 400 North; a new bicyclist and pedestrian crossing at 500 North; and a new shared-use path on the east side of U.S. 89 between 200 West and North Salt Lake (see Figures A-1, A-5, A-8, and A-9 in Attachment A).
Sub-area Interchange Concepts (partial extent from North Temple to 600 North)		
Tunnel Option A North Temple and 600 North	Draft alternatives screening public comment	Tunnel Option A would begin going underground just north of the Union Pacific Railroad crossing near South Temple and would be below ground near 200 North. Tunnel Option A would come back to the existing grade just north of 600 North and would include only the SB off-ramp and NB on-ramp at the 600 North interchange. Tunnel Option A would allow 200 North, 300 North, 400 North, and 500 North to cross over I-15 at the existing grade.
Tunnel Option B North Temple and 600 North	Draft alternatives screening public comment	Tunnel Option B would begin going underground just north of the Union Pacific Railroad crossing near South Temple and would be below ground near 200 North. Tunnel Option B would come back to the existing grade near 450 North and would maintain a full interchange at 600 North. Tunnel Option B would allow 200 North, 300 North, and 400 North to cross over I-15 at the existing grade.
Tunnel Option C North Temple and 600 North	Draft alternatives screening public comment	Tunnel Option C would begin going underground just north of North Temple and would be below ground near 250 North. Tunnel Option C would come back to the existing grade near 450 North and would maintain a full interchange access at 600 North. Tunnel Option C would allow 300 North and 400 North to cross over I-15 at the existing grade.
Tunnel Option D North Temple and 600 North	Draft alternatives screening public comment	Tunnel Option D would begin going underground just north of 300 North and would be below ground near 500 North. Tunnel Option D would come back to the existing grade near 700 North and would maintain a full interchange access at 600 North. Tunnel Option D would allow for a cap below the 600 North interchange.

(*continued on next page*)

Table 3-5. Salt Lake City Interchange Concepts Advanced to Level 2 Screening

Cross Street(s) and Concept Name	Source	Description
Sub-area Interchange Concepts (partial extent at 600 North and 800 West intersection)		
Roundabout Option at 600 North and 800 West	Draft alternatives screening public comment	The Roundabout Option at 600 North and 800 West would be a four-way roundabout that accommodates two travel lanes in every direction. The roundabout would include sidewalks and buffered or barrier-separated bike lanes on both sides of 600 North and 800 West.
Sub-area Interchange Concepts (partial extent 800 North to 1300 North)		
1000 North – Northern Option	Scoping	The Salt Lake City 1000 North – Northern Option would provide full access to I-15 north of 1000 North (near 1100 North) and would be compatible with the 600 North CD interchange. One signalized intersection would provide access to and from the SB I-15 CD ramp on the west side of I-15. A second signalized intersection would provide access to and from the NB I-15 CD ramp on the east side of I-15. The connection to and from I-15 would go north from the 900 West/1000 North intersection in Salt Lake City.
1000 North – Southern Option	Draft alternatives screening public comment	The Salt Lake City 1000 North – Southern Option would provide full access to I-15 at 1000 North and would be compatible with the 600 North CD interchange. One signalized intersection would provide access to and from the SB I-15 CD ramp on the west side of I-15. A second signalized intersection would provide access to and from the NB I-15 CD ramp on the east side of I-15. The connection to and from I-15 would go east from the 900 West/1000 North intersection in Salt Lake City. The Salt Lake City 1000 North – Southern Option would also have a SB lane that would have a grade-separated crossing for the SB traffic exiting to 600 North.

Changes to Options after the Draft Alternatives Public Comment Period. The main changes to Salt Lake Option A after the draft alternatives public comment period were the following three items:

1. **Removed the 500 North pedestrian crossing.** The 500 North crossing was removed due to engineering constraints and the infeasibility of providing a comfortable undercrossing. Because the 500 North crossing would need to cross under both the I-15 mainline and the I-15 southbound on-ramp and northbound off-ramp to 600 North, the crossing would be about 350 feet long. To maintain the existing I-15 grade under 600 North (and not require impacts to properties on 600 North west of I-15), I-15 must be close to existing grade at 500 North. To meet these design criteria, the vertical crossing at 500 North could be only a maximum of 5 feet high, which is less than the American Association of State Highway and Transportation Officials standard minimum vertical clearance of 10 feet for bicyclists and pedestrians. Additionally, UDOT received comments during the draft alternatives public comment period that both supported and opposed the 500 North crossing. Much of the feedback opposing the 500 North crossing came from residents of properties near this crossing stating concerns about the crossing being unsafe and being used by homeless populations due to the long length and short height. Because it was not technically feasible to provide a safe pedestrian underpass at 500 North, the 500 North underpass was removed from Salt Lake Option A.
2. **Changed the 1000 North connection to I-15 with Option A**. The preliminary design was refined and resulted in two options at 1000 North. These options are the Salt Lake City 1000 North –

Southern Option and the Salt Lake City 1000 North – Northern Option. Both of these Salt Lake City 1000 North options are reviewed in Level 2 screening for Salt Lake Option A.

3. **Removed a frontage road on the east side of U.S. 89 in the area of the shared-use path.** The frontage road was removed to improve the experience of the shared-use path (the frontage road would be east of the shared-use path and would require the shared-use path to be between U.S. 89 and the frontage road) and to minimize impacts to the properties on the east side of U.S. 89. Access is still provided to the properties on the east side of U.S. 89 with the revised design.

Level 2 Screening Analysis for Salt Lake Options

Salt Lake Option A extends the full length of the geographic area (400 South to the Salt Lake County–Davis County boundary) and is reviewed separately from the four tunnel options, 600 North 800 West roundabout, and the two 1000 North options, which are evaluated for a smaller area.

Salt Lake Option A Analysis

Table 3-6 below shows the Level 2 screening data for Salt Lake Option A.

Option A meets the purpose of the project by being compatible with Salt Lake City's planned 600 North project improvements, by improving access to the 1000 North area by having full interchange access (including adding the northbound off-ramp access) instead of the existing three-quarter interchange that does not allow northbound off-ramp access, and by providing more-comfortable bicyclist and pedestrian facilities that minimize out-of-direction travel. Option A would have benefits to low-income and minority populations in this area with the full-access 1000 North connections to I-15 and better bicyclist and pedestrian facilities that minimize out-of-direction travel.

Table 3-6. Salt Lake Option A Level 2 Screening Data

Resource [a]	Option A
Active transportation	Provides more-comfortable bicyclist and pedestrian facilities on 600 North and new bicyclist and pedestrian facilities at 400 North. Bicyclist and pedestrian facilities on 600 North are compatible with planned Salt Lake City 600 North bicyclist and pedestrian improvements.
Acres of aquatic resources potentially impacted	19
Number of connections to regional transit facilities and regional trails	1 – new SUP on U.S. 89 between 200 West and North Salt Lake
Number of Section 4(f) parks or recreational properties potentially impacted	0
Number of Section 6(f) parks potentially impacted	0
Number of residential properties potentially relocated [b]	24
Number of commercial properties potentially relocated [b]	3
Number of historic buildings with potential adverse effect [b]	1
Potential impacts or benefits to low-income or minority populations?	Yes; areas in Salt Lake City have potential low-income and minority populations, and there could be property impacts to these populations. Option A would improve roadway, bicyclist, and pedestrian facilities for residents and businesses in these communities and improve access to and from I-15 at 1000 North.
Passes Level 2 screening?	**Yes**

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

[b] The number of residential properties, commercial properties, and historic buildings potentially relocated is based on a review of the structures (residential, commercial, and historic) that are within the 25 foot buffer of the options. Additional detail regarding the locations and types of property impacts for the Draft EIS alternative(s) will be determined in the Draft EIS analysis after additional design and impact minimization are completed.

Salt Lake City Tunnel Options Analysis

Based on comments and requests received during the draft alternatives public comment period, UDOT also evaluated burying I-15 in Salt Lake City between North Temple and 600 North. Four different versions of a buried tunnel option for I-15 in Salt Lake City were evaluated and are shown in Figure 3-13 and Attachment B, *Salt Lake City Tunnel Options*. In addition to the Level 2 screening criteria and impacts discussed below, tunneling in Salt Lake City near the I-15 corridor has the potential for shallow groundwater, artesian water pressure, buried foundations and rubble from previous projects, and other geotechnical issues due to poor and weak soils, all of which may cause constructability and settlement issues. These issues are a concern for the constructability and stability of a tunnel as well as the nearby residential properties that may experience settlement impacts from the construction of the tunnel. The four tunnel options are shorter than the Salt Lake Option A reviewed above, which includes the area from 400 South to the Salt Lake County–Davis County boundary.

Tunnel Option A. Tunnel Option A would begin going underground just north of the Union Pacific Railroad crossing near South Temple and would be below ground near 200 North. Tunnel Option A would come back

to the existing grade just north of 600 North and would include only the southbound off-ramp and northbound on-ramp at the 600 North interchange. Tunnel Option A would allow 200 North, 300 North, 400 North, and 500 North to cross over I-15 at the existing grade. Tunnel Option A would require temporary lanes for northbound I-15 to be built on the east side of existing I-15 and temporary lanes for southbound I-15 to be built on the west side of existing I-15 in order to allow excavating and constructing the buried section of I-15 between 200 North and 600 North. Additionally, Tunnel Option A would require closing North Temple and the UTA TRAX Green Line on North Temple during construction to accommodate burying I-15. North Temple and the UTA TRAX Green Line would need to be reconstructed and raised about 15 feet to cross over I-15 with Tunnel Option A. As shown in Table 3-7 below, Tunnel Option A is estimated to require acquisition of 96 residential homes, 11 commercial properties or businesses, 10 apartment buildings, and 2 churches. The property impacts from Tunnel Option A would be a result of the temporary lanes for northbound and southbound I-15 and reconstruction of North Temple and the UTA TRAX Green Line on a new profile to go over the buried I-15.

Tunnel Option B. Tunnel Option B would begin going underground just north of the Union Pacific Railroad crossing near South Temple and would be below ground near 200 North. Tunnel Option B would come back to the existing grade near 450 North and would maintain a full interchange at 600 North. Tunnel Option B would allow 200 North, 300 North, and 400 North to cross over I-15 at the existing grade. Tunnel Option B would require temporary lanes for northbound I-15 to be built on the east side of existing I-15 and temporary lanes for southbound I-15 to be built on the west side of existing I-15 in order to allow excavation and construction of the buried section of I-15 between 200 North and 450 North. Additionally, Tunnel Option B would require closing North Temple and the UTA TRAX Green Line on North Temple during construction to accommodate burying I-15. North Temple and the UTA TRAX Green Line would need to be reconstructed and raised about 15 feet to cross over I-15 with Tunnel Option B. As shown in Table 3-7 below, Tunnel Option B is estimated to require acquisition of 117 residential homes, 15 commercial properties or businesses, 10 apartment buildings, and 3 churches. The property impacts from Tunnel Option B would be a result of the temporary lanes for northbound and southbound I-15 and reconstruction of North Temple and the UTA TRAX Green line on a new profile to go over the buried I-15.

Tunnel Option C. Tunnel Option C would begin going underground just north of North Temple and would be below ground near 250 North. Tunnel Option C would come back to the existing grade near 450 North and would maintain a full interchange access at 600 North. Tunnel Option C would allow 300 North and 400 North to cross over I-15 at the existing grade. Tunnel Option C would require temporary lanes for northbound I-15 to be built on the east side of existing I-15 and temporary lanes for southbound I-15 to be built on the west side of existing I-15 in order to allow excavation and construction of the buried section of I-15 between 250 North and 450 North. Tunnel Option C is anticipated to not require closing North Temple or the UTA TRAX Green Line but would have impacts to properties on the east and west sides of I-15 on North Temple during construction due to the temporary lanes for northbound and southbound I-15. As shown in Table 3-7 below, Tunnel Option C is estimated to require acquisition of 113 residential homes, 11 commercial properties or businesses, and 6 apartment buildings. The property impacts from Tunnel Option C would be a result of the temporary lanes for northbound and southbound I-15.

Tunnel Option D. Tunnel Option D would begin going underground just north of 300 North and would be below ground near 550 North. Tunnel Option D would come back to the existing grade near 650 North and would maintain a full interchange access at 600 North. Tunnel Option D would result in a park cap below the

600 North interchange. Tunnel Option D would allow 300 North to continue to cross under I-15 at the existing grade. Tunnel Option D would allow 400 North to cross over I-15 if the elevation of 400 North is raised by around 15 feet above existing grade. Tunnel Option D would require temporary lanes for northbound I-15 to be built on the east side of existing I-15 and temporary lanes for southbound I-15 to be built on the west side of existing I-15 in order to allow excavation and construction of the buried section of I-15 between 300 North and 700 North. Tunnel Option D would not require closing North Temple or the UTA TRAX Green Line but would have impacts to properties on the east and west sides of I-15 on North Temple during construction due to the temporary lanes for northbound and southbound I-15. As shown in Table 3-7 below, Tunnel Option D is estimated to require acquisition of 148 residential homes, 7 commercial properties or businesses, and 3 apartment buildings. The property impacts from Tunnel Option D would be a result of the temporary lanes for northbound and southbound I-15.

Figures and profiles for the four tunnel options are included in Attachment B, *Salt Lake City Tunnel Options*.

As shown below in Table 3-7, compared to Salt Lake Option A, any of the four tunnel options would have substantially more impacts to the adjacent residential properties, commercial properties, and historic properties in just the section of I-15 between North Temple and the 600 North interchange area. For just one data point, the tunnel options would require relocation of 180 to 1,270 more residential households or 750% to 5,290% more than the 24 potential residential relocations estimated for Salt Lake Option A. All of these impacted properties are located in areas that are identified as having lower-income and/or minority populations and several of the apartment buildings are low-income housing apartments. In addition to the much higher impacts, all four tunnel options would also have many more impacts during construction related to dust, noise, road closures and detours. All four tunnel options were screened out due to the substantially higher impacts to the community compared to Salt Lake Option A.

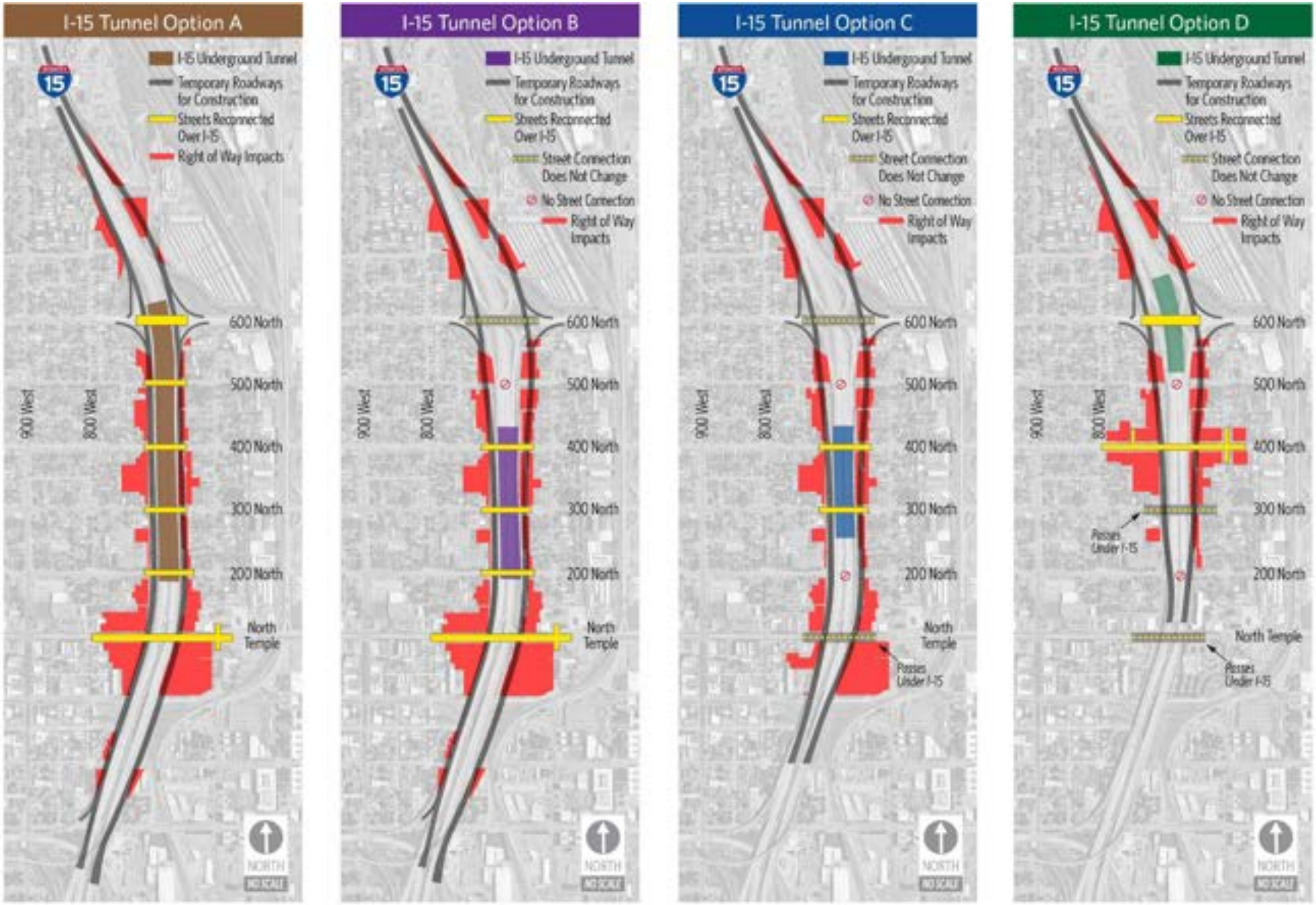
Table 3-7. Salt Lake City Tunnel Options Level 2 Screening Data

Resource	Tunnel Option A [a]	Tunnel Option B [a]	Tunnel Option C [a]	Tunnel Option D [a]
Number of community facilities directly impacted [b]	2 churches	3 churches	3 churches	4 churches
Number of residential properties directly impacted [b]	96 single-family homes and 10 apartment/ condominium buildings (1,177 units)	117 single-family homes and 10 apartment/ condominium buildings (1,177 units)	113 single-family homes and 6 apartment/ condominium buildings (716 units)	148 single-family homes and 3 apartment/ condominium buildings (56 units)
Number of commercial properties directly impacted [b]	11	15	11	7
Number of historic buildings potentially impacted [a]	21	24	24	21
Level of interchange access provided at 600 North	Half access; only SB off-ramp and NB on-ramp accommodated	Full access; all movements accommodated	Full access; all movements accommodated	Full access; all movements accommodated
Impacts to North Temple and UTA TRAX Green Line	Yes, North Temple and the UTA TRAX Green Line would be closed during construction and would need to be reconstructed to raise the grade about 15 feet to go over the buried I-15.	Yes, North Temple and the UTA TRAX Green Line would be closed during construction and would need to be reconstructed to raise the grade about 15 feet to go over the buried I-15.	No, North Temple and the UTA TRAX Green Line would remain at the current grade. There would be impacts to properties on North Temple east and west of I-15 due to constructing temporary lanes for I-15 that would be used while constructing the tunnel.	No, North Temple and UTA TRAX Green Line would remain at the current grade. All temporary and permanent construction begins north of the North Temple bridges.
Passes Level 2 screening?	**No**	**No**	**No**	**No**

[a] These tunnel options do not extend the full distance of Salt Lake Options A and B; therefore, the impacts are underrepresented for these options within the Salt Lake City geographic corridor.

[b] Resource impacts for the tunnel options are based on a preliminary engineering analysis that assumes that temporary northbound and southbound I-15 lanes would need to be constructed on both the east and west sides of existing I-15 to allow construction of the tunnel on the existing I-15 alignment. Constructing the temporary lanes would require UDOT to purchase these properties and relocate the owners or tenants. These are considered definite relocations because the locations of the temporary lanes would require the full use and acquisition of these properties.

Figure 3-13. Salt Lake City Tunnel Options Designs, Traffic Management, and Potential Property Impacts



Salt Lake City Roundabout Option at 600 North and 800 West Level 2 Screening Analysis

Based on comments and requests received during the draft alternatives public comment period, UDOT also evaluated a roundabout at 600 North and 800 West. The roundabout option is applicable only for the 600 North and 800 West intersection area and does not include the larger area for Salt Lake Option A reviewed above, which includes the area from 400 South to the Salt Lake County–Davis County boundary. Salt Lake Option A above includes a traditional perpendicular intersection with stop signs on northbound and southbound traffic on 800 West. There would be no potential relocations with the traditional perpendicular intersection proposed with Salt Lake Option A.

Roundabout Option at 600 North and 800 West. The roundabout option at 600 North and 800 West would require that the pedestrian refuges on the corners of 600 North and 800 West be removed to allow for the vehicle lanes to circumvent the wider footprint of the roundabout. As shown in Figure 3-14 and Table 3-8, below this results in four potential residential relocations for the four homes located on the existing intersection corners.

As shown in Table 3-8 below, the roundabout at 600 North and 800 West would result in more impacts to residential properties, historic properties, and Section 4(f) resources and was therefore not advanced to be incorporated into Salt Lake Option A, which includes the traditional perpendicular intersection at 600 North and 800 West.

Figure 3-14. Roundabout Option at 600 North and 800 West

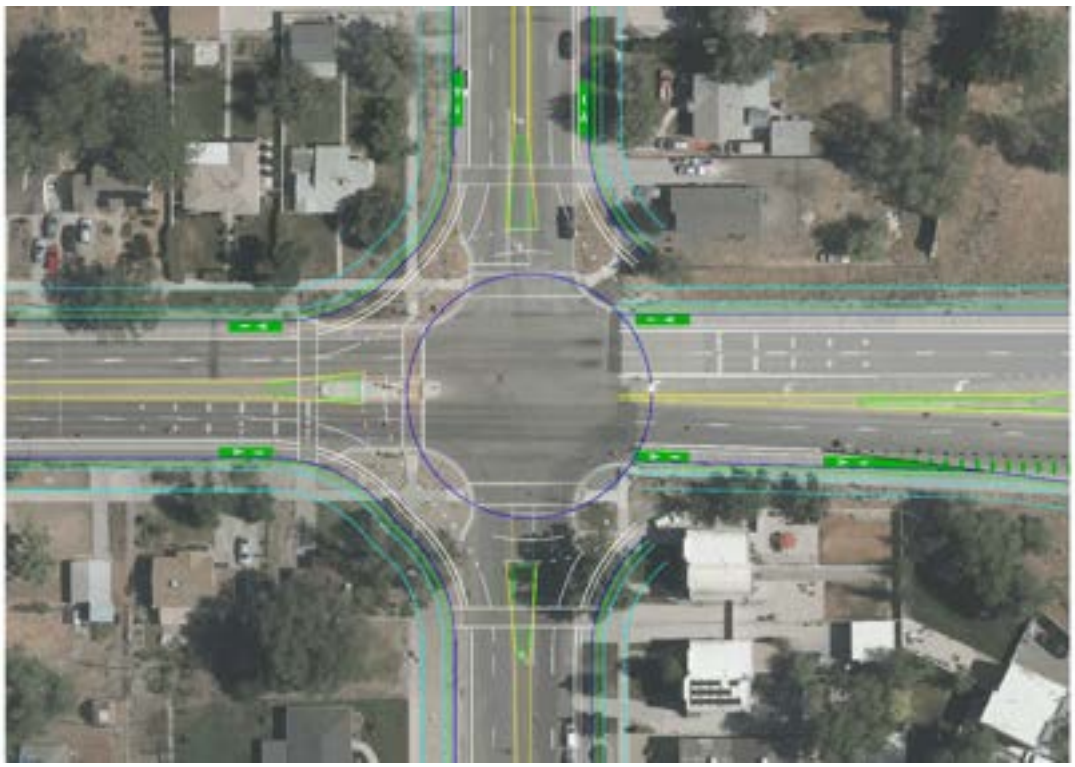


Table 3-8. Salt Lake City 600 North Roundabout Options Level 2 Screening Data

Resource	Salt Lake Option A Traditional Perpendicular Intersection at 600 North and 800 West	Roundabout Option at 600 North and 800 West
Residential Impacts	0 relocations or partial impacts to residential properties	4 potential relocations
Historic Property Impacts	0	1 – 805 West 600 North is an eligible historic property and would be relocated with the roundabout.
Section 4(f) Impacts	0	Yes, the historic property at 805 West 600 North is also a Section 4(f) resource and would have a greater than *de minimis* impact with the roundabout.
Passes Level 2 screening?	**Yes**	**No**

Salt Lake City 1000 North Interchange Analysis

Based on comments and requests received during the draft alternatives public comment period, UDOT also evaluated two different interchange options at 1000 North. The two 1000 North options are shorter than the Salt Lake Option A reviewed above, which includes the area from 400 South to the Salt Lake County–Davis County boundary.

Salt Lake City 1000 North – Northern Option. The Salt Lake City 1000 North – Northern Option would provide full access to I-15 north of 1000 North (near 1100 North) and would be compatible with the 600 North CD interchange. One signalized intersection would provide access to and from the southbound I-15 CD ramp on the west side of I-15. A second signalized intersection would provide access to and from the northbound I-15 CD ramp on the east side of I-15. The connection to and from I-15 would go north from the 900 West/1000 North intersection in Salt Lake City.

Salt Lake City 1000 North – Southern Option. The Salt Lake City 1000 North – Southern Option would provide full access to I-15 at 1000 North and would be compatible with the 600 North CD interchange. One signalized intersection would provide access to and from the southbound I-15 CD ramp on the west side of I-15. A second signalized intersection would provide access to and from the northbound I-15 CD ramp on the east side of I-15. The connection to and from I-15 would go east from the 900 West/1000 North intersection in Salt Lake City. The Salt Lake City 1000 North – Southern Option would also have a southbound lane that would have a grade-separated crossing for the southbound traffic exiting to 600 North.

As shown below in Table 3-9, both the Salt Lake City 1000 North – Northern Option and Salt Lake City 1000 North – Southern Option (Figure 3-15 below) would have similar impacts and were both advanced past Level 2 screening as part of Salt Lake Option A.

Table 3-9. Salt Lake City 1000 North Options Level 2 Screening Data

Resource	1000 North – Northern Option [a]	1000 North – Southern Option [a]
Number of residential properties potentially relocated	0	0
Number of commercial properties potentially relocated	1	0
Number of historic buildings with potential adverse effects	1	1
Passes Level 2 screening?	**Yes**	**Yes**

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

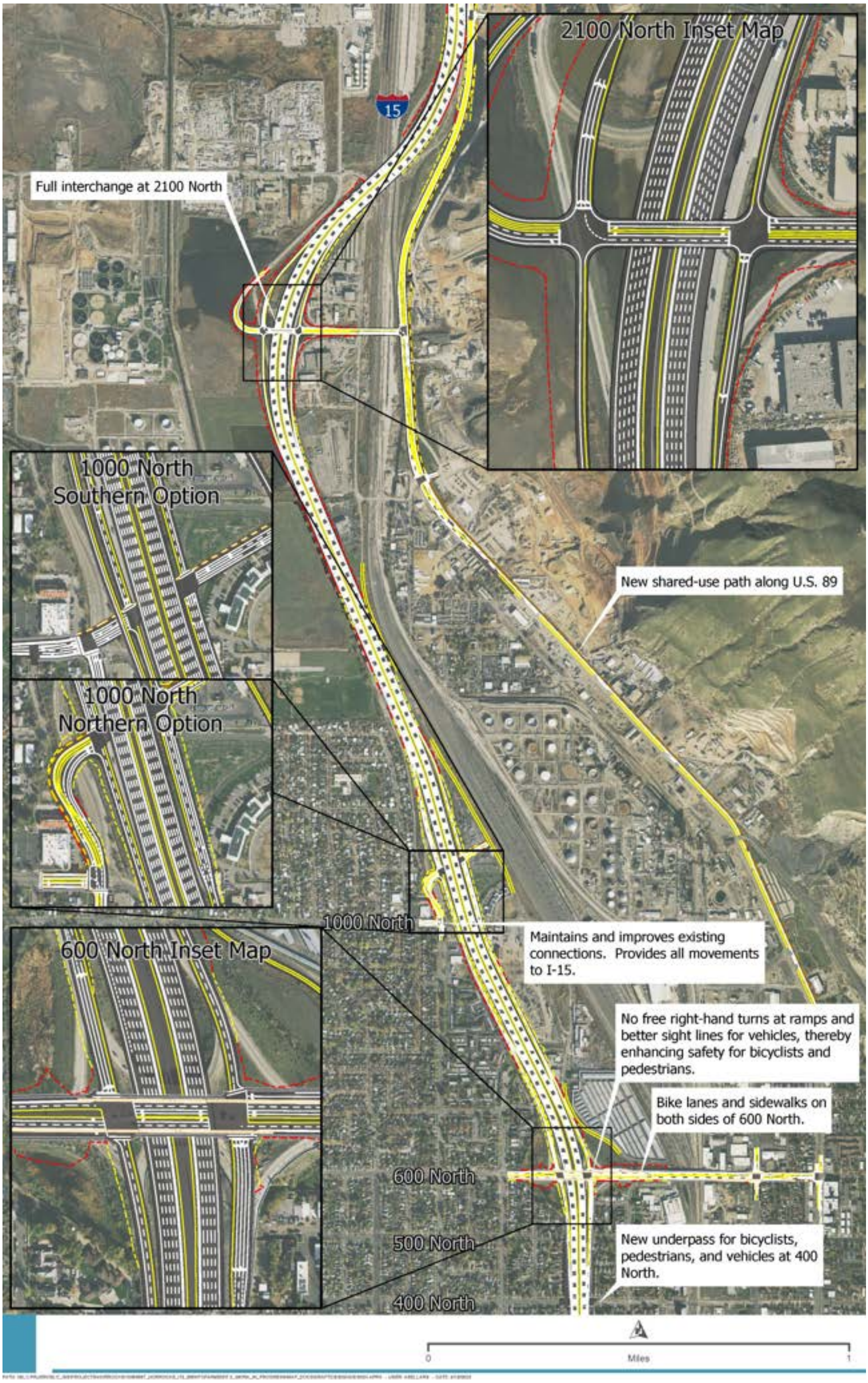
Level 2 Results for Salt Lake City

Based on the Level 2 screening analysis and comments from the public and agencies received during the draft alternatives public comment period, UDOT advanced **Salt Lake Option A** for detailed evaluation in the Draft EIS (Figure 3-16 below). The advanced Salt Lake Option A would include both of the two 1000 North options, the Salt Lake City 1000 North – Northern Option and the Salt Lake City 1000 North – Southern Option.

During Level 2 screening, UDOT eliminated all four tunnel options to bury I-15 in Salt Lake City and the roundabout option at 600 North 800 West.

Figure 3-15. Salt Lake City 1000 North Option Designs

Figure 3-16. Salt Lake Option A



Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in North Salt Lake/Woods Cross

Options Advanced to Level 2 Screening. UDOT advanced two options (Options A and B) to Level 2 screening for the North Salt Lake/Woods Cross section (Table 3-10 below). Options A and B were part of the draft alternatives published for public and agency review during the comment period from November 10, 2022, to January 13, 2023.

New Options Identified during the Draft Alternatives Public Comment Period. During the draft alternatives public comment period, UDOT received several comments from the City of North Salt Lake, Woods Cross City, and others requesting that UDOT reconsider options that would allow the southbound off-ramp at Center Street in North Salt Lake to be maintained. UDOT also received requests from the City of North Salt Lake and Union Pacific Railroad asking that the design of I-15 at Center Street either include or be forward-compatible with a Center Street grade-separated crossing of the Union Pacific and UTA FrontRunner railroad tracks. This option was eliminated in Level 1 screening. See the discussion above in *Interchange Concepts Eliminated in Level 1 Screening* on page 59.

UDOT also received comments from Woods Cross City requesting that UDOT evaluate other options at 2600 South in Woods Cross that would not require traffic coming from the northwest side of the city to cross under I-15 on the new 800 West and use Wildcat Way to access I-15. Representatives of Woods Cross City stated that they like the current “jug handle” design for the southbound off-ramp at 2600 South and wondered whether this design could be maintained. Based on the traffic analysis for the I-15 project, UDOT determined that the tight diamond (Option A) and SPUI (Option B) are the best interchange options at 2600 South. UDOT understands that either of these options introduces some out-of-direction travel for people from the parts of Woods Cross north of 2600 South and west of I-15 who use the southbound off-ramp and southbound on-ramp, but UDOT does not expect that this out-of-direction travel would decrease traffic performance or add notable delays for users in Woods Cross. The traffic analysis shows that converting the interchange to a more standard tight diamond or SPUI does a better job of accommodating all traffic movements through the interchange, improves driver expectancy by using a more standard interchange type, and minimizes the number of unconventional signals and movements at the 2600 South interchange. Therefore, **no additional options were advanced** for screening from the draft alternatives public comment period.

Changes to Options from the Draft Alternatives Public Comment Period. There were no substantial changes to the design of the interchanges or bicyclist and pedestrian facilities for North Salt Lake/Woods Cross Option A or B as a result of the draft alternatives public comment period. UDOT made small refinements to the design of 2600 South on the west side of I-15 to provide better access to the industrial properties on the north side of 2600 South and to minimize impacts to the Colonial Woods mobile home park on the south side of 2600 South.

Table 3-10. North Salt Lake/Woods Cross Interchange Concepts Advanced to Level 2 Screening

Cross Street(s) and Concept Name	Source	Description
Interchange Concepts (full extent from the county boundary to 1500 South)		
North Salt Lake/ Woods Cross Option A I-215, U.S. 89, and 2600 South	Scoping	Option A included a new local interchange in North Salt Lake that provides access to I-15 and I-215 from U.S. 89, a tight diamond interchange at 2600 South with a realignment of 800 West to connect to Wildcat Way north of 2600 South, bicycle lanes and shared-use path improvements at 2600 South and 800 West, and wider bridges over Center Street and Main Street in North Salt Lake (see Figures A-11 and A-15 in Attachment A).
North Salt Lake/ Woods Cross Option B I-215, U.S. 89, and 2600 South	Scoping	Option B included a new local interchange in North Salt Lake that provides access to I-15 and I-215 from U.S. 89, a SPUI at 2600 South with a realignment of 800 West to connect to Wildcat Way north of 2600 South, bicycle lanes and shared-use path improvements at 2600 South (including a grade-separated shared-use path) and 800 West, and wider bridges over Center Street and Main Street in North Salt Lake (see Figures A-12, A-16, and A-17 in Attachment A).

Level 2 Screening Analysis for North Salt Lake/Woods Cross Options

Table 3-11 below shows the Level 2 screening data for the two North Salt Lake/Woods Cross options.

As shown below in Table 3-11, the impacts from North Salt Lake/Woods Cross Options A and B would be the same for all resources. During the draft alternatives public comment period, UDOT received support for Option B from the City of North Salt Lake and many residents based on Option B's higher roadway capacity with the SPUI. Although both Options A and B can suitably accommodate the projected traffic volumes at the 2600 South interchange, Option B has more capacity and is able to move the projected traffic more efficiently. Because there were no differences in impacts and because Option B would provide more traffic benefits, UDOT advanced North Salt Lake/Woods Cross Option B through Level 2 screening. UDOT eliminated North Salt Lake/Woods Cross Option A because it would substantially duplicate Option B and would result in substantially similar impacts as Option B.

Table 3-11. North Salt Lake/Woods Cross Options Level 2 Screening Data

Resource [a]	Option A	Option B
Acres of aquatic resources potentially impacted	0.5	0.5
Number of connections to regional transit facilities and regional trails	1 – new SUP on U.S. 89 between 200 West and North Salt Lake	1 – new SUP on U.S. 89 between 200 West and North Salt Lake
Number of Section 4(f) parks or recreational properties potentially impacted	1 –Wood Cross High School playing fields	1 – Wood Cross High School playing fields
Number of Section 6(f) parks potentially impacted	0	0
Number of residential properties potentially relocated [b]	10	10
Number of commercial properties potentially relocated [b]	3	3
Number of historic buildings with potential adverse effect[b]	3	3
Potential impacts or benefits to low-income or minority populations?	Yes; areas in North Salt Lake have potential low-income and minority populations, and there could be property impacts to these populations. Option A would improve roadway, bicyclist, and pedestrian facilities for residents and businesses in these communities and improve access to and from I-15 and I-215 from the southern part of North Salt Lake near U.S. 89.	Yes; areas in North Salt Lake have potential low-income and minority populations, and there could be property impacts to these populations. Option B would improve roadway, bicyclist, and pedestrian facilities for residents and businesses in these communities and improve access to and from I-15 and I-215 from the southern part of North Salt Lake near U.S. 89.
Passes Level 2 screening?	**Not advanced because Option A has less traffic capacity, and it substantially duplicates and has impacts similar to those of Option B, which will be considered in detail in the Draft EIS**	**Yes (Advanced)**

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

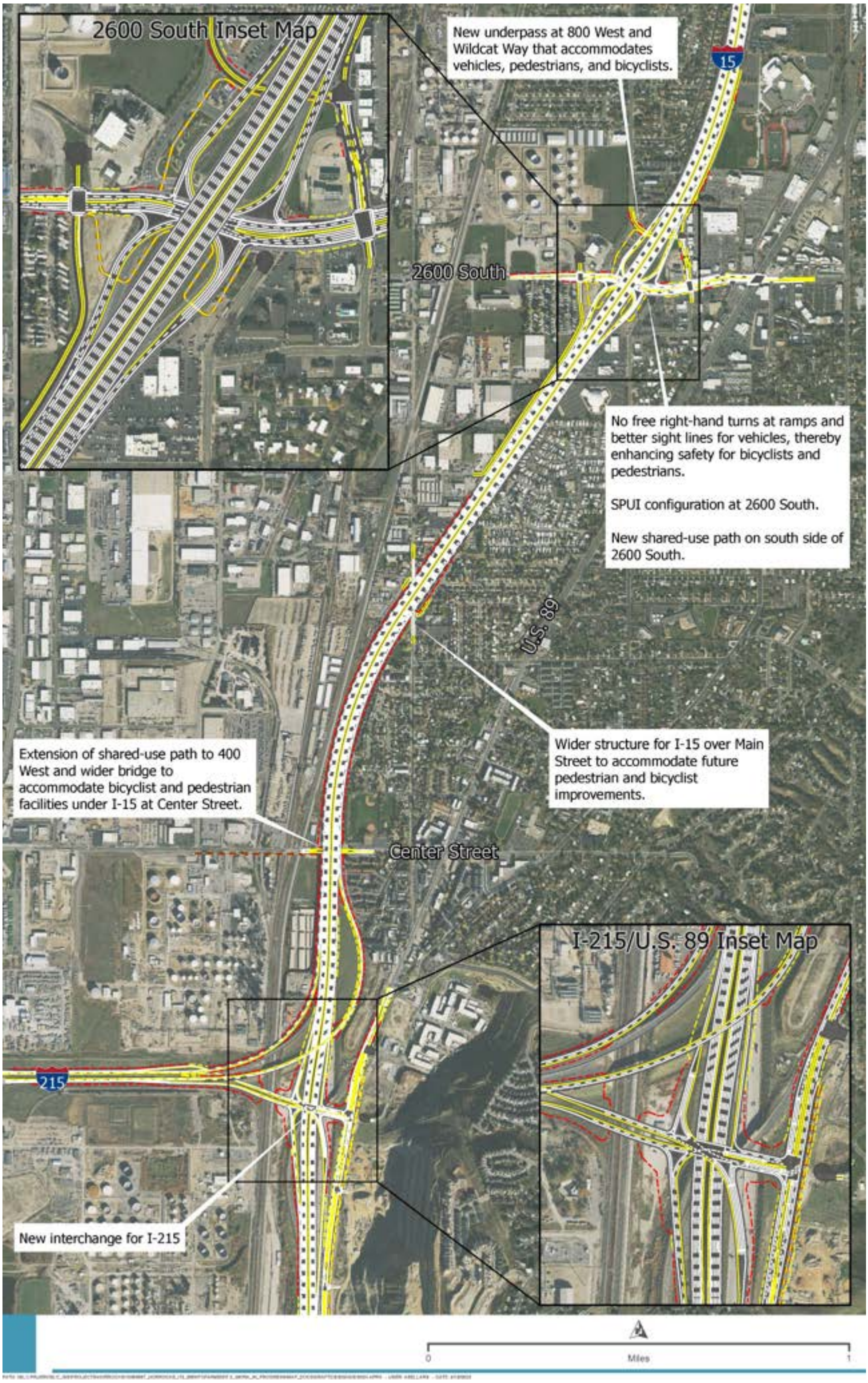
[b] The number of residential properties, commercial properties, and historic buildings potentially relocated is based on a review of the structures (residential, commercial, and historic) that are within the 25 foot buffer of the options. Additional detail regarding the locations and types of property impacts for the Draft EIS alternative(s) will be determined in the Draft EIS analysis after additional design and impact minimization are completed.

Level 2 Results for North Salt Lake/Woods Cross

Based on the Level 2 screening analysis and comments from the public and agencies received during the draft alternatives public comment period, UDOT advanced **North Salt Lake/Woods Cross Option B** for detailed evaluation in the Draft EIS (Figure 3-17 below). The SPUI interchange included with **North Salt Lake/Woods Cross Option B** has more capacity and is able to move the projected traffic more efficiently. **North Salt Lake/Woods Cross Option B** would also improve safety and mobility for pedestrians and bicyclists by providing a new grade-separated crossing at 2600 South and a new underpass at 800 West.

UDOT eliminated North Salt Lake/Woods Cross Option A during Level 2 screening. UDOT eliminated North Salt Lake/Woods Cross Option A because it would substantially duplicate Option B and would result in substantially similar impacts as Option B.

Figure 3-17. North Salt Lake/Woods Cross Option B



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Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in Bountiful/West Bountiful

Options Advanced to Level 2 Screening. UDOT advanced three options (Options A, B, and C) to Level 2 screening for the Bountiful/West Bountiful section (Table 3-12). Options A, B, and C were part of the draft alternatives published for public and agency review during the comment period from November 10, 2022, to January 13, 2023.

New Options Identified during the Draft Alternatives Public Comment Period. UDOT received a few comments requesting that UDOT keep the existing DDI or consider a SPUI instead of the diamond interchange at 500 South in Bountiful/West Bountiful/Woods Cross. Both the DDI and SPUI were evaluated during Level 1 screening (Table 3-1 above). Since a tight diamond interchange at 500 South is sufficient for traffic and preferable for bicyclists and pedestrians, the SPUI and DDI concepts at 500 South were not advanced to Level 2 screening. UDOT also received comments from West Bountiful City, Bountiful City, and others requesting that UDOT consider ways to minimize impacts to businesses on 500 South and 400 North east of I-15. In response to these comments, UDOT evaluated two options (Bountiful 500 South – Southern Option and Bountiful 500 South – Northern Option) for 500 South between I-15 and 400 West and two options (Bountiful 400 North – Southern Option and Bountiful 400 North – Northern Option) for 400 North between I-15 and 350 West.

Table 3-12. Bountiful/West Bountiful Interchange Concepts Advanced to Level 2 Screening

Cross Street(s) and Concept Name	Source	Description
Interchange Concepts (full extent from 1500 South to Pages Lane/1600 North)		
Option A 500 South, 400 North, and 500 West	Scoping	Option A included a diamond interchange at 500 South, a split diamond interchange at 400 North (northbound off-ramps and southbound on-ramps) and 500 West (northbound on-ramp and southbound off-ramp on right side), bicycle lanes and shared-use path improvements at 500 South and 400 North, a new shared-use path connection to the Woods Cross FrontRunner Station, and a wider bridge over Pages Lane/1600 North (see Figures A-20 and A-23 in Attachment A).
Option B 500 South, 400 North, and 500 West	Scoping	Option B included a diamond interchange at 500 South, a three-quarters diamond interchange at 400 North (northbound off-ramps, southbound on-ramps, and southbound off-ramps), a northbound on-ramp at 500 West, bicycle lanes and shared-use path improvements at 500 South and 400 North, a new shared-use path connection to the Woods Cross FrontRunner Station, and a wider bridge over Pages Lane/1600 North (see Figures A-21 and A-24 in Attachment A).
Option C 500 South, 400 North, and 500 West	Scoping	Option C included a new CD ramp system for 500 South and 400 North, a northbound on-ramp at 500 West, bicycle lanes and shared-use path improvements at 500 South and 400 North, a new shared-use path connection to the Woods Cross FrontRunner Station, and a wider bridge over Pages Lane/1600 North (see Figures A-22 and A-25 in Attachment A).
Sub-area Interchange Concepts (partial extent at 500 South between I-15 and 400 West)		
Bountiful 500 South – Northern Option	Alternatives Development Process	The Bountiful 500 South – Northern Option would accommodate the extra space needed for the 500 South roadway, turn lanes, bike lanes, and shared-use paths by shifting 500 South to the north between I-15 and 400 West. This option would minimize impacts to properties on the south side of 500 South.
Bountiful 500 South – Southern Option	Alternatives Development Process	The Bountiful 500 South – Southern Option would accommodate the extra space needed for the 500 South roadway, turn lanes, bike lanes, and shared-use paths by shifting 500 South to the south between I-15 and 400 West. This option would minimize impacts to properties on the north side of 500 South.
Sub-area Interchange Concepts (partial extent at 400 North between I-15 and 350 West)		
Bountiful 400 North – Northern Option	Alternatives Development Process	The Bountiful 400 North – Northern Option would accommodate the extra space needed for the 400 North roadway, turn lanes, bike lanes, and shared-use paths by shifting 400 North to the north between I-15 and 350 West. This option would minimize impacts to properties on the south side of 400 North.
Bountiful 400 North – Southern Option	Alternatives Development Process	The Bountiful 400 North – Southern Option would accommodate the extra space needed for the 400 North roadway, turn lanes, bike lanes, and shared-use paths by shifting 400 North to the south between I-15 and 350 West. This option would minimize impacts to properties on the north side of 400 North.

Changes to Options from the Draft Alternatives Public Comment Period. There were no substantial changes to the design of the interchanges for Bountiful/West Bountiful Option A, B, or C as a result of the draft alternatives public comment period. A 6-foot-wide sidewalk was added to the south side of 400 North, allowing for pedestrian connectivity on both sides of 400 North across I-15 and the railroad tracks.

Level 2 Screening Analysis for Bountiful/West Bountiful Options

Table 3-13 below shows the Level 2 screening data for the three Bountiful/West Bountiful options.

Table 3-13. Bountiful/West Bountiful Options Level 2 Screening Data

Resource [a]	Option A	Option B	Option C
Acres of aquatic resources potentially impacted	<0.1	<0.1	<0.1
Number of connections to regional transit facilities and regional trails	1 – new shared-use path connection to Woods Cross FrontRunner Station from 500 South	1 – new shared-use path connection to Woods Cross FrontRunner Station from 500 South	1 – new shared-use path connection to Woods Cross FrontRunner Station from 500 South
Number of Section 4(f) parks or recreational properties potentially impacted	1 Woods Cross Elementary playing fields	1 Woods Cross Elementary playing fields	1 Woods Cross Elementary playing fields
Number of Section 6(f) parks potentially impacted	0	0	0
Number of residential properties potentially relocated[b]	2 to 3	3 to 4	5
Number of commercial properties potentially relocated[b]	17 to 20	21	23
Number of historic buildings with potential adverse effect[b]	1	1	2
Potential impacts or benefits to low-income or minority populations?	Yes; areas in West Bountiful and Bountiful near I-15 have potential low-income and minority populations, and there could be property impacts to these populations. Option A would improve roadway, bicyclist, and pedestrian facilities for residents and businesses in these communities.	Yes; areas in West Bountiful and Bountiful near I-15 have potential low-income and minority populations, and there could be property impacts to these populations. Option B would improve roadway, bicyclist, and pedestrian facilities for residents and businesses in these communities.	Yes; areas in West Bountiful and Bountiful near I-15 have potential low-income and minority populations, and there could be property impacts to these populations. Option C would improve roadway, bicyclist, and pedestrian facilities for residents and businesses in these communities.
Passes Level 2 screening?	**Yes**	**Not advanced because Option B substantially duplicates and would have impacts similar but slightly higher than those of Option A, which will be considered in detail in the Draft EIS**	**Not advanced because Option C substantially duplicates and would have impacts similar but slightly higher than those of Option A, which will be considered in detail in the Draft EIS**

(*continued on next page*)

Table 3-13. Bountiful/West Bountiful Options Level 2 Screening Data

Resource [a]	Option A	Option B	Option C

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

[b] The number of residential properties, commercial properties, and historic buildings potentially relocated is based on a review of the structures (residential, commercial, and historic) that are within the 25 foot buffer of the options. Additional detail regarding the locations and types of property impacts for the Draft EIS alternative(s) will be determined in the Draft EIS analysis after additional design and impact minimization are completed.

As shown above in Table 3-13, the impacts would be similar for all three options. Option B would impact one more residence and one more business on the east side of I-15 between 400 North and 500 West due to a wider footprint on the east side of I-15 to accommodate the southbound off-ramp at 400 North with Option B. Option C would impact two more residential properties, two more businesses, and one more historic property on the east side of I-15 between 400 North and 500 West due to a wider footprint on the east side of I-15 to accommodate the CD system with Option C. Option A would be the most consistent with current traffic patterns and would maintain all existing business accesses. Option A would also have the fewest impacts to the business and commercial properties between 400 North and 500 West on the east side of I-15. Additionally, UDOT received comments from West Bountiful City and residents and stakeholders supporting Option A during the draft alternatives public comment period. UDOT has received support from Bountiful City for Option A during meetings with city staff.

Because Option A was supported by the Cities, would be consistent with local travel patterns, and had the fewest impacts to residential properties, commercial properties, and historic properties, UDOT advanced Bountiful/West Bountiful Option A through Level 2 screening. UDOT eliminated Bountiful/West Bountiful Options B and C because they would substantially duplicate Option A and would result in substantially similar, but slightly higher, impacts compared to Bountiful/West Bountiful Option A.

Bountiful 500 South Analysis

Based on comments and requests received during the draft alternatives public comment period related to minimizing impacts to businesses on 500 South, UDOT also evaluated two different options for Bountiful 500 South between I-15 and 400 West (see Figure 3-20). The two 500 South options are shorter than the Bountiful/West Bountiful Options A, B, and C reviewed above, which include the area from 1500 South to Pages Lane (1600 North).

Bountiful 500 South – Northern Option. The Bountiful 500 South – Northern Option would accommodate the extra space needed for the 500 South roadway, turn lanes, bike lanes, and shared-use paths by shifting 500 South to the north between I-15 and 400 West. This option would minimize impacts to properties on the south side of 500 South.

Bountiful 500 South – Southern Option. The Bountiful 500 South – Southern Option would accommodate the extra space needed for the 500 South roadway, turn lanes, bike lanes, and shared-use paths by shifting

500 South to the south between I-15 and 400 West. This option would minimize impacts to properties on the north side of 500 South.

As shown above in Table 3-14, the two Bountiful 500 South options would have similar impacts, with the impacts occurring to commercial properties on the north or south side of 500 South.

Both the Bountiful 500 South – Northern Option and the Bountiful 500 South – Southern Option (Figure 3-22 below) would have similar impacts and were both advanced past Level 2 screening as part of Bountiful/West Bountiful Option A.

Table 3-14. Bountiful 500 South Options Level 2 Screening Data

Resource	Bountiful 500 South – Northern Option[a]	Bountiful 500 South – Southern Option[a]
Number of residential properties potentially relocated	0	0
Number of commercial properties potentially relocated	7	9
Number of historic buildings with potential adverse effect	0	0
Passes Level 2 screening?	**Yes**	**Yes**

[a] The impact data for these options includes only the segment of 500 South between I-15 and 400 West in Bountiful. The impacts do not include the full distance of Bountiful/West Bountiful Options A, B, and C shown above.

Bountiful 400 North Analysis

Based on comments and requests received during the draft alternatives public comment period related to minimizing impacts to businesses on 400 North, UDOT also evaluated two different options for Bountiful 400 North between I-15 and 350 West (see Figure 3-19). The two 400 North options are shorter than the Bountiful/West Bountiful Options A, B, and C reviewed above, which include the area from 1500 South to Pages Lane (1600 North).

Bountiful 400 North – Northern Option. The Bountiful 400 North – Northern Option would accommodate the extra space needed for the 400 North roadway, turn lanes, bike lanes, and shared-use paths by shifting 400 North to the north between I-15 and 350 West. This option would minimize impacts to properties on the south side of 400 North.

Bountiful 400 North – Southern Option. The Bountiful 400 North – Southern Option would accommodate the extra space needed for the 400 North roadway, turn lanes, bike lanes, and shared-use paths by shifting 400 North to the south between I-15 and 350 West. This option would minimize impacts to properties on the north side of 400 North.

As shown above in Table 3-15, the two Bountiful 400 North options would have similar impacts to residential, commercial, and historic properties on the north or south sides of 400 North in Bountiful.

Both the Bountiful 400 North – Northern Option and the Bountiful 400 North – Southern Option (Figure 3-18 below) would have similar impacts and were both advanced past Level 2 screening as part of Bountiful/West Bountiful Option A.

Table 3-15. Bountiful 400 North Options Level 2 Screening Data

Resource	Bountiful 400 North – Northern Option[a]	Bountiful 400 North – Southern Option[a]
Number of residential properties potentially relocated	1	2
Number of commercial properties potentially relocated	3	4
Number of historic buildings with potential adverse effect	1	1
Passes Level 2 screening?	**Yes**	**Yes**

[a] The impact data for these options includes only the segment of 400 North between I-15 and 400 West in Bountiful. The impacts do not include the full distance of Bountiful/West Bountiful Options A, B, and C shown above.

Level 2 Results for Bountiful/West Bountiful

Based on the Level 2 screening analysis and comments from the public and agencies received during the draft alternatives public comment period, UDOT advanced **Bountiful/West Bountiful Option A** for detailed evaluation in the Draft EIS (Figure 3-18 below). The advanced Bountiful/West Bountiful Option A would include two 500 South options, the Bountiful 500 South – Northern Option and the Bountiful 500 South – Southern Option; and two 400 North options, the Bountiful 400 North – Northern Option and the Bountiful 400 North – Southern Option.

UDOT eliminated Bountiful/West Bountiful Options B and C during Level 2 screening. UDOT eliminated Bountiful/West Bountiful Options B and C because they would substantially duplicate Option A and would result in substantially similar, but slightly higher, impacts compared to Bountiful/West Bountiful Option A.

Figure 3-18. Bountiful/West Bountiful Option A

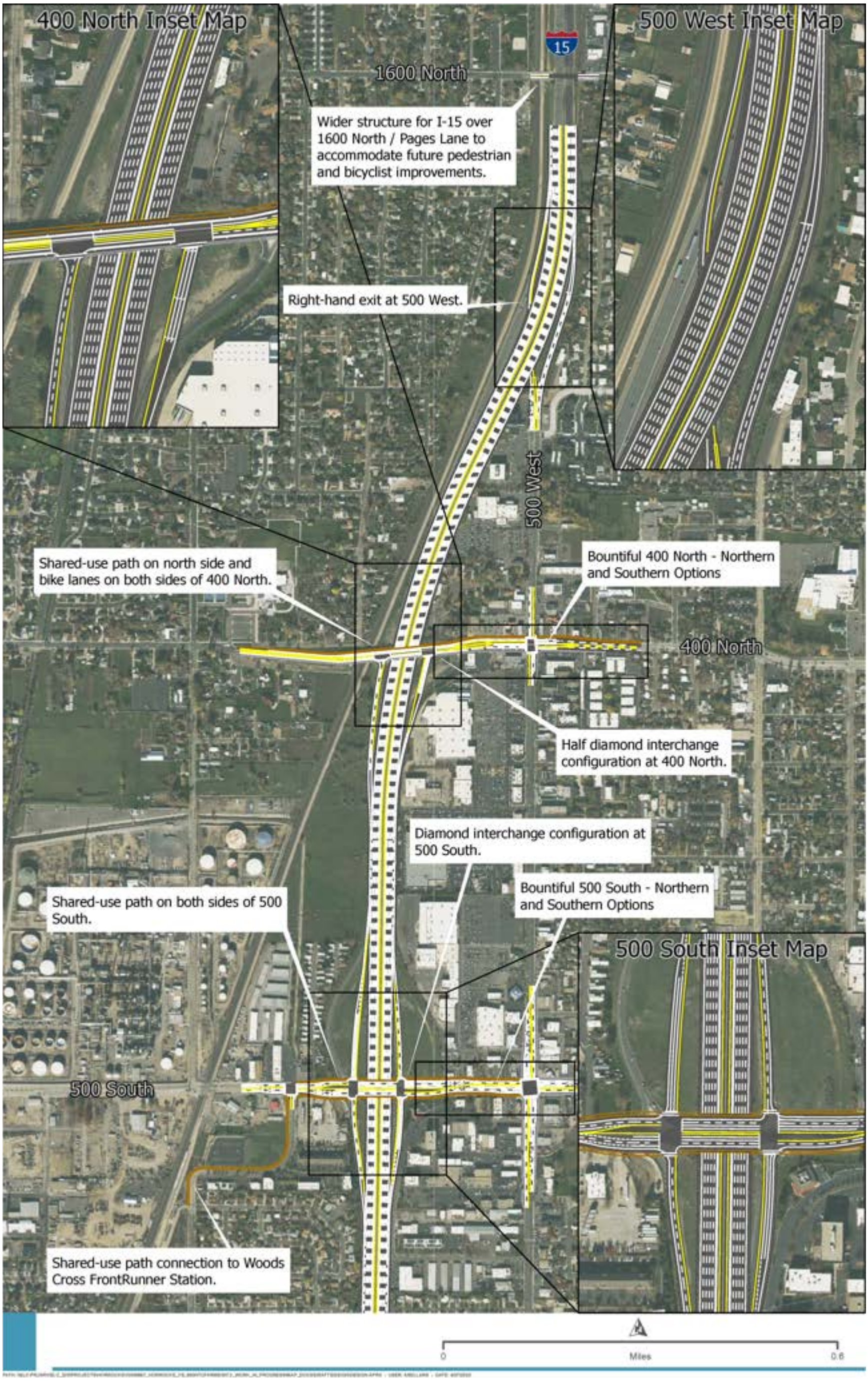
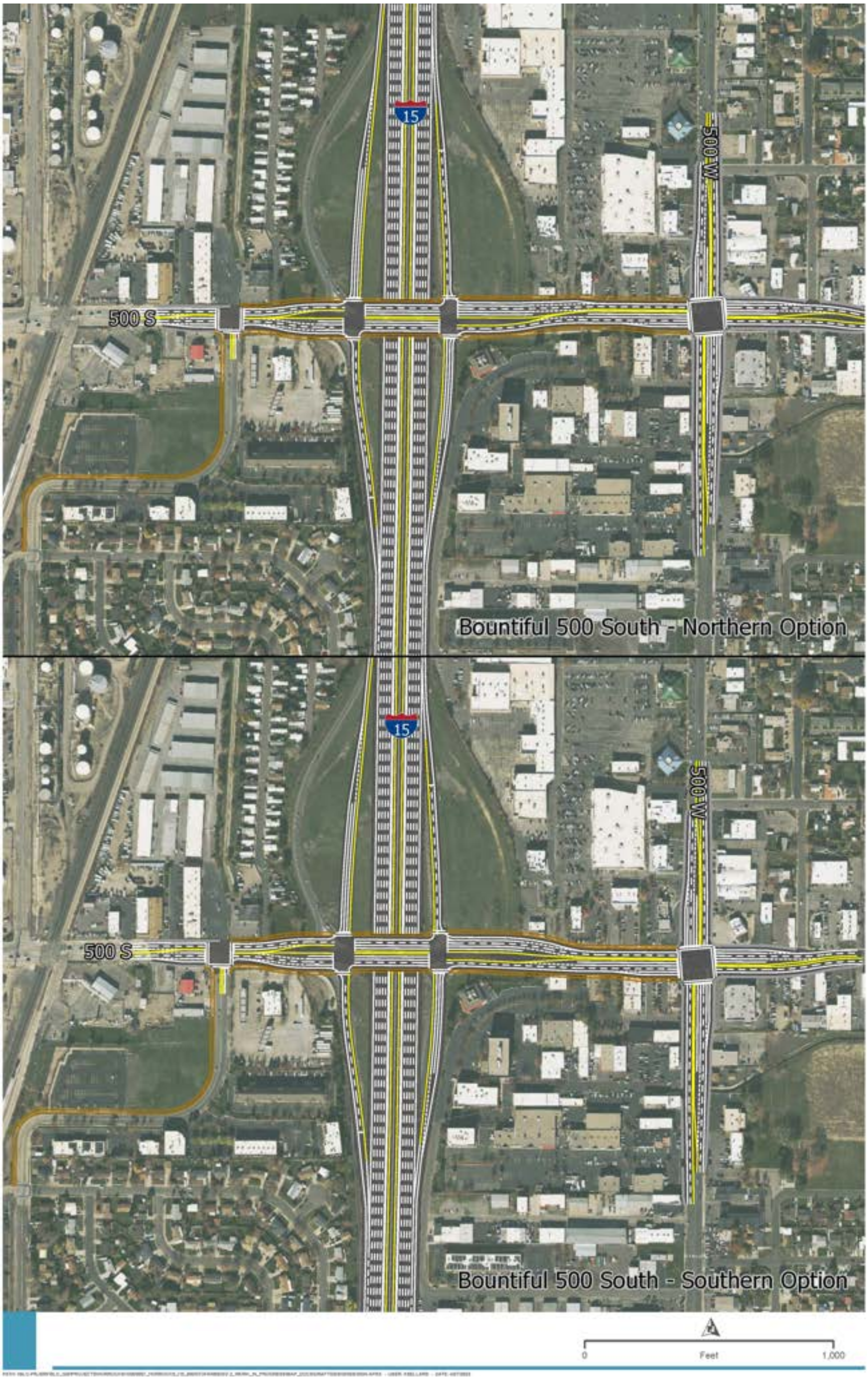


Figure 3-19. Bountiful/West Bountiful Option A – 400 North – Northern and Southern Options

Figure 3-20. Bountiful/West Bountiful Option A – 500 South – Northern and Southern Options



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Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in Centerville

Options Advanced to Level 2 Screening. UDOT advanced two options (Options A and B) to Level 2 screening for the Centerville section (Table 3-16). Options A and B were part of the draft alternatives published for public and agency review during the comment period from November 10, 2022, to January 13, 2023.

New Options Identified during the Draft Alternatives Public Comment Period. No new interchange options were identified for Centerville during the draft alternatives public comment period.

Table 3-16. Centerville Concepts Advanced to Level 2 Screening

Cross Street(s) and Concept Name	Source	Description
Interchange Concepts (full extent from Pages Lane/1600 North to Farmington boundary)		
Option A Parrish Lane and Pages Lane/ 1600 North	Scoping	Option A included a tight diamond interchange at Parrish Lane with a NB off-ramp tunnel to the frontage road north of Parrish Lane, a new grade-separated pedestrian crossing at Porter Lane/400 South, a new grade-separated pedestrian crossing at Centerville Community Park, and bicyclist and pedestrian improvements on Parrish Lane (see Figures A-27, A-29, and A-31 in Attachment A).
Option B Parrish Lane and Pages Lane/ 1600 North	Scoping	Option B included a SPUI at Parrish Lane with a NB off-ramp tunnel to the frontage road north of Parrish Lane, a new grade-separated pedestrian crossing at 200 North, a new grade-separated pedestrian crossing at Centerville Community Park, and bicyclist and pedestrian improvements on Parrish Lane (see Figures A-28 and A-30 in Attachment A).

Changes to Options from the Draft Alternatives Public Comment Period. There were no substantial changes to the design of the interchanges or bicyclist and pedestrian facilities for Centerville Option A or Option B as a result of the draft alternatives public comment period.

Level 2 Screening Analysis for Centerville Options

Table 3-17 below shows the Level 2 screening data for the two Centerville options.

As shown below in Table 3-17, the impacts from Centerville Options A and B would be similar for all resources. During the draft alternatives public comment period, UDOT received support for Option A from Centerville City. UDOT also received support from many residents supporting Option B's higher roadway capacity with the SPUI at Parrish Lane and the new grade-separated shared-use path at 200 North that would be provided with Option B. Although both Options A and B can suitably accommodate the projected traffic volumes at the Parrish Lane interchange, Option B has more capacity and is able to move the projected traffic more efficiently. Because Option A would have slightly higher impacts and because Option B would provide more traffic benefits, UDOT advanced Centerville Option B through Level 2 screening. UDOT eliminated Centerville Option A because it would substantially duplicate Option B and would result in impacts slightly higher than those of Option B.

Table 3-17. Centerville Options Level 2 Screening Data

Resource [a]	Option A	Option B
Acres of aquatic resources potentially impacted	<0.1	<0.1
Number of connections to regional transit facilities and regional trails	3 – new or improved connections over I-15 and the railroad tracks at Centerville Community Park, Parrish Lane, and Porter Lane	3 – new or improved connections over I-15 and the railroad tracks at Centerville Community Park, Parrish Lane, and 200 North
Number of Section 4(f) parks or recreational properties potentially impacted	1 Centerville Community Park	1 Centerville Community Park
Number of Section 6(f) parks potentially impacted	1 Centerville Community Park	1 Centerville Community Park
Number of residential properties potentially relocated[b]	3	3
Number of commercial properties potentially relocated[b]	1 to 2	0
Number of historic buildings with potential adverse effect[b]	0	0
Potential impacts or benefits to low-income or minority populations?	No, there are no lower-income or minority populations in this area.	No, there are no lower-income or minority populations in this area.
Passes Level 2 screening?	**Not advanced because Option A has less traffic capacity, and it substantially duplicates and would have impacts similar but slightly higher than those of Option B, which will be considered in detail in the Draft EIS**	**Yes (Advanced)**

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

[b] The number of residential properties, commercial properties, and historic buildings potentially relocated is based on a review of the structures (residential, commercial, and historic) that are within the 25 foot buffer of the options. Additional detail regarding the locations and types of property impacts for the Draft EIS alternative(s) will be determined in the Draft EIS analysis after additional design and impact minimization are completed.

Level 2 Results for Centerville

Based on the Level 2 screening analysis and comments from the public and agencies received during the draft alternatives public comment period, UDOT advanced **Centerville Option B** for detailed evaluation in the Draft EIS (Figure 3-21 below). The SPUI interchange included with **Centerville Option B** has more capacity and is able to move the projected traffic more efficiently. **Centerville Option B** would also improve safety and mobility for pedestrians and bicyclists by providing a new grade-separated crossing at 200 North, a new grade-separated crossing at Centerville Park, and a new shared-use path on the north side of Parrish Lane.

UDOT eliminated Centerville Option A during Level 2 screening. UDOT eliminated Centerville Option A because it would substantially duplicate Option B and would result in impacts similar to but slightly higher than those of Option B.

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Figure 3-21. Centerville Option B

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Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts in Farmington

Options Advanced to Level 2 Screening. UDOT advanced three options (Options A, B, and C) to Level 2 screening for the Farmington section (Table 3-18). Options A, B, and C were part of the draft alternatives published for public and agency review during the comment period from November 10, 2022, to January 13, 2023.

New Options Identified during the Draft Alternatives Public Comment Period. During the draft alternatives public comment period, UDOT received several comments from Farmington City and others requesting that UDOT consider options that would minimize impacts to the State Street and 400 West area with any of the three options in Farmington. In response to these comments, UDOT evaluated two different options for the State Street and 400 West area.

Table 3-18. Farmington Interchange Concepts Advanced to Level 2 Screening

Cross Street(s) and Concept Name	Source	Description
Interchange Concepts (full extent from Centerville boundary to U.S. 89)		
Option A 200 West	Scoping	Option A included rebuilding the existing 200 West northbound off-ramp and southbound on-ramp, and bicyclist and pedestrian improvements at the State Street and Glovers Lane crossings of I-15 (see Figures A-32, A-38, and A-39 in Attachment A).
Option B Glovers Lane	Scoping	Option B included a new SPUI at Glovers Lane, rebuilding the existing 200 West northbound off-ramp and southbound on-ramp, and bicyclist and pedestrian improvements at the State Street and Glovers Lane crossings of I-15 (see Figures A-33, A-36, and A-37 in Attachment A).
Option C 200 West	Scoping	Option C included a new full access interchange at 200 West that provides all movements to I-15, and bicyclist and pedestrian improvements at the State Street and Glovers Lane crossings of I-15 (see Figures A-34 and A-39 in Attachment A).
Sub-area Interchange Concepts (partial extent State Street and 400 West area)		
Farmington 400 West Option	Draft alternatives screening public comment	The Farmington 400 West Option would maintain the existing local road connections with the frontage road going under State Street and an intersection to 400 West north of State Street. The Farmington 400 West Option was refined to allow the State Street and 400 West intersection to remain in its current location at the current grade to minimize impacts to residential properties on 400 West and State Street. The Farmington 400 West Option would maintain the existing parking area, pavilion, and landscaped areas at Ezra Clark Park and would require minor realignments of the Farmington Creek Trail in Ezra Clark Park.
Farmington State Street Option	Draft alternatives screening public comment	The Farmington State Street Option would raise the elevation of the frontage road south of State Street and create a new intersection of the frontage road at State Street. This option would realign 400 West north of State Street and make 400 West the new frontage road north of State Street. This realignment of 400 West would be located on the parking area, pavilion, and landscaped areas at Ezra Clark Park and would require the Farmington Creek Trail to be realigned to be east of the realigned 400 West.

Changes to Options from the Draft Alternatives Public Comment Period. UDOT refined the design of Farmington Option A after the draft alternatives public comment period to improve local road connections between the Frontage Road and 200 West. These improvements maintain free-flow movements to the northbound Frontage Road from I-15 and southbound from the frontage road on to southbound I-15 but

improve local mobility by allowing new connections to 200 West from the Frontage Road and new connections between the north Frontage Road and south Frontage Road that are not currently accommodated.

Level 2 Screening Analysis for Farmington Options

Table 3-19 shows the Level 2 screening data for the three Farmington options.

Table 3-19. Farmington Interchange Options Level 2 Screening Data

Resource [a]	Option A	Option B	Option C
Acres of aquatic resources potentially impacted	0.5	1.60	1.00
Number of connections to regional transit facilities and regional trails	2 – improved shared-use path connections across State Street and Glovers Lane provide better connections to Legacy Parkway Trail and D&RGW Trail.	2 – improved shared-use path connections across State Street and Glovers Lane provide better connections to Legacy Parkway Trail and D&RGW Trail.	2 – improved shared-use path connections across State Street and Glovers Lane provide better connections to Legacy Parkway Trail and D&RGW Trail.
Number of Section 4(f) parks or recreational properties potentially impacted	3 South Park Ezra Clark Park Farmington Jr. High playing fields	3 South Park Ezra Clark Park Farmington Jr. High playing fields	3 South Park Ezra Clark Park Farmington Jr. High playing fields
Number of Section 6(f) parks potentially impacted	0	0	0
Number of residential properties potentially relocated [b]	3	21	6
Number of commercial properties potentially relocated [b]	0	0	0
Number of historic buildings with potential adverse effects [b]	2	2	2
Potential impacts or benefits to low-income or minority populations?	No; there are no low-income or minority populations in this area.	No; there are no low-income or minority populations in this area.	No; there are no low-income or minority populations in this area.
Passes Level 2 screening?	**Yes**	**No**	**Not advanced because Option C substantially duplicates and would have impacts similar but slightly higher than those of Option A, which will be considered in detail in the Draft EIS**

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Table 3-19. Farmington Interchange Options Level 2 Screening Data

Resource [a]	Option A	Option B	Option C

[a] Resource impacts are based on a GIS analysis that uses a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS alternative(s).

[b] The number of residential properties, commercial properties, and historic buildings potentially relocated is based on a review of the structures (residential, commercial, and historic) that are within the 25 foot buffer of the options. Additional detail regarding the locations and types of property impacts for the Draft EIS alternative(s) will be determined in the Draft EIS analysis after additional design and impact minimization are completed.

Option A would be the most consistent with current traffic patterns and would maintain all existing accesses to residences and businesses in Farmington. Option A would also have the fewest impacts to residential areas in Farmington. Because Farmington Option A would be the most consistent with the current access and would have the fewest impacts, it was advanced to Level 2 screening.

UDOT received many comments from Farmington City and residents in Farmington east of I-15 opposing a new interchange at Glovers Lane (with Option B) and the full-access 200 West interchange that was proposed with Option C.

As shown above in Table 3-19, Option B would have substantially more potential residential relocations in Farmington (21) compared to Option A (3). This would be an increase of 18 potential residential relocations (or 600% more) compared to Option A. The new SPUI at Glovers Lane with Option B would impact homes near Glovers Lane that would be avoided with either Option A or Option C. Additionally, Option B would put more traffic on residential roads that are not planned to accommodate higher traffic volumes. UDOT eliminated Farmington Option B in Level 2 screening due to the substantially higher impacts to residential properties and the change in traffic patterns that would result in higher traffic volumes on residential roads that have not been planned to accommodate traffic accessing an I-15 interchange.

Option C would potentially require relocation of three more residential properties on the east side of I-15 near 200 West due to a wider footprint on the east side of I-15 to accommodate the new full-access interchange and local road connections with Option C. UDOT eliminated Farmington Option C because it would substantially duplicate Farmington Option A and would result in substantially similar, but slightly higher, impacts compared to Farmington Option A.

Farmington State Street and 400 West Area Analysis

Based on several comments requesting that UDOT evaluate options to minimize impacts near State Street and 400 West with any of the Farmington options, UDOT developed and evaluated two new options by State Street. Both of these options were designed to work with the Farmington Option A design since that was the Farmington option advanced through Level 2 screening.

Table 3-20 shows the Level 2 screening data for the two State Street and 400 West options.

Table 3-20. Farmington State Street and 400 West Options Level 2 Data

Resource	Farmington 400 West Option	Farmington State Street Option
Residential Impacts	3 – potential relocations	3 – potential relocations
Ezra Clark Park and Farmington Creek Trail impacts	Frontage road would be located on a small strip of park property on the west side of the park. No impacts to parking lot, pavilion, or landscaped areas. Minor realignments of the Farmington Creek Trail in Ezra Clark Park.	Realigned 400 West would be located on the parking lot, pavilion, and landscaped areas of the park. Full relocation of the Farmington Creek Trail between the realigned 400 West and State Street.
Connection to Frontage Road	At 400 West in current location.	At State Street. Would potentially make frontage road more desirable for some Station Park traffic.
Passes Level 2 screening?	**Yes**	**Yes**

Both the Farmington 400 West and Farmington State Street options (Figure 3-22 below) would have similar impacts and were both advanced past Level 2 screening as part of Farmington Option A.

Figure 3-22. Farmington State Street/Frontage Road and 400 West/Frontage Road Options

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Level 2 Results for Farmington

Based on the Level 2 screening analysis and comments from the public and agencies received during the draft alternatives public comment period, UDOT advanced **Farmington Option A** for detailed evaluation in the Draft EIS (Figure 3-23 below). The advanced Farmington Option A would include both of the two State Street and 400 West area options, the Farmington 400 West Option and the Farmington State Street Option.

UDOT eliminated Farmington Option B and Farmington Option C during Level 2 screening. UDOT eliminated Farmington Option B in Level 2 screening due to the substantially higher impacts to residential properties and the change in traffic patterns that would result in higher traffic volumes on residential roads that have not been planned to accommodate traffic accessing an I-15 interchange. UDOT eliminated Farmington Option C because it would substantially duplicate Farmington Option A and would result in substantially similar, but slightly higher, impacts compared to Farmington Option A.

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Figure 3-23. Farmington Option A

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Summary of Level 2 Screening for Each Geographic Area

As a result of the Level 2 screening process, UDOT advanced the following options and subarea options for each of the five geographic areas:

- Salt Lake – Option A:
  - Salt Lake City 1000 North – Northern Option
  - Salt Lake City 1000 North – Southern Option
- North Salt Lake/Woods Cross Option B
- Bountiful/West Bountiful Option A:
  - Bountiful 500 South – Northern Option
  - Bountiful 500 South – Southern Option
  - Bountiful 400 North – Northern Option
  - Bountiful 400 North – Southern Option
- Centerville Option B
- Farmington Option A:
  - Farmington 400 West Option
  - Farmington State Street Option

Concepts Eliminated in Screening

Eleven interchange concepts were eliminated during Level 2 screening. The eliminated options are summarized in Table 3-21.

Table 3-21. Initial Interchange Concepts Eliminated in Level 2 Screening

Concept Name and Description	Reason for Elimination
Salt Lake Area Interchange Concepts	
600 North 800 West Roundabout	The roundabout at 600 North and 800 West was eliminated because it would result in four relocations of residential properties and one historic property/Section 4(f) resource that would be avoided with Salt Lake Option A.
Tunnel Option A	All tunnel options were eliminated for the same reasons. All four of the tunnel options were screened out due to the substantially higher impacts to the community and higher costs compared to the original Salt Lake Option A.
Tunnel Option B	
Tunnel Option C	
Tunnel Option D	
North Salt Lake/Woods Cross Interchange Concepts	
Option A	UDOT eliminated North Salt Lake/Woods Cross Option A because it would substantially duplicate Option B and would result in substantially similar impacts as Option B.
Bountiful/West Bountiful Interchange Concepts	
Option B	UDOT eliminated Bountiful/West Bountiful Option B because it would substantially duplicate Bountiful/West Bountiful Option A and would result in substantially similar, but slightly higher, impacts compared to Bountiful/West Bountiful Option A.
Option C	UDOT eliminated Bountiful/West Bountiful Option C because it would substantially duplicate Bountiful/West Bountiful Option A and would result in substantially similar, but slightly higher, impacts compared to Bountiful/West Bountiful Option A.
Centerville Interchange Concepts	
Option A	UDOT eliminated Centerville Option A because it would substantially duplicate Option B and would result in impacts similar to but slightly higher than those of Option B.
Farmington Interchange Concepts	
Option B	UDOT eliminated Farmington Option B in Level 2 screening due to the substantially higher impacts to residential properties and the change in traffic patterns that would result in higher traffic volumes on residential roads that have not been planned to accommodate traffic accessing an I-15 interchange.
Option C	UDOT eliminated Farmington Option C because it would substantially duplicate Farmington Option A and would result in substantially similar, but slightly higher, impacts compared to Farmington Option A.

4.0 Summary of the Results of the Alternatives Development and Screening Process

Based on the results of the alternatives development and screening process, UDOT advanced the following alternatives for further study in the EIS:

- No-action Alternative
- Action Alternative

The Action Alternative includes the 5 GP + 1 HOT lane mainline concept combined with the concepts for each of the five geographic areas that passed Level 1 and Level 2 screening.

The Action Alternative also includes the following subarea options:

- Salt Lake City 1000 North – Northern Option
- Salt Lake City 1000 North – Southern Option
- Bountiful 500 South – Northern Option
- Bountiful 500 South – Southern Option
- Bountiful 400 North – Northern Option
- Bountiful 400 North – Southern Option
- Farmington 400 West Option
- Farmington State Street Option

Table 4-1 below lists the interchange and bicyclist and pedestrian improvements for each of the five geographic areas. UDOT structure policy currently requires an agreement with the local governments for long-term ownership and maintenance of any separate pedestrian and bicyclist facilities (such as the Centerville Park shared-use path crossing, the Centerville 200 North shared-use path crossing, and the 2600 South shared-use path crossing). The inclusion of these project features is subject to a signed agreement between these Cities and UDOT. UDOT will continue to work with these Cities on design and agreements for these facilities.

Figure 4-1 through Figure 4-21 below show the components of the Action Alternative for each of the five geographic areas.

As discussed previously, UDOT determined the Level 2 screening impacts to each resource by estimating the right-of-way needed for each concept. The right-of-way widths were based on the typical sections and UDOT's design standards, and also included a 25-foot buffer to account for an area of expected needs such as drainage, utilities, cut and fill, and construction access and easement requirements. The screening-level design accounted for only the width needed for actual right-of-way plus a 25-foot buffer. Further design refinement will occur before final widths and potential impacts are determined. Those elements are typically designed in more detail for the alternatives that pass the screening process because of the extensive effort and time required to engineer an alternative. UDOT will update the impact lines to account for these items for the Draft EIS impact analyses. UDOT will also work to avoid or minimize impacts to adjacent resources as it conducts this higher level of design refinement for the Draft EIS Action Alternative. **UDOT will continue to coordinate efforts to refine the designs of the Draft EIS Action Alternative with the Cities and**

other stakeholders during the design refinement process, especially design features that increase and improve connectivity to the cities in the project area.

Table 4-1. I-15 Interchange and Bicyclist and Pedestrian Concepts That Passed Level 2 Screening by Location

Geographic Area Selected Concept	Limits	Interchange and Bicyclist and Pedestrian Crossing Features	Subarea Options for Location
Salt Lake County Option A	400 South to county boundary	**600 North CD and 2100 North full diamond interchange (Figure 4-1, Figure 4-2, Figure 4-3, and Figure 4-4)** • No free right-hand turns and better sight lines for vehicles, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes and 8-foot-wide sidewalks on both sides of 600 North (Figure 4-3). • 12-foot-wide SUP on 1000 North that crosses under I-15 and connects to Warm Springs Road east of I-15 (Figure 4-4). • 400 North: new sidewalks and roadway crossing under I-15 (Figure 4-2). • New U.S. 89 12-foot-wide SUP between Eagle Ridge Drive in North Salt Lake and Wall Street/200 West in Salt Lake City.	**1000 North (Figure 4-4)** • Salt Lake City 1000 North – Northern Option • Salt Lake City 1000 North – Southern Option
North Salt Lake/Woods Cross Option B	County boundary to 1500 South	**New I-215/U.S. 89 local interchange and 2600 South SPUI (Figure 4-5, Figure 4-6, Figure 4-7, Figure 4-8, Figure 4-9, Figure 4-10, and Figure 4-11)** • New U.S. 89 12-foot-wide SUP between Eagle Ridge Drive in North Salt Lake and Wall Street/200 West in Salt Lake City. • Center Street buffered or barrier-separated bike lanes on both sides, 6-foot-wide sidewalk on north side, and 12-foot-wide SUP improvements on south side of Center Street between I-15 and 400 West (Figure 4-6). • Wider bridge over Main Street to accommodate future bicyclist and pedestrian improvements (Figure 4-7). • At 2600 South, no free right-hand turns for vehicles and better sight lines, thereby enhancing safety for bicyclists and pedestrians. • Buffered or barrier-separated bike lanes on both sides of 2600 South (Figure 4-8). • 8-foot-wide sidewalk on north side of 2600 South (Figure 4-8). • 14-foot-wide grade-separated SUP on south side of 2600 South (Figure 4-9). • 800 West: new underpass of I-15 with new 12-foot-wide SUP. 12-foot-wide SUP connection between 800 West and 2600 South on west side of I-15 (Figure 4-10). • Wider bridge over 1500 South to accommodate future bicyclist and pedestrian improvements (Figure 4-11).	NA

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Table 4-1. I-15 Interchange and Bicyclist and Pedestrian Concepts That Passed Level 2 Screening by Location

Geographic Area Selected Concept	Limits	Interchange and Bicyclist and Pedestrian Crossing Features	Subarea Options for Location
Bountiful/ West Bountiful Option A	1500 South to Pages Lane/ 1600 North	**500 South diamond interchange and 400 North/500 West half-diamond interchange (Figure 4-12, Figure 4-13, Figure 4-14, and Figure 4-15)** • No free right-hand turns for vehicles and better sight lines, thereby enhancing safety for bicyclists and pedestrians. • 12-foot-wide SUP on both sides of 500 South (Figure 4-13). • Buffered or barrier-separated bike lanes on both sides of 400 North (Figure 4-14). • 12-foot-wide SUP on the north side of 400 North (Figure 4-14). • 6-foot-wide sidewalk on the south side of 400 North (Figure 4-14). • New SUP connection from 500 South to Woods Cross FrontRunner Station west of I-15. • Wider bridge over 1600 North/Pages Lane to accommodate future bicyclist and pedestrian improvements (Figure 4-15).	**500 South diamond interchange (Figure 4-12)** • Bountiful 500 South – Northern Option • Bountiful 500 South – Southern Option **400 North/500 West half diamond interchange (Figure 4-12)** • Bountiful 400 North – Northern Option • Bountiful 400 North - Southern Option
Centerville Option B	Pages Lane/ 1600 North to Farmington boundary	**Parrish Lane SPUI with NB connection to east frontage road (Figure 4-16 and Figure 4-17)** • No free right-hand turns for vehicles and better sight lines, thereby enhancing safety for bicyclists and pedestrians. • 14-foot-wide SUP on the north side of Parrish Lane (Figure 4-17). • Grade-separated 14-foot-wide SUP crossing of I-15 and railroad tracks at 200 North. • New grade-separated 14-foot-wide SUP crossing at Centerville Park over I-15/railroad tracks/Legacy Parkway.	NA
Farmington Option A	Centerville boundary to U.S. 89	**Existing 200 West SB on-ramp and NB off-ramp (Figure 4-18, Figure 4-19, Figure 4-20, and Figure 4-21)** • No free right-hand turns for vehicles and better sight lines, thereby enhancing safety for bicyclists and pedestrians. • Glovers Lane bridge over I-15 and the railroad tracks is widened to include a 10-foot-wide sidewalk on the north side, a 6-foot-wide sidewalk on the south side, and buffered or barrier-separated bike lanes on both sides to match the facilities going over Legacy Parkway (Figure 4-19). • State Street/Clark Lane bridge over I-15 and the railroad tracks is widened to include buffered or barrier-separated bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway (Figure 4-21).	**Existing 200 West SB on-ramp and NB off-ramp (Figure 4-18, Figure 4-19, Figure 4-20, and Figure 4-21)** • Farmington 400 West Option • Farmington State Street Option

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Figure 4-1. Action Alternative: Salt Lake Segment

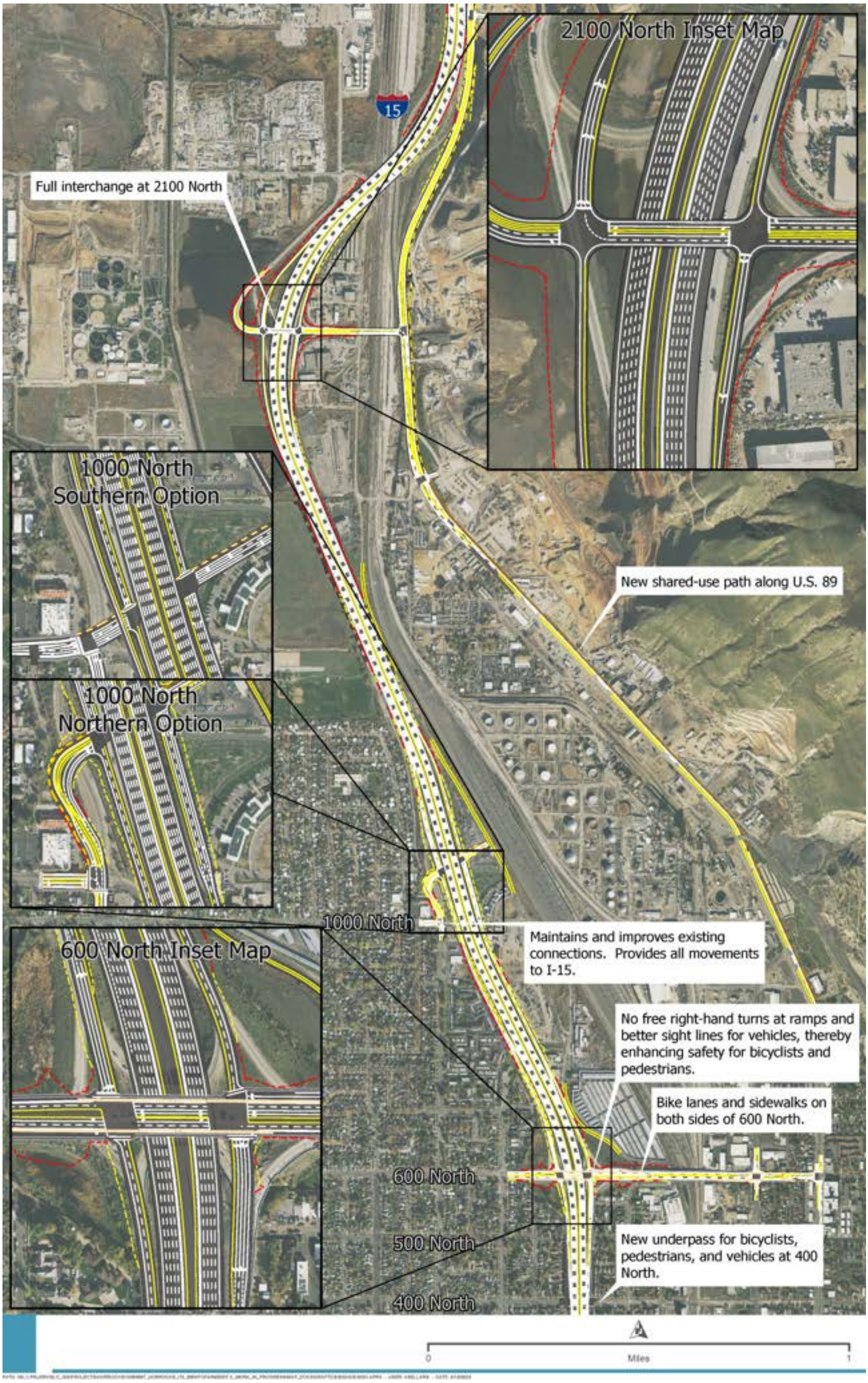

Figure 4-2. Action Alternative: 400 North Salt Lake

Figure 4-3. Action Alternative: 600 North Salt Lake

Figure 4-4. Action Alternative: Salt Lake 1000 North – Northern and Southern Options

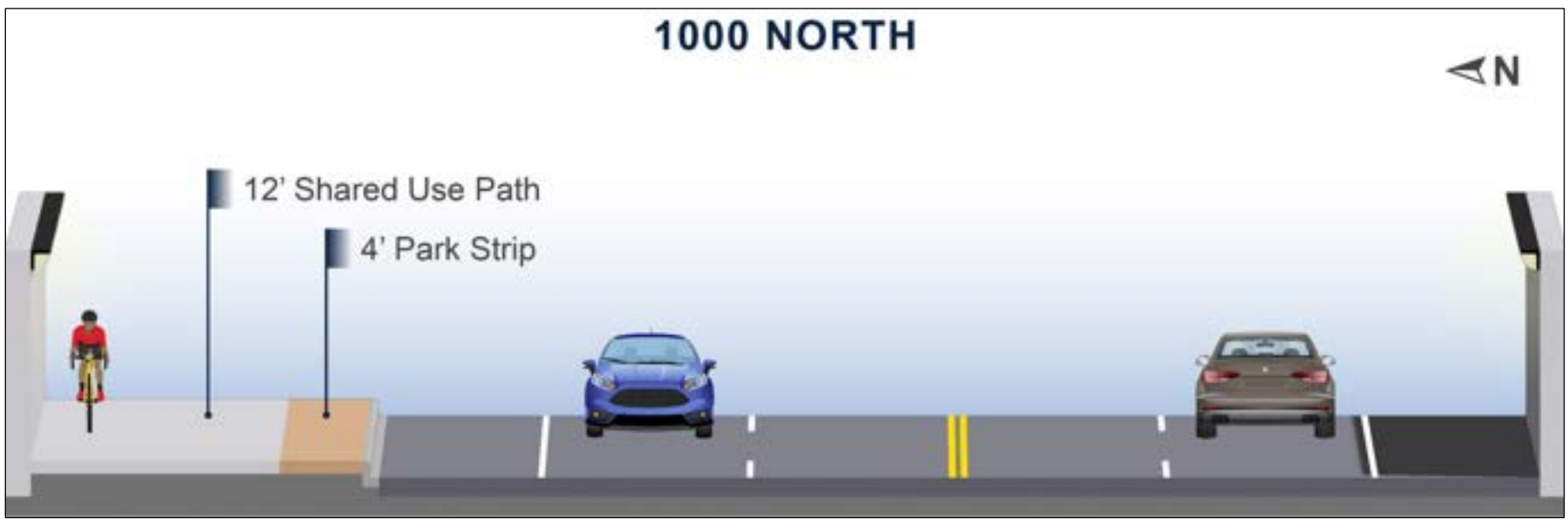

Figure 4-5. Action Alternative: North Salt Lake/Woods Cross Segment

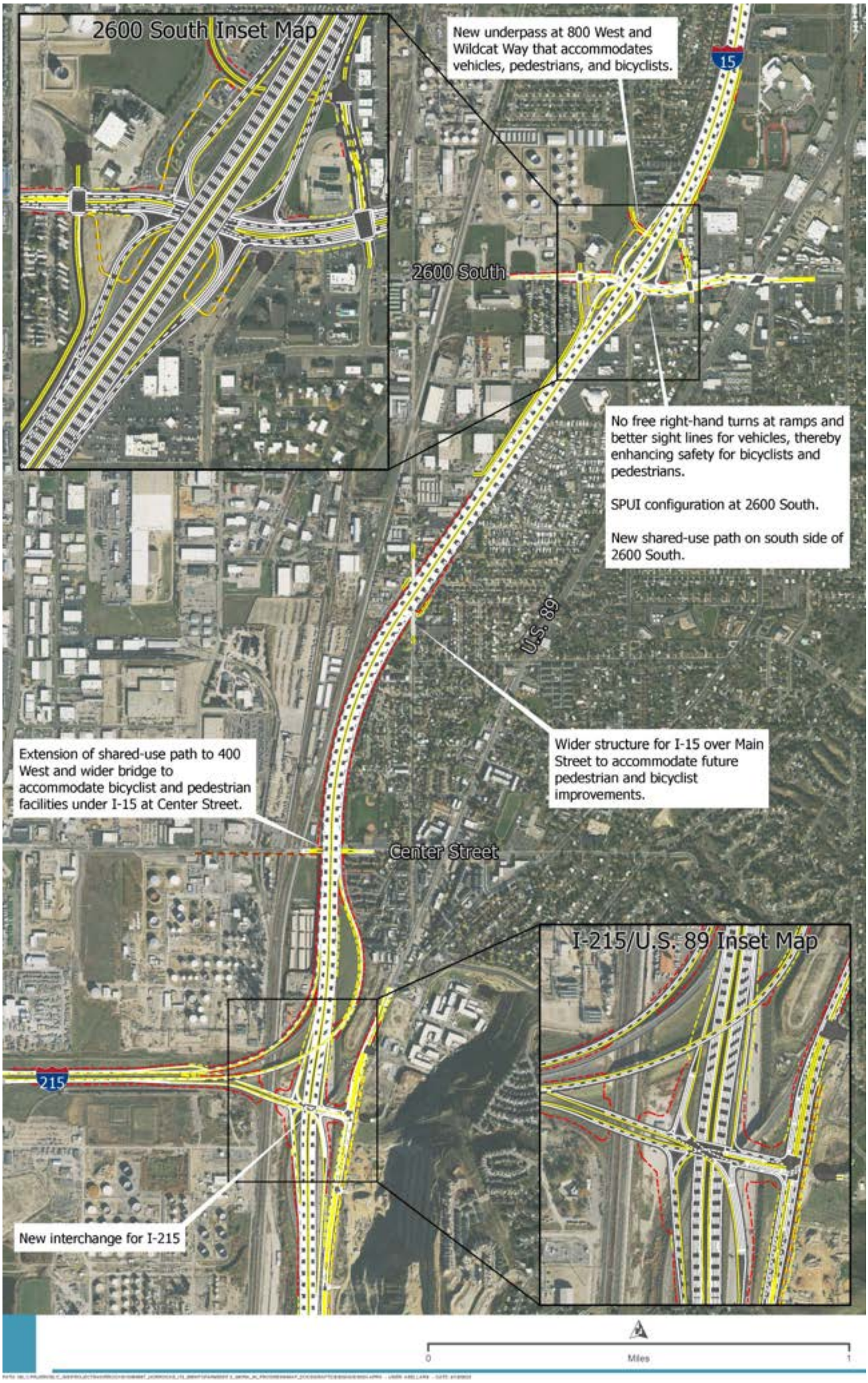

Figure 4-6. Action Alternative: Center Street North Salt Lake

Figure 4-7. Action Alternative: Main Street North Salt Lake

Figure 4-8. Action Alternative: 2600 South Woods Cross

Figure 4-9. Action Alternative: 2600 South SUP

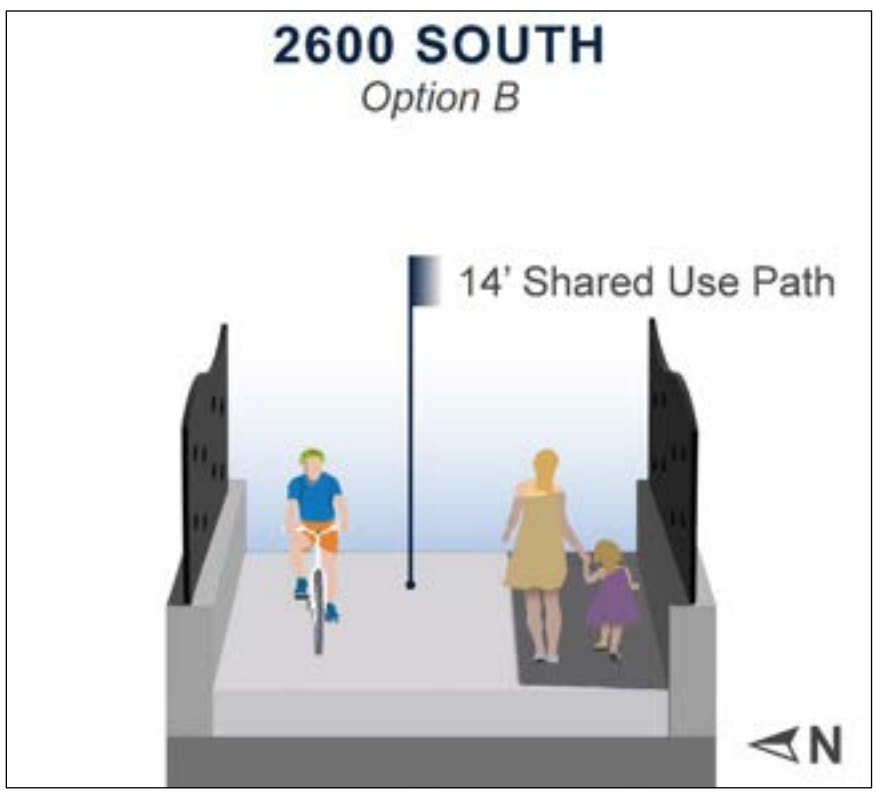

Figure 4-10. Action Alternative: 800 West Woods Cross

Figure 4-11. Action Alternative: 1500 South Woods Cross

Figure 4-12. Action Alternative: Bountiful/West Bountiful Segment

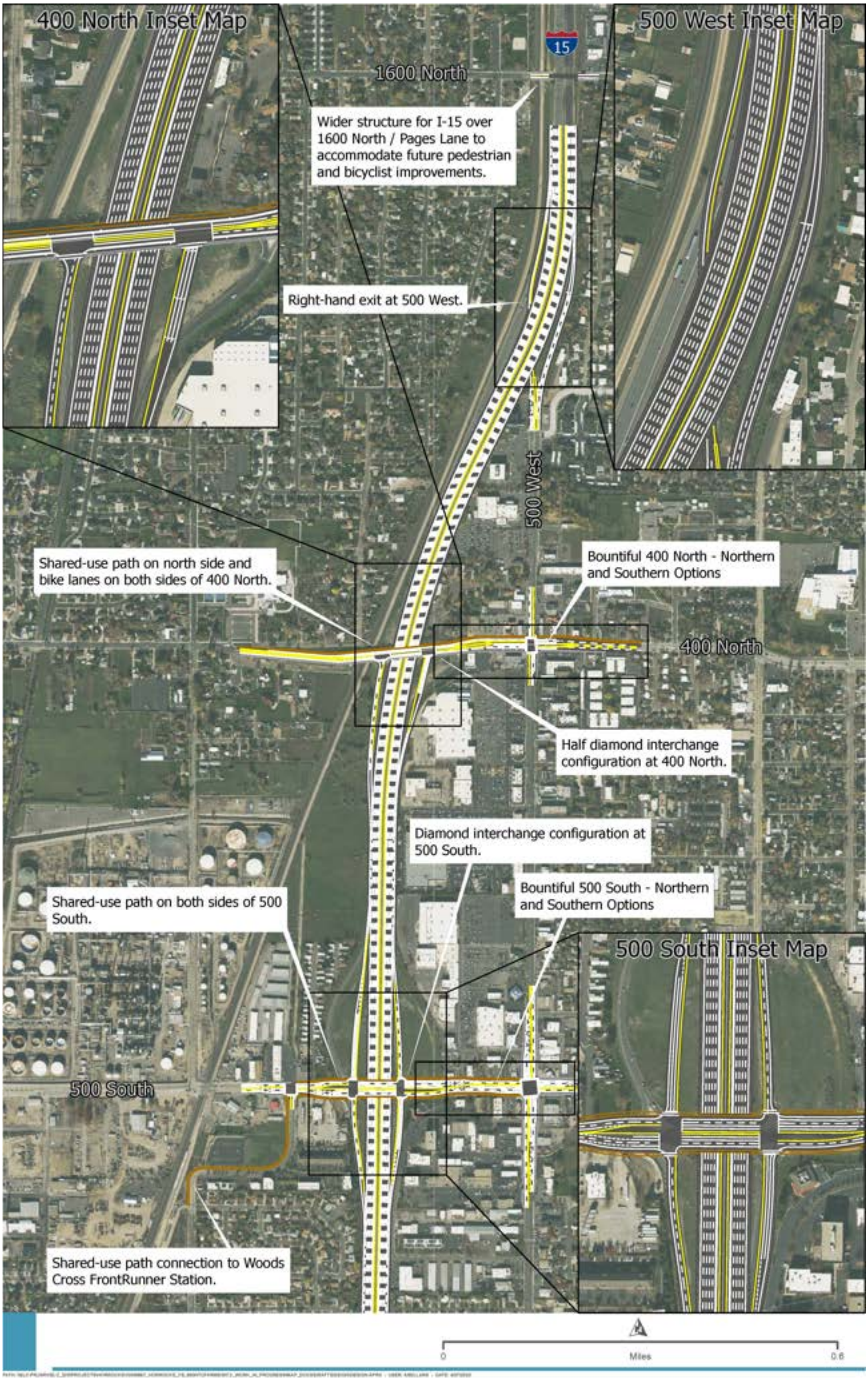

Figure 4-13. Action Alternative: 500 South Bountiful/West Bountiful

Figure 4-14. Action Alternative: 400 North Bountiful/West Bountiful

Figure 4-15. Action Alternative: Pages Lane/1600 North West Bountiful/Centerville

Figure 4-16. Action Alternative: Centerville Segment

Figure 4-17. Action Alternative: Parrish SUP

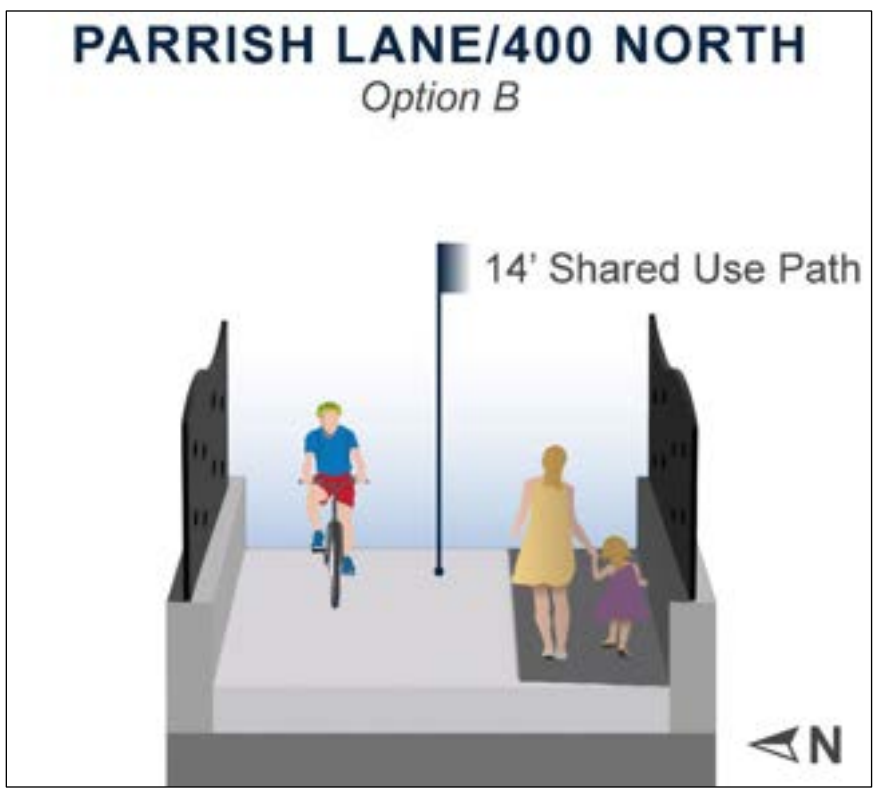

Figure 4-18. Action Alternative: Farmington Segment

Figure 4-19. Action Alternative: Glovers Lane Farmington

Figure 4-20. Action Alternative: 200 West Farmington

Figure 4-21. Action Alternative: State Street Farmington

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2022b Draft Purpose and Need and Appendix for the I-15 Farmington to Salt Lake City Environmental Impact Statement. September. https://i15eis.udot.utah.gov/wp-content/uploads/2022/09/I15EIS_01_Chapter_PurposeAndNeed_Sept2022.pdf.

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[UDOT and UTA] Utah Department of Transportation and Utah Transit Authority

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[UDOT and others] Utah Department of Transportation, Utah Transit Authority, Wasatch Front Regional Council, and Mountainland Association of Governments

2015 Wasatch Front Central Corridor Study. https://wfrc.org/studies/wasatch-front-central-corridor-study/.

[UTA] Utah Transit Authority

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[WFRC] Wasatch Front Regional Council

2019 2019–2050 Regional Transportation Plan. https://wfrc.org/vision-plans/regional-transportation-plan/2019-2050-regional-transportation-plan/.

ATTACHMENT A

Draft Alternative Concept Figures – November 2022

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Attachment A: Draft Alternative Concept Figures – November 2022

- 600 North CD and 2100 North full diamond interchange
- 600 North SPUI and 1800 North full diamond interchange
- New I-215/U.S. 89 local interchange and 2600 South diamond
- New I-215/U.S. 89 local interchange and 2600 South SPUI
- 500 South diamond and 400 North/500 West half diamond
- 500 South diamond and 400 North/500 West 3/4 diamond at 400 North with NB on ramp at 500 West
- CD for 500 South/400 North with NB on ramp at 500 West
- Parrish Lane diamond with NB connection to east frontage road
- Parrish Lane SPUI with NB connection to east frontage road
- Existing 200 West SB on-ramp and NB off-ramp
- Glovers Lane SPUI
- 200 West full interchange

Contents

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Figure A-1. Salt Lake City Option A 600 North CD and 2100 North Full Diamond Interchange

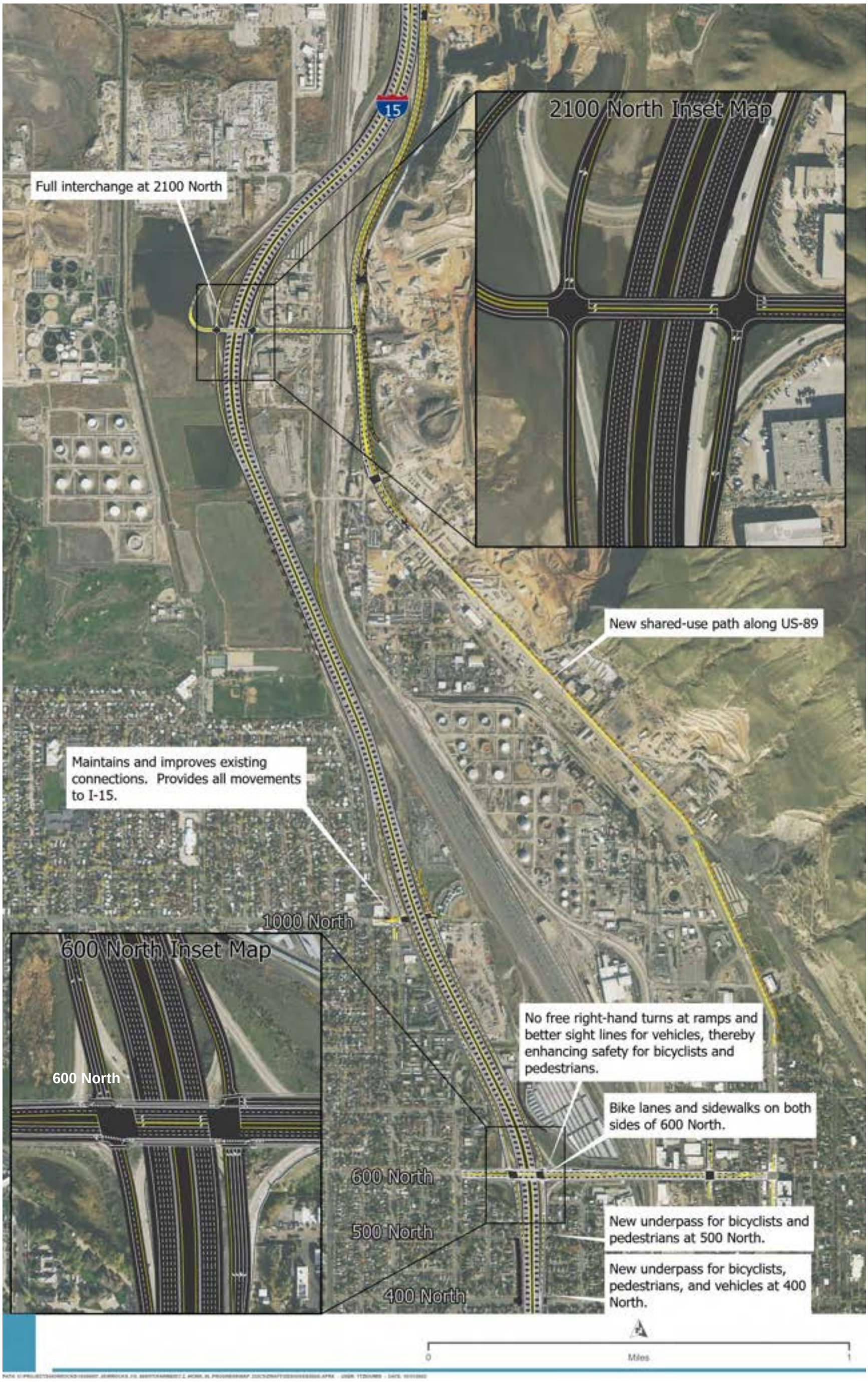

Figure A-2. Salt Lake City Option B 600 North SPUI and 1800 North Full Diamond Interchange

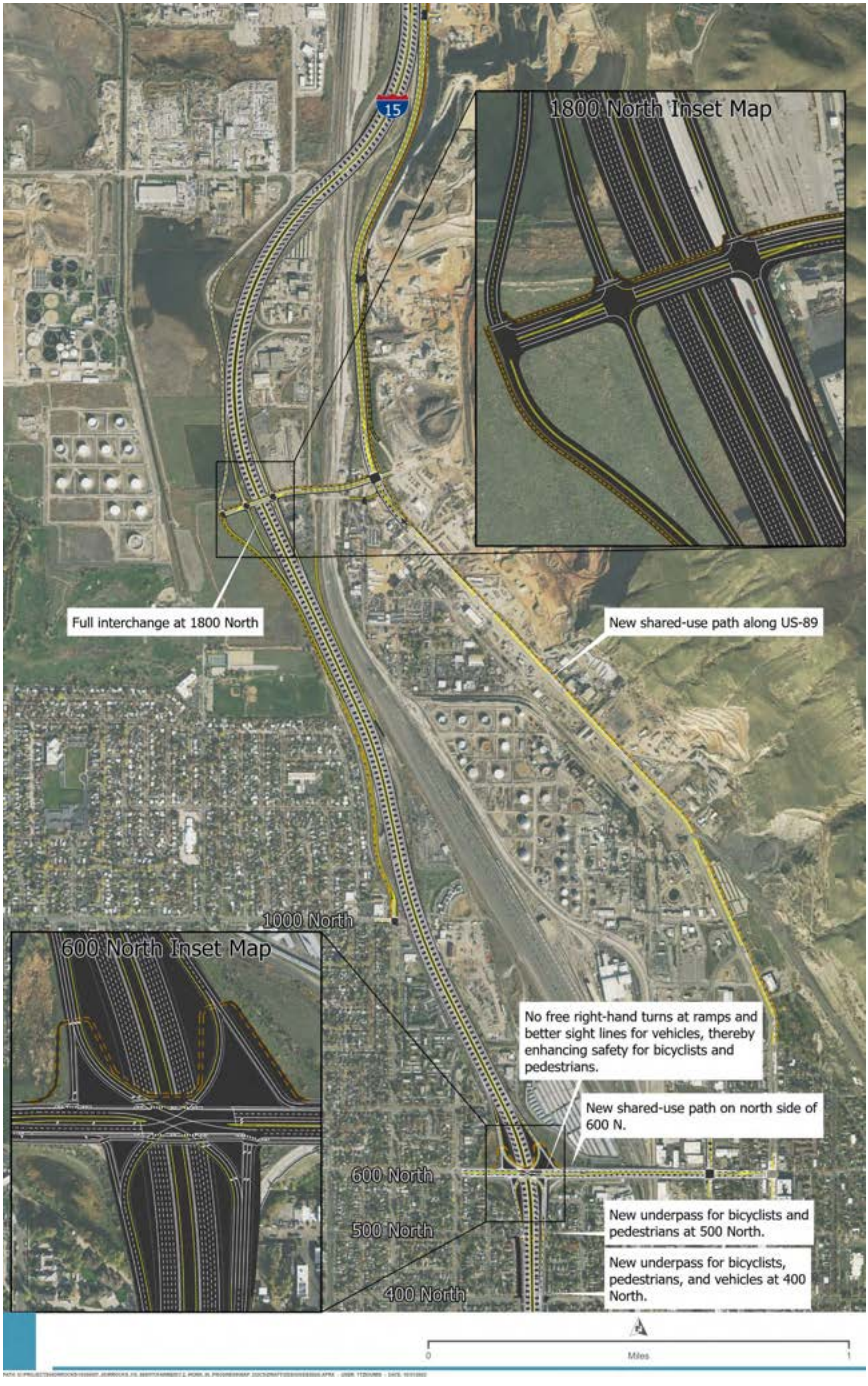

Figure A-3. Cross Section for Bicycle and Pedestrian Crossing at 500 North Salt Lake City Options A and B

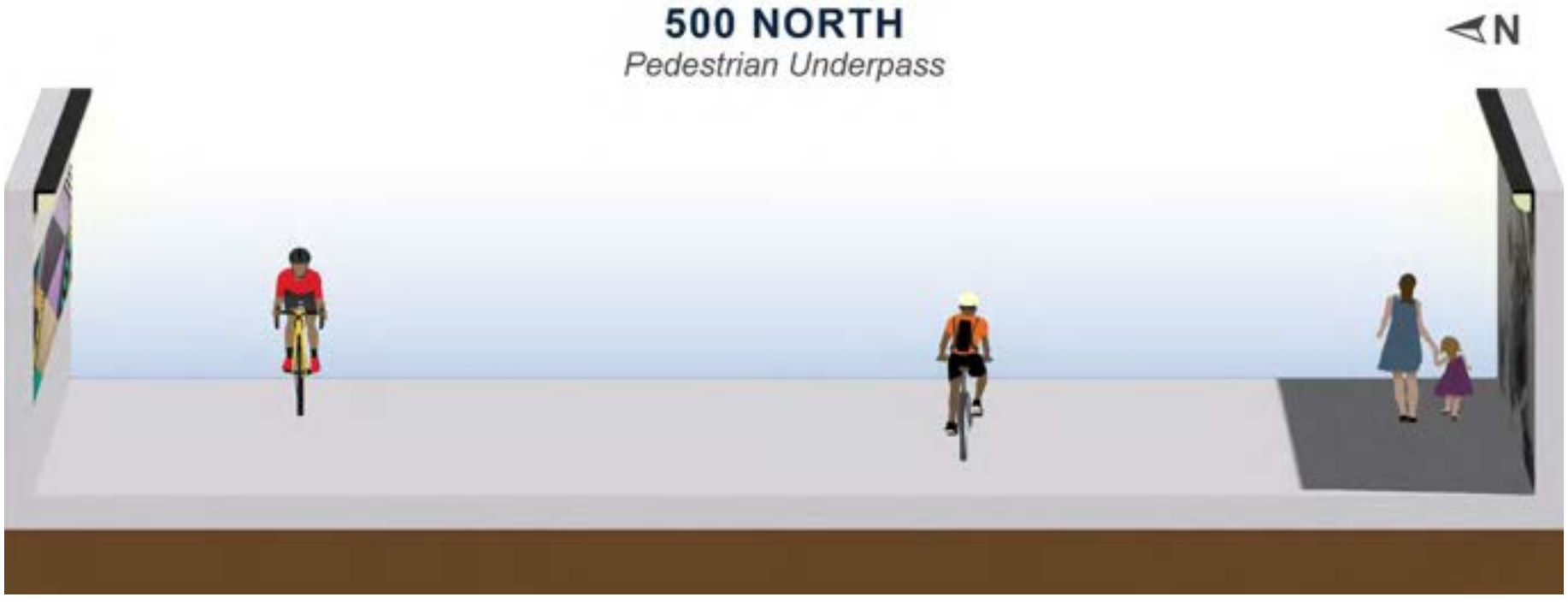

Figure A-4. Cross Section for 400 North Salt Lake City Options A and B

Figure A-5. Cross Section for Salt Lake City 600 North Option A

Figure A-6. Cross Section for Salt Lake City 600 North Option B

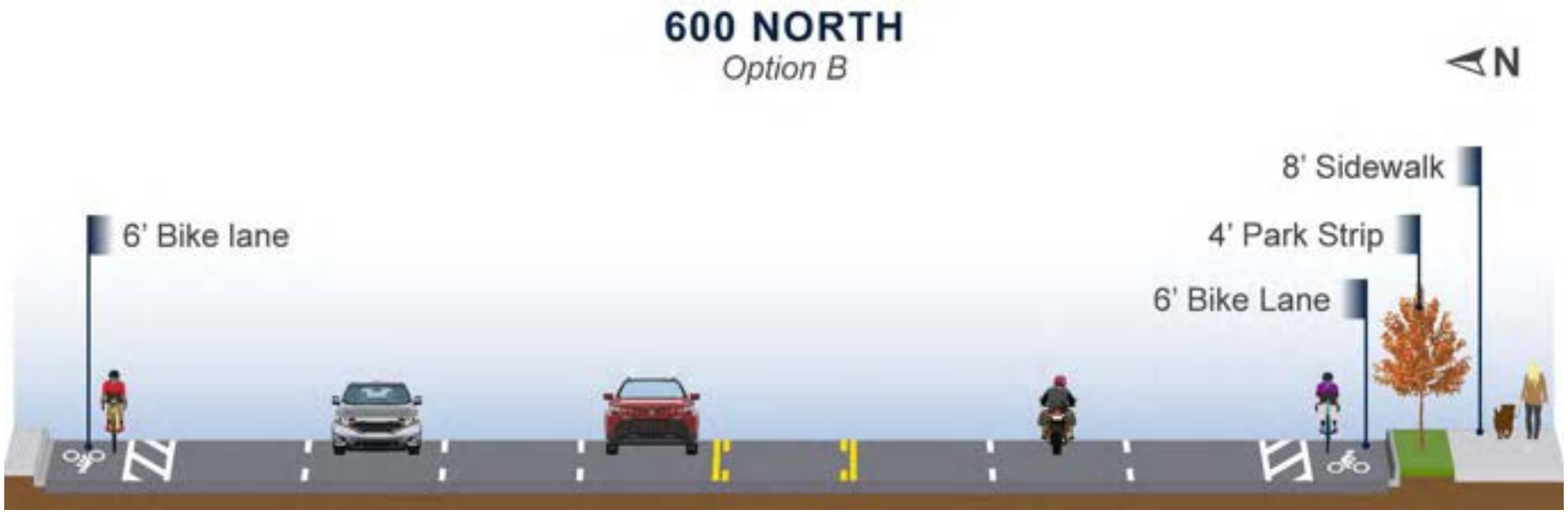

Figure A-7. Cross Section for 600 North Salt Lake City Option B Shared-use Path

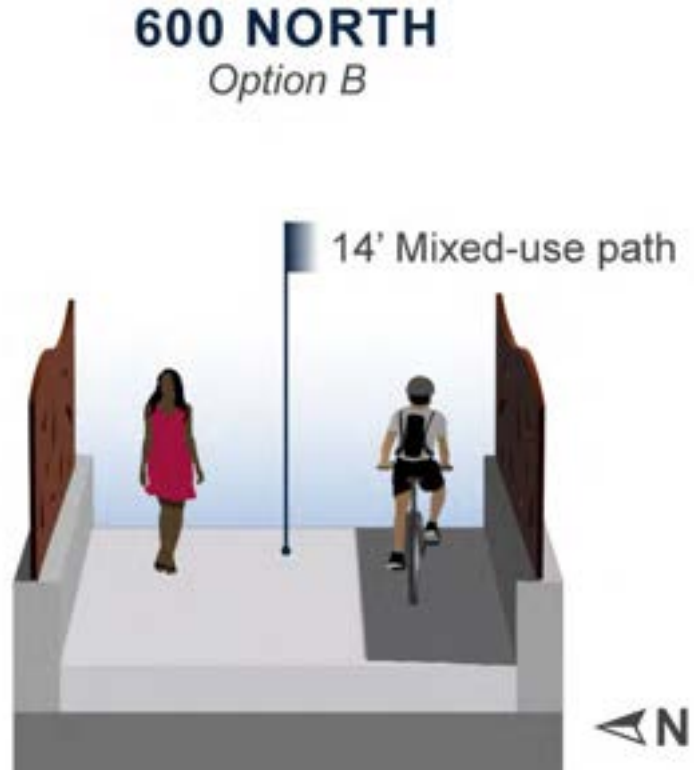

Figure A-8. Cross Section for Beck Street in Salt Lake City Options A and B

Figure A-9. Cross Section for 2100 North Bridge for Salt Lake City Option A

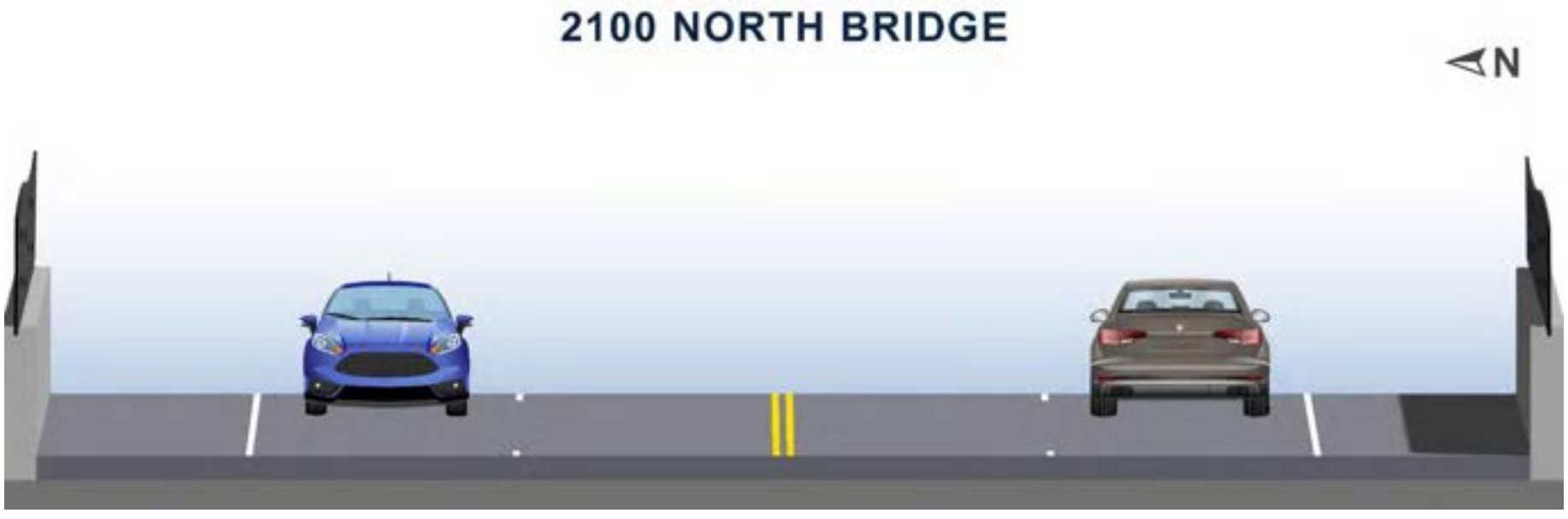

Figure A-10. Cross Section for 1800 North Bridge for Salt Lake City Option B

Figure A-11. North Salt Lake/Woods Cross Option A New I-215/U.S. 89 Local Interchange and 2600 South Diamond

Figure A-12. North Salt Lake/Woods Cross Option B New I-215/U.S. 89 Local Interchange and 2600 South SPUI

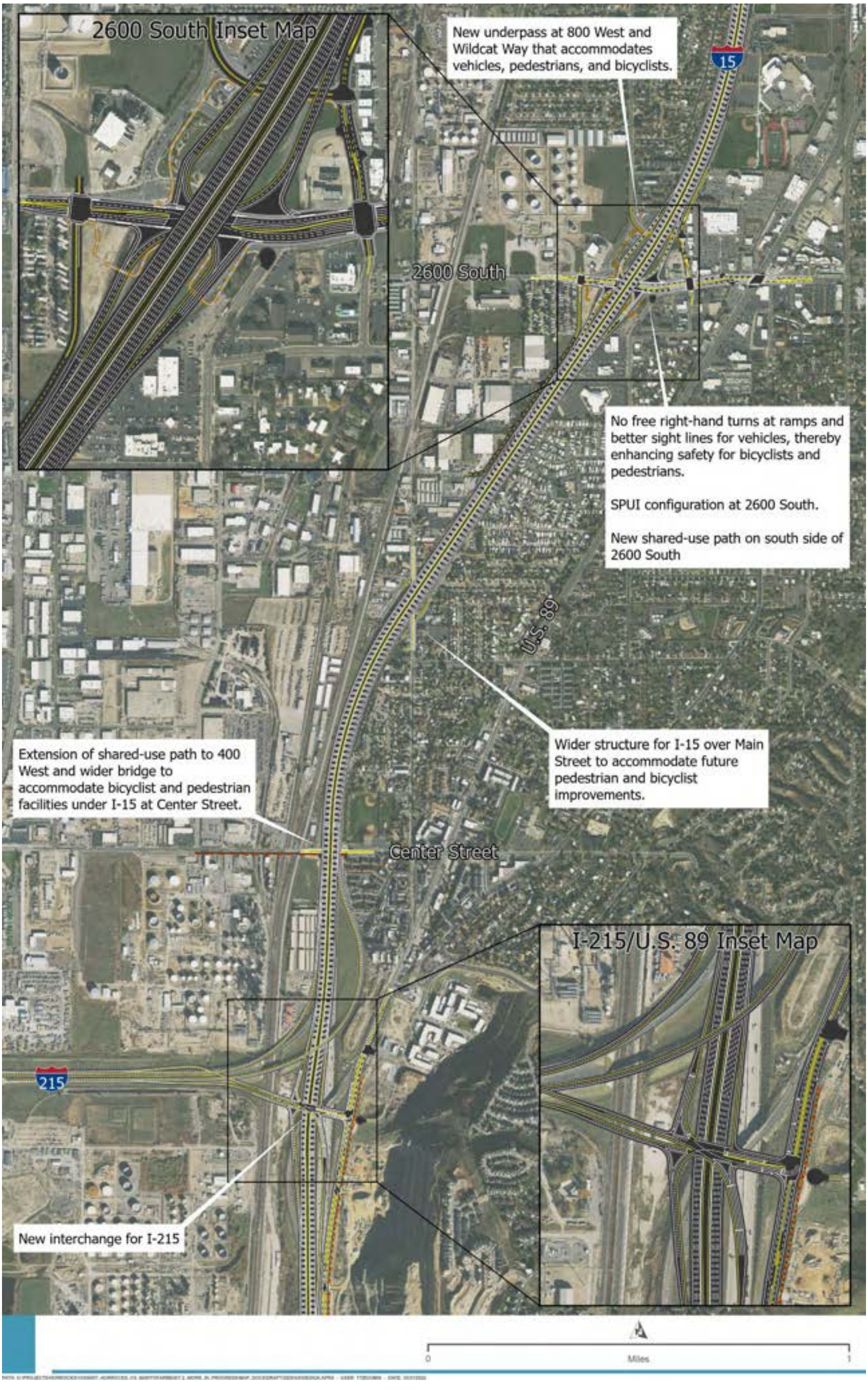

Figure A-13. Cross Section for Center Street in North Salt Lake (for North Salt Lake/Woods Cross Options A and B)

Figure A-14. Cross Section for Main Street in North Salt Lake (for North Salt Lake/Woods Cross Options A and B)

Figure A-15. Cross Section for North Salt Lake/Woods Cross Option A

Figure A-16. Cross Section for North Salt Lake/Woods Cross Option B

Figure A-17. Shared-use Path Cross Section for North Salt Lake/Woods Cross Option B

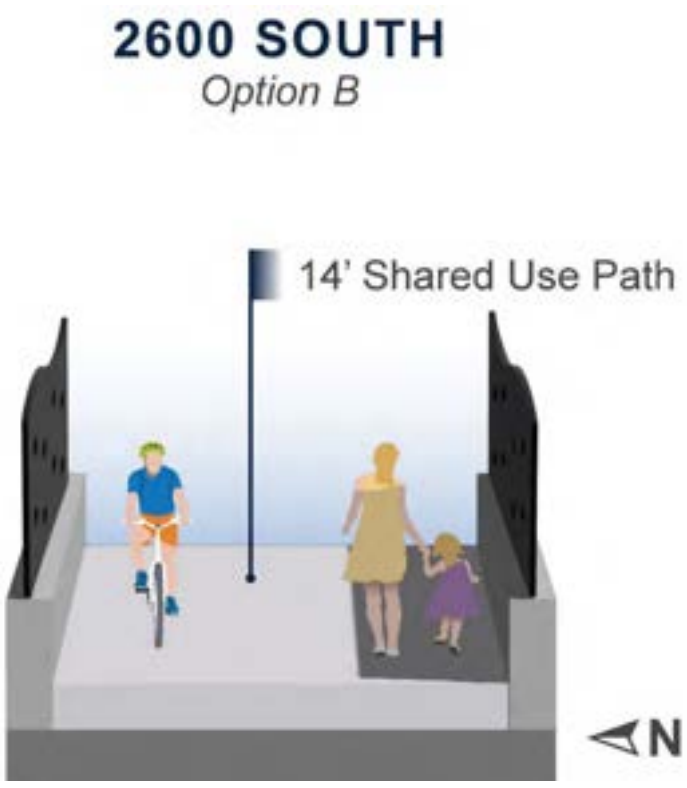

Figure A-18. Cross Section for 800 West for North Salt Lake/Woods Cross Option A and B

Figure A-19. Cross Section for 1500 South Woods Cross (for North Salt Lake/Woods Cross Options A and B)

Figure A-20. Bountiful/West Bountiful Option A 500 South Diamond and 400 North/500 West Half Diamond

Figure A-21. Bountiful/West Bountiful Option B 500 South Diamond and 400 North/500 West 3/4 Diamond at 400 North with NB On-ramp at 500 West

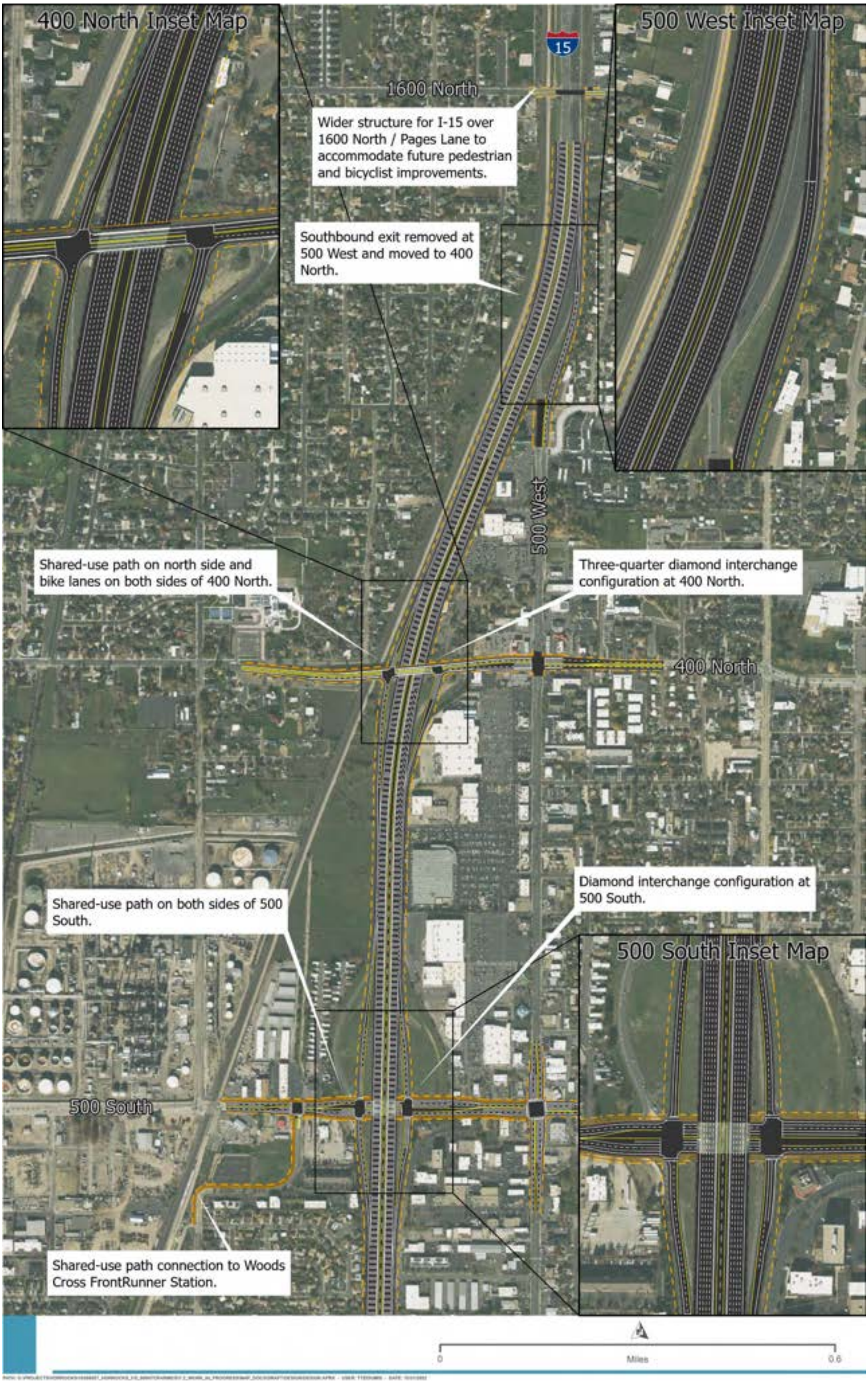

Figure A-22. Bountiful/West Bountiful Option C CD for 500 South/400 North with NB On-ramp at 500 West

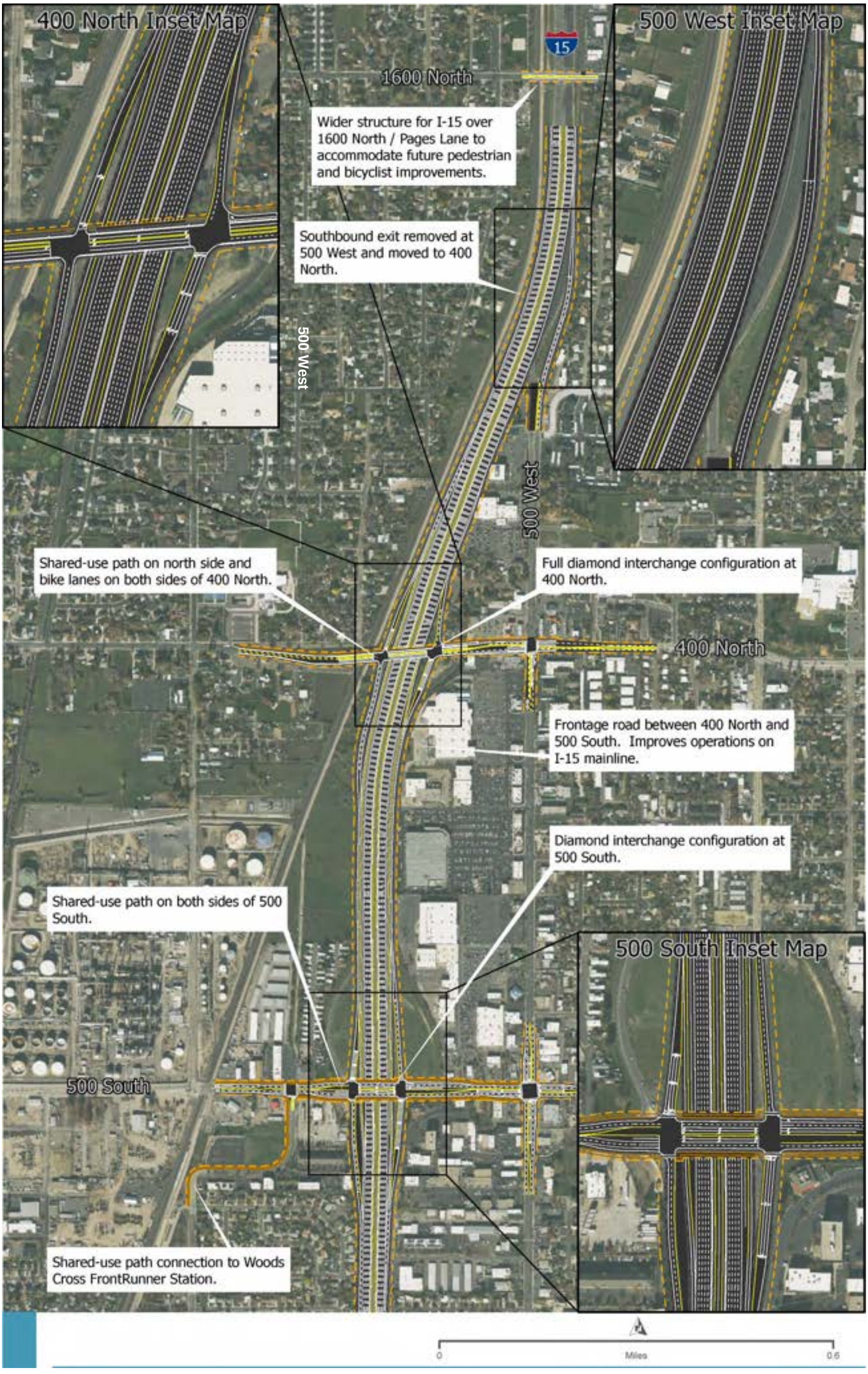

Figure A-23. Cross Section for 500 South Bountiful/West Bountiful Options A, B, and C

Figure A-24. Cross Section for 400 North Bountiful/West Bountiful Options A and B

Figure A-25. Cross Section for 400 North Bountiful/West Bountiful Option C

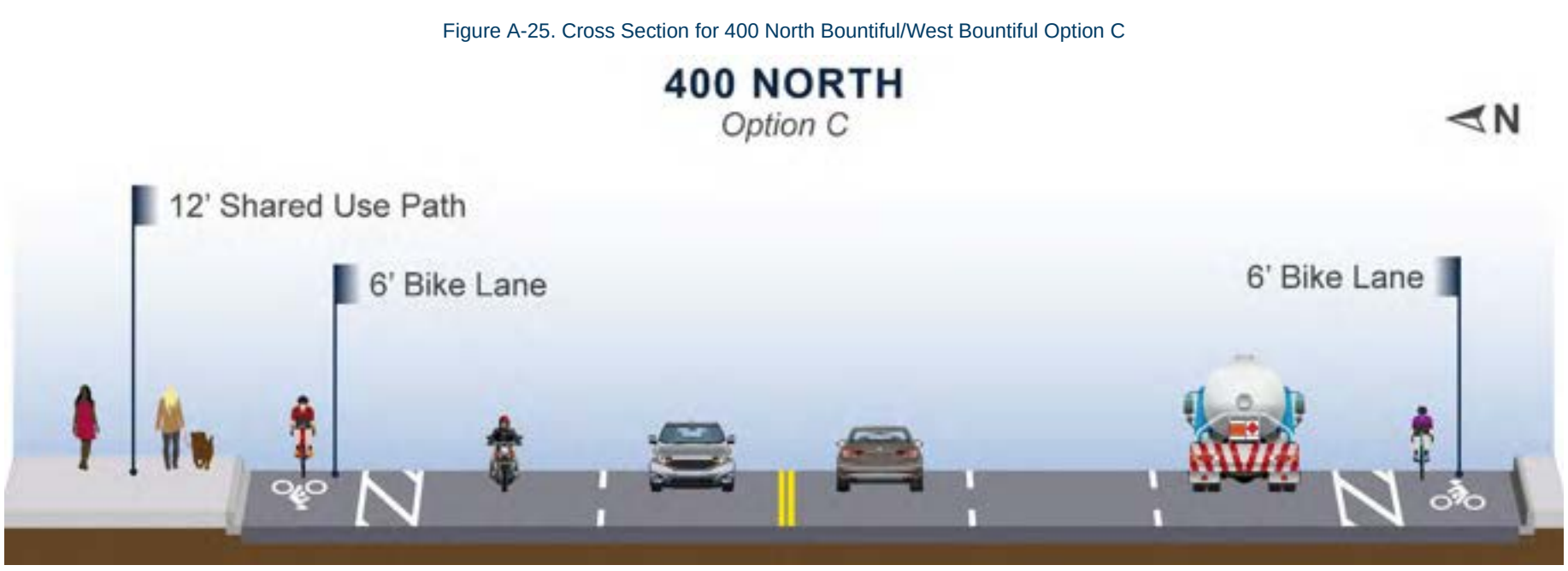

Figure A-26. Cross Section for Pages Lane/1600 North Centerville (for Bountiful/West Bountiful Options A, B, and C)

Figure A-27. Centerville Option A Parrish Lane Diamond with NB Connection to East Frontage Road

Figure A-28. Centerville Option B Parrish Lane SPUI with NB Connection to East Frontage Road

Figure A-29. Cross Section for Parrish Lane/400 North Option A Centerville

Figure A-30. Shared Use Path Cross Section for Parrish Lane/400 North Option B Centerville

Figure A-31. Cross Section for Porter Lane Pedestrian and Bicyclist Crossing Centerville Option A

Figure A-32. Farmington Option A Existing 200 West SB On-ramp and NB Off-ramp

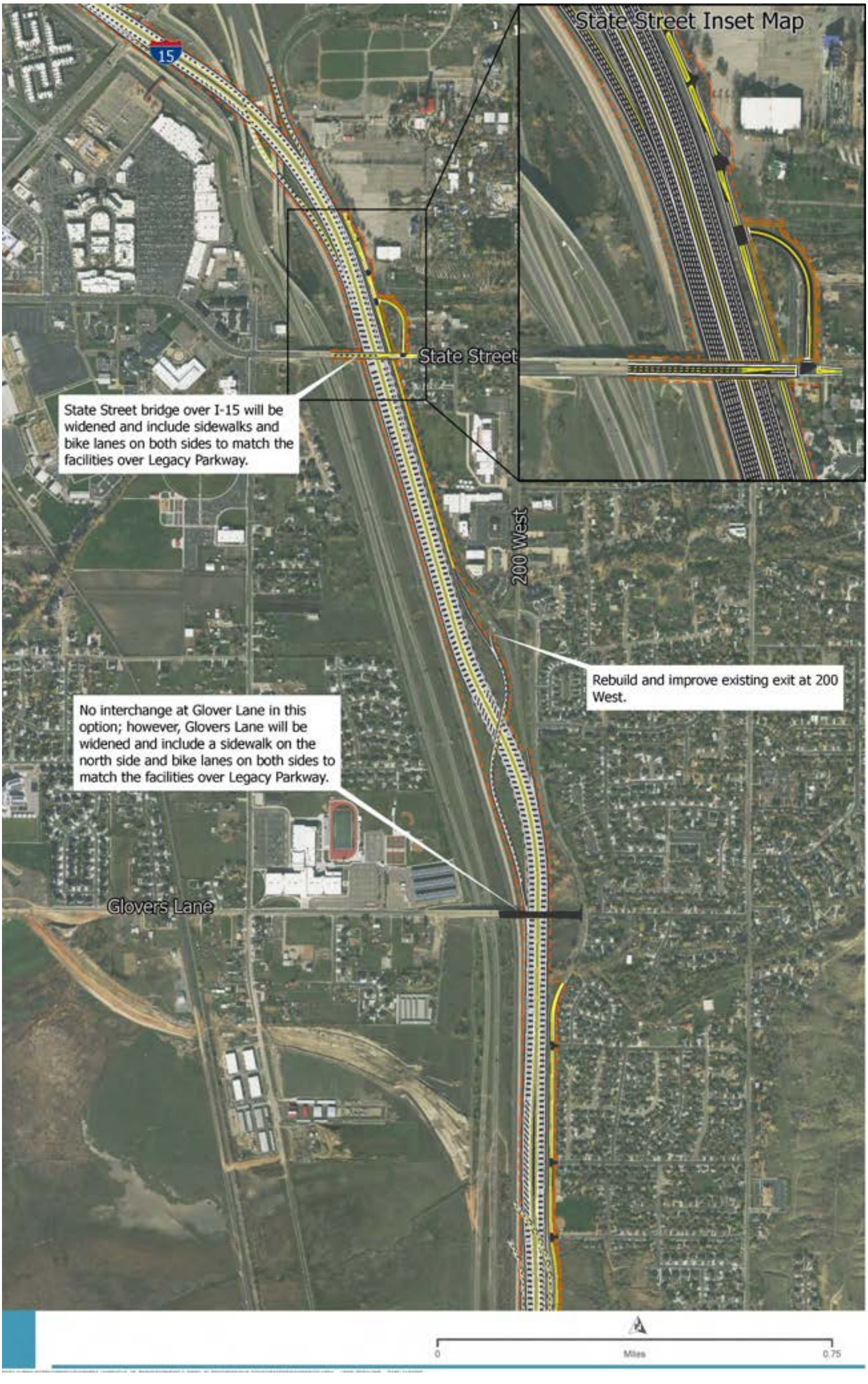

Figure A-33. Farmington Option B Glovers Lane SPUI

Figure A-34. Farmington Option C 200 West Full Interchange

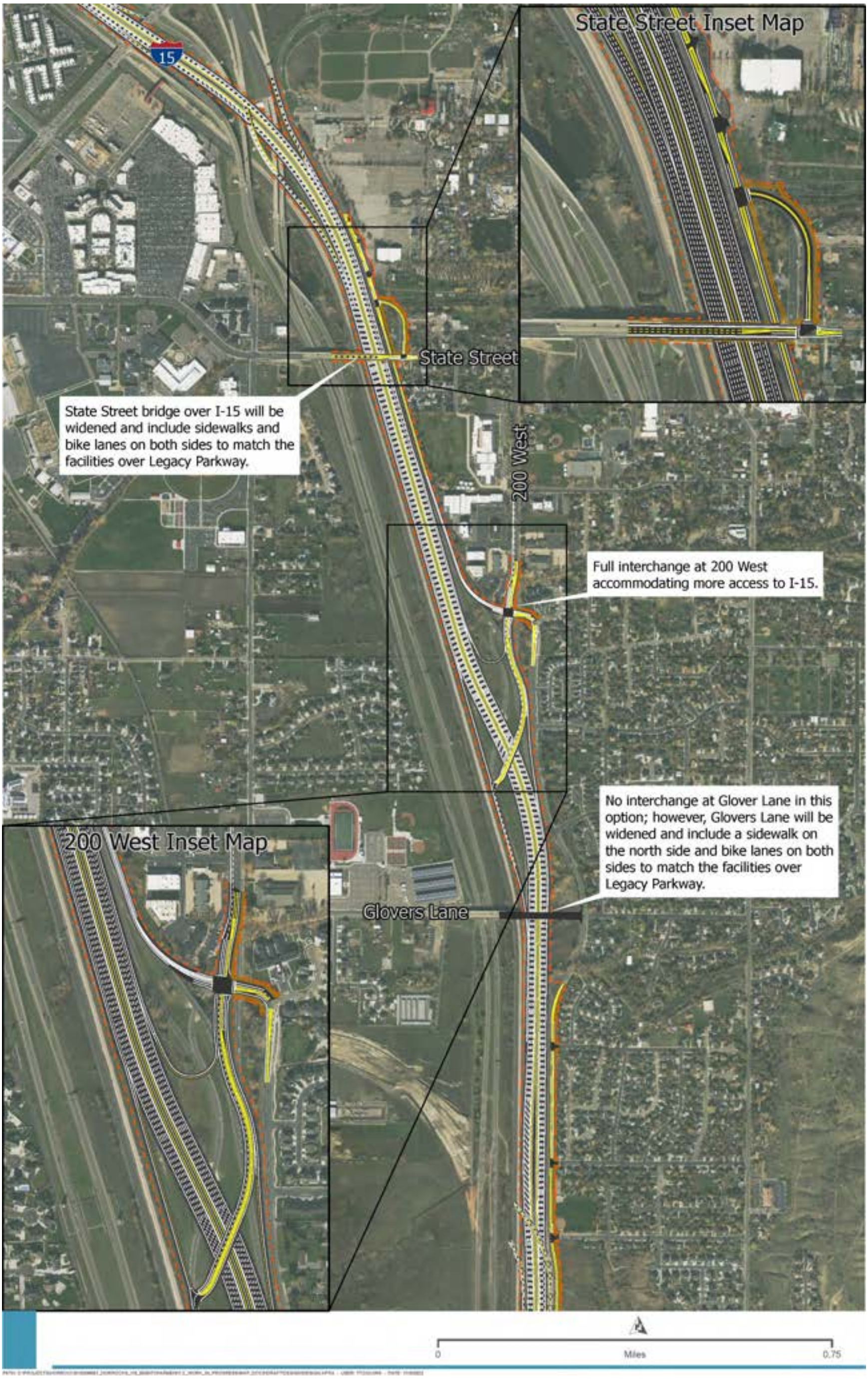

Figure A-35. Cross Section for State Street Farmington (Farmington Options A, B, and C)

Figure A-36. Cross Section for Shared Use Path Farmington Option B

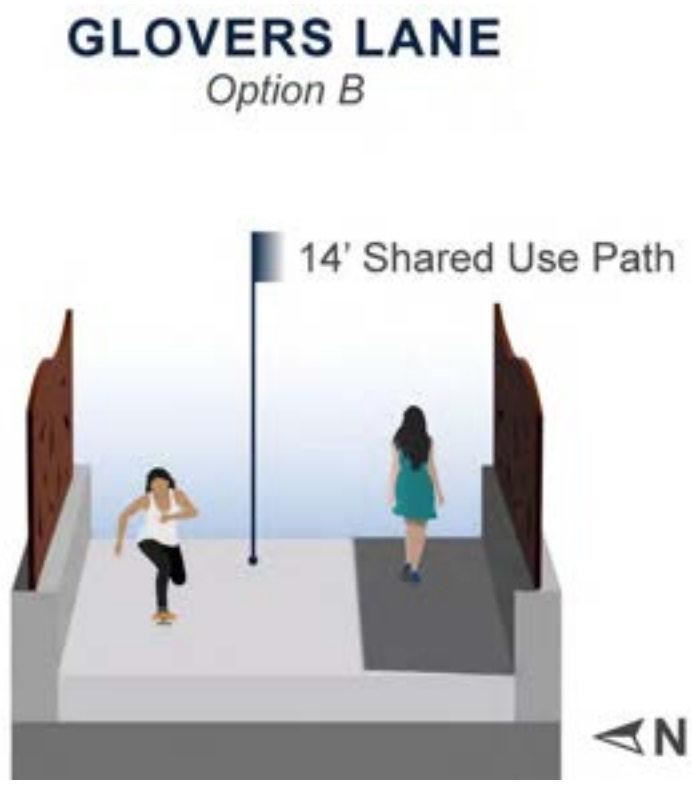

Figure A-37. Cross Section for Glovers Lane Farmington Option B

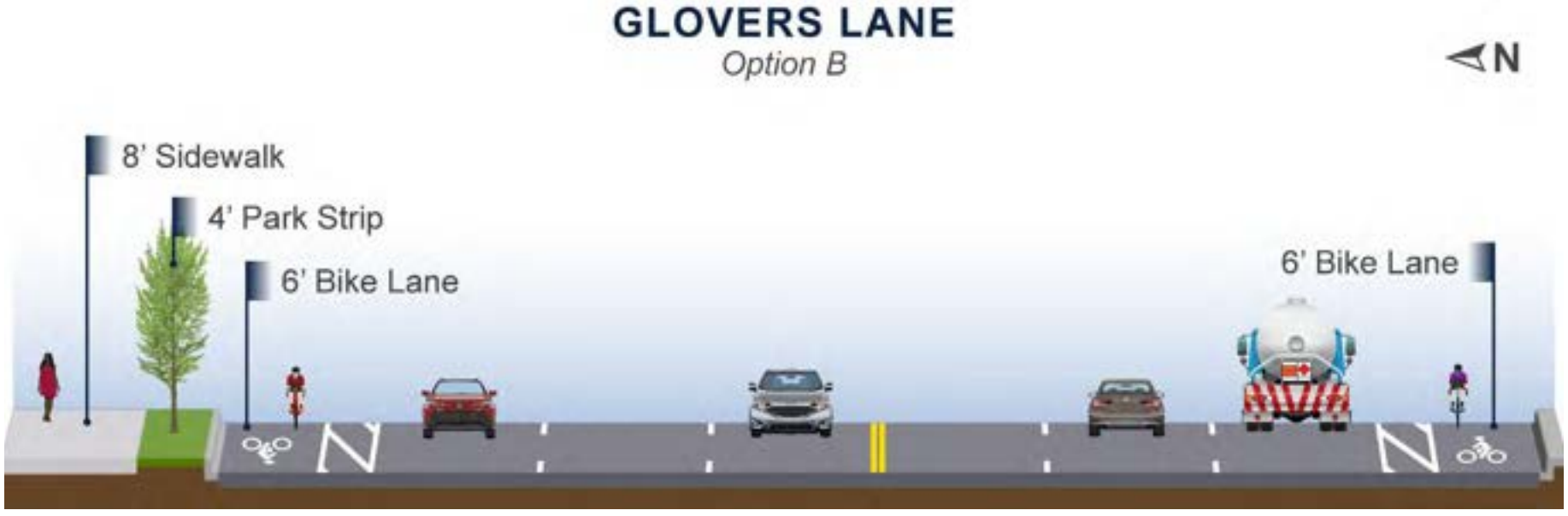

Figure A-38. Cross Section for 200 West Farmington Option A

Figure A-39. Cross Section for Glovers Lane for Farmington Options A and C

Figure A-40. Salt Lake City Option A 600 North CD and 2100 North Full Diamond Interchange (Reversible I-15 Mainline)

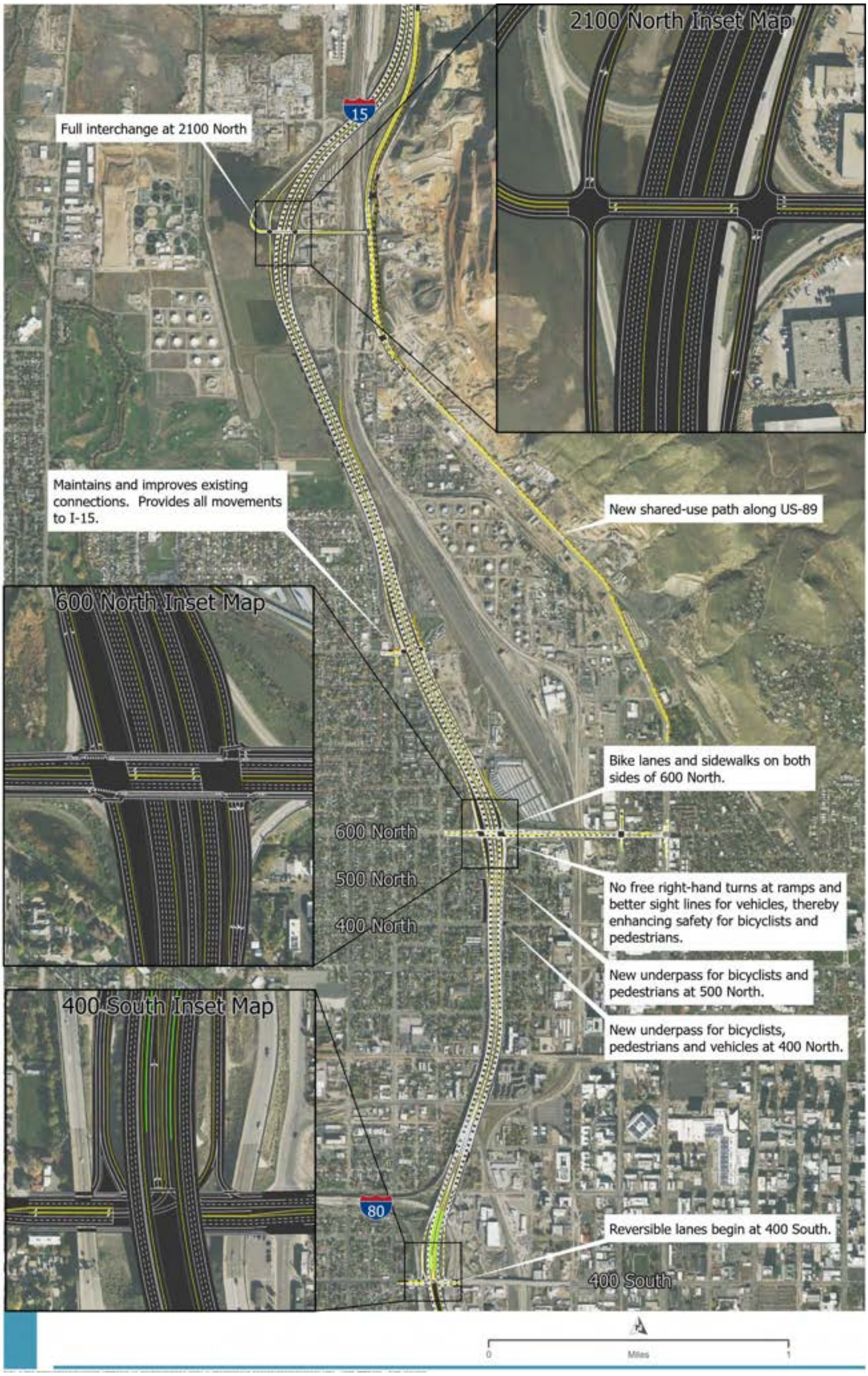

Figure A-41. Salt Lake City Option B 600 North SPUI and 1800 North Full Diamond Interchange (Reversible I-15 Mainline)

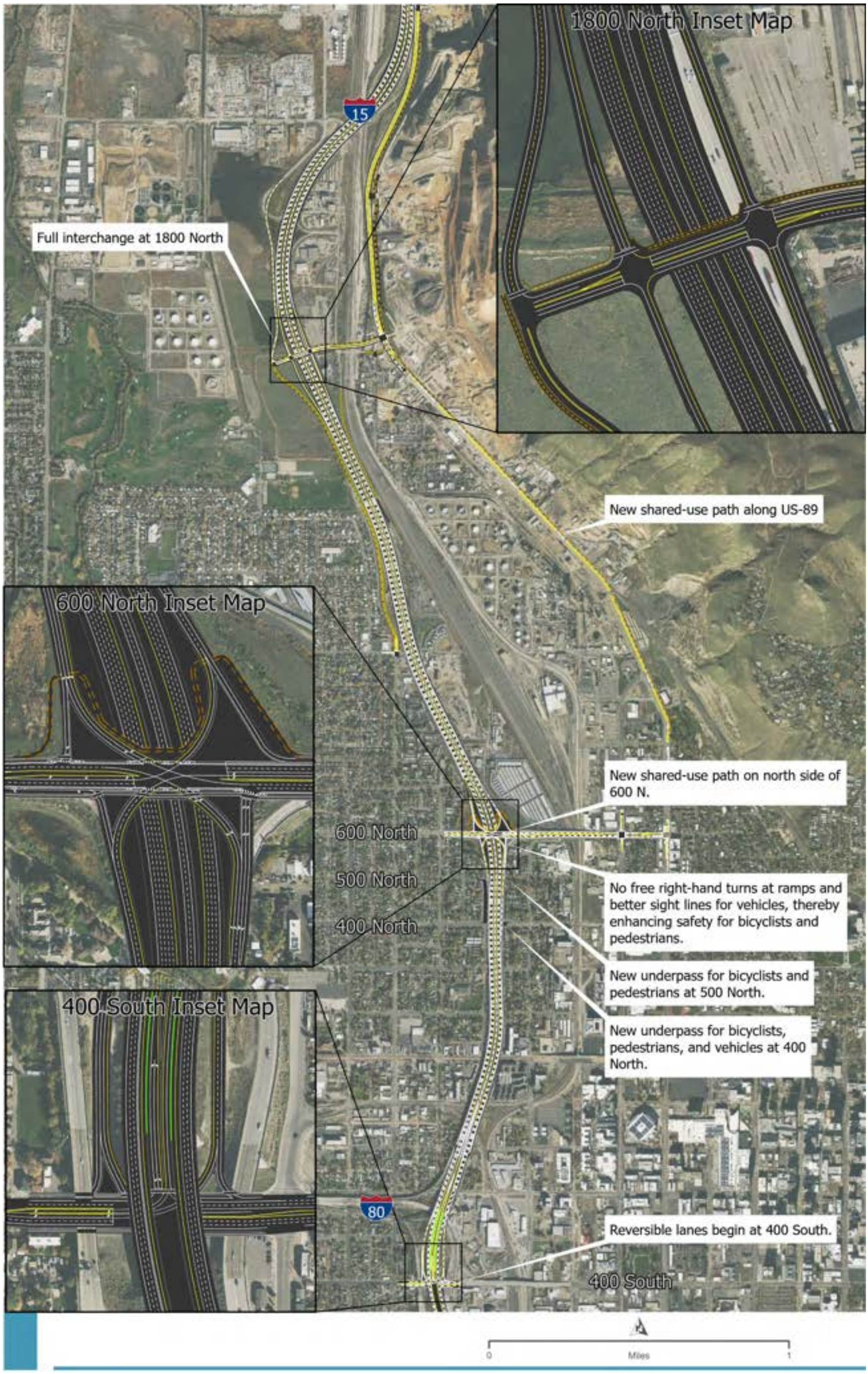

Figure A-42. North Salt Lake/Woods Cross Option A New I-215/U.S. 89 Local Interchange and 2600 South Diamond (Reversible I-15 Mainline)

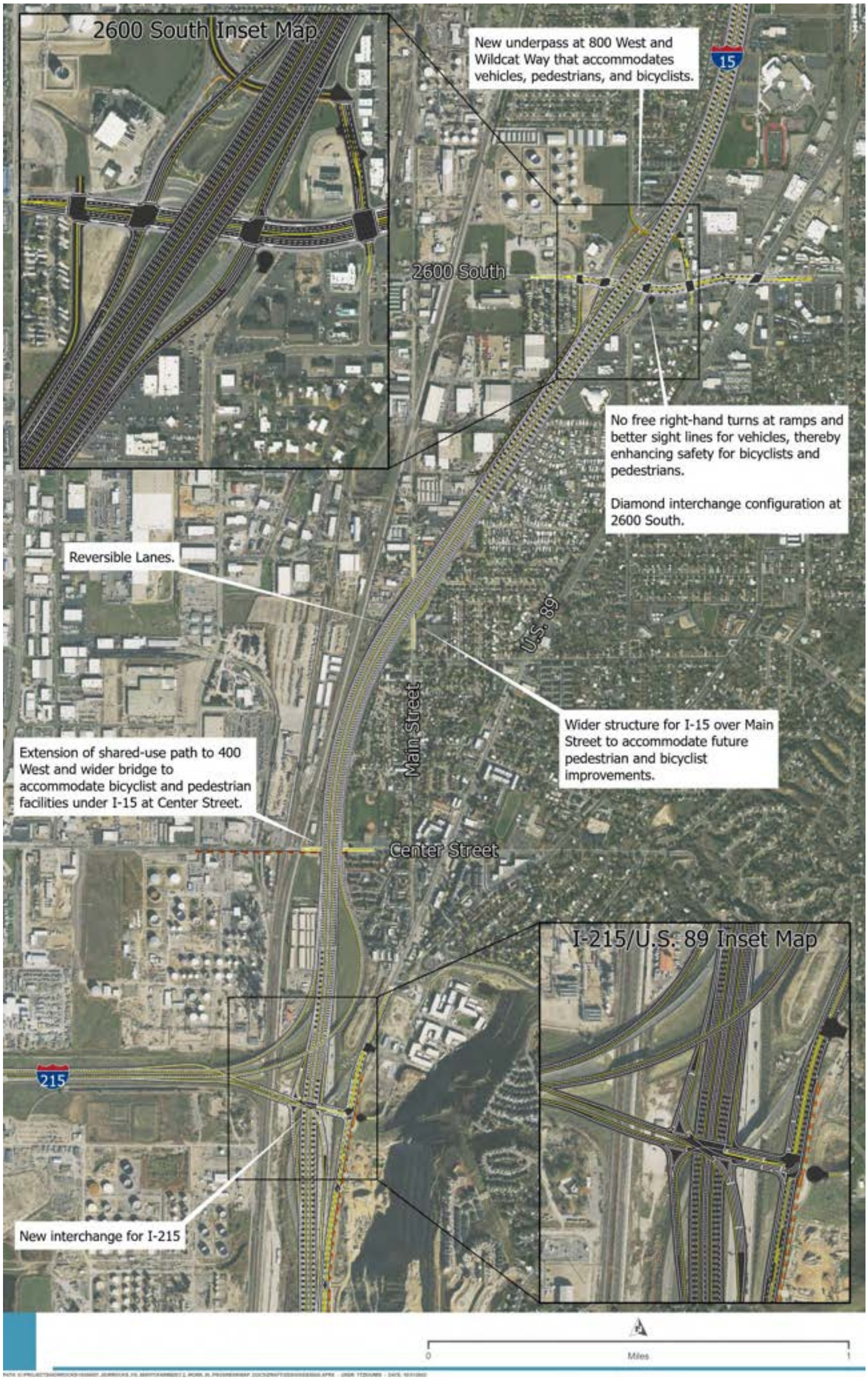

Figure A-43. North Salt Lake/Woods Cross Option B New I-215/U.S. 89 Local Interchange and 2600 South SPUI (Reversible I-15 Mainline)

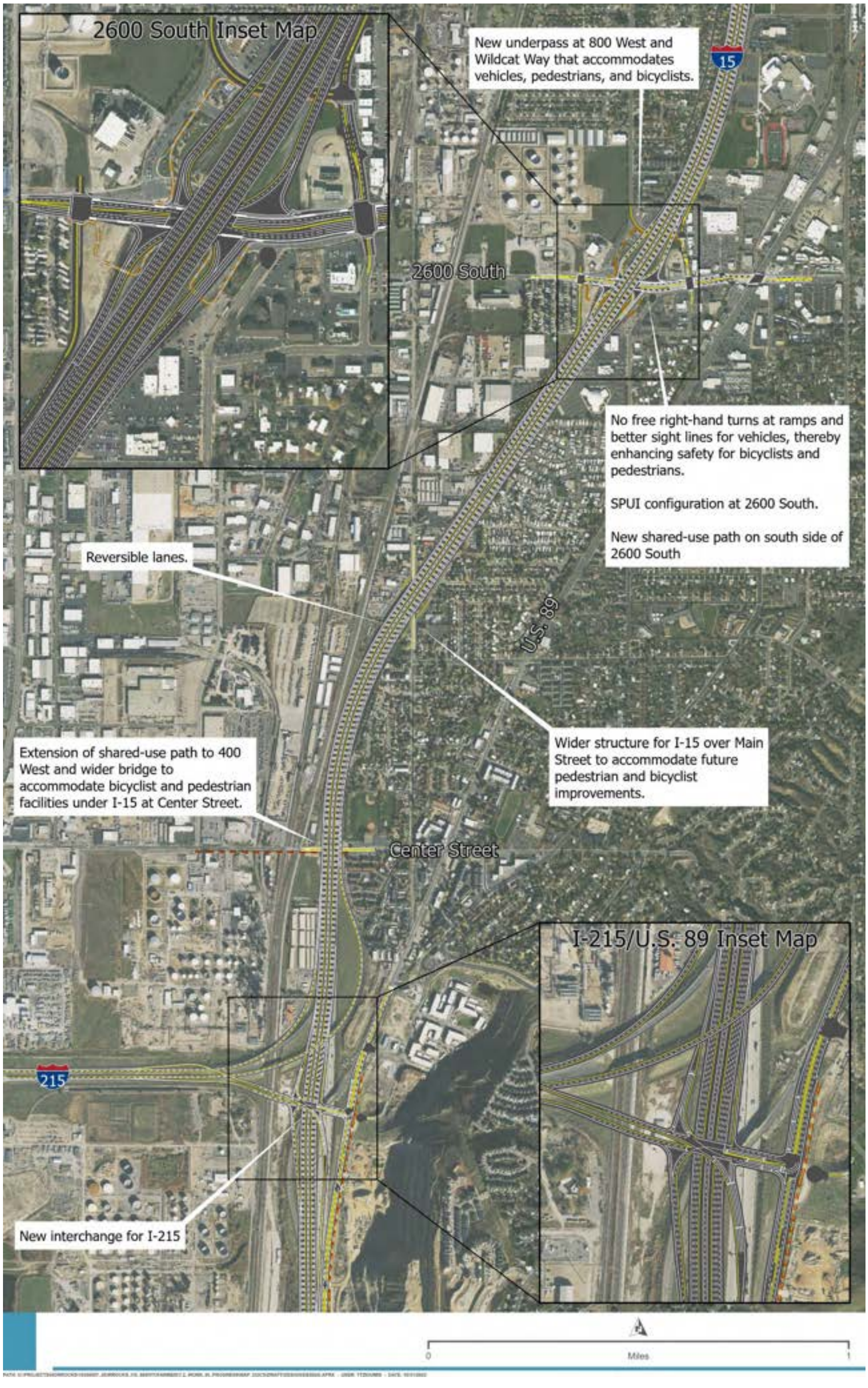

Figure A-44. Bountiful/West Bountiful Option A 500 South Diamond and 400 North/500 West Half Diamond (Reversible I-15 Mainline)

Figure A-45. Bountiful/West Bountiful Option B 500 South Diamond and 400 North/500 West 3/4 Diamond at 400 North with NB On-ramp at 500 West (Reversible I-15 Mainline)

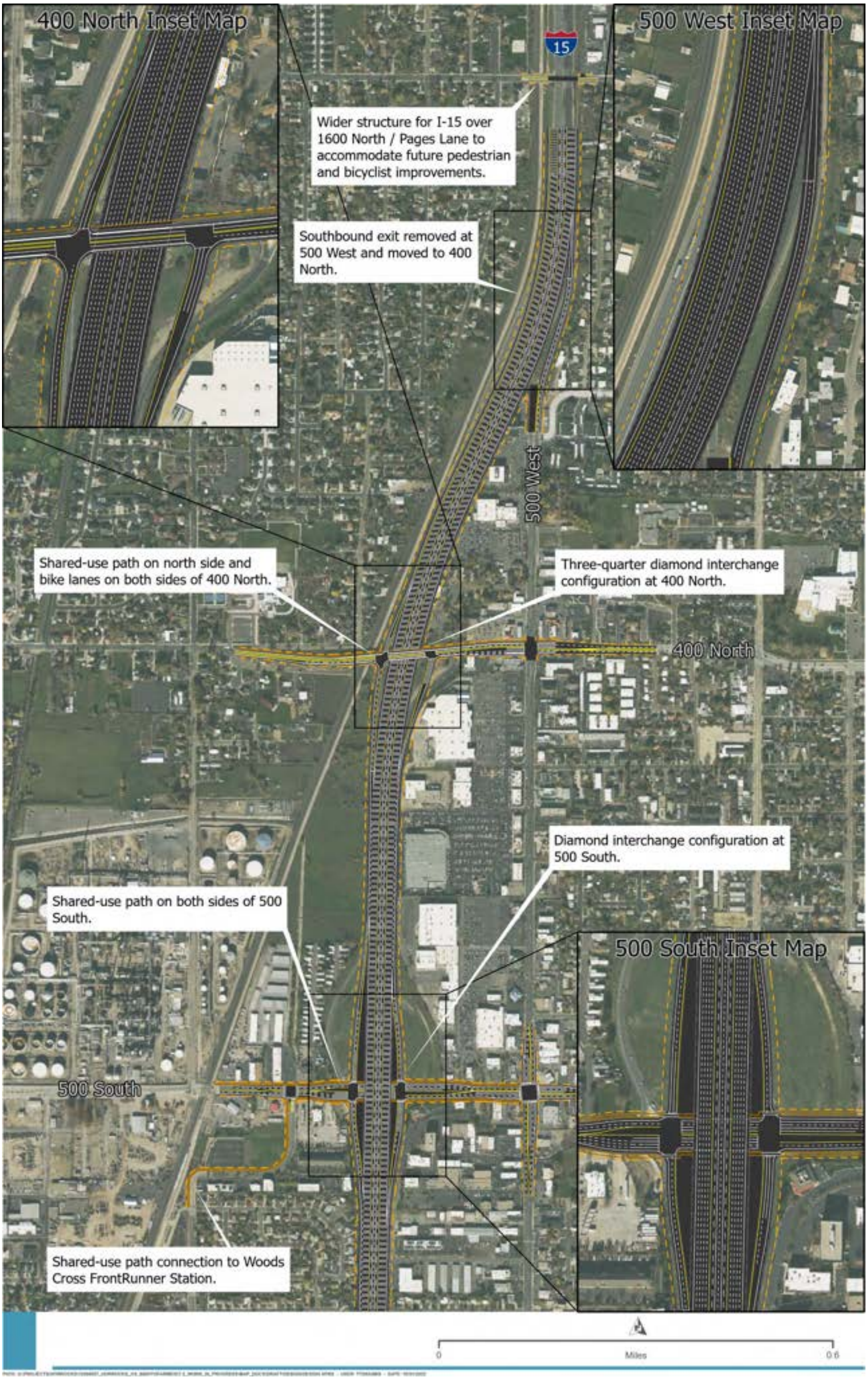

Figure A-46. Bountiful/West Bountiful Option C CD for 500 South/400 North with NB On-ramp at 500 West (Reversible I-15 Mainline)

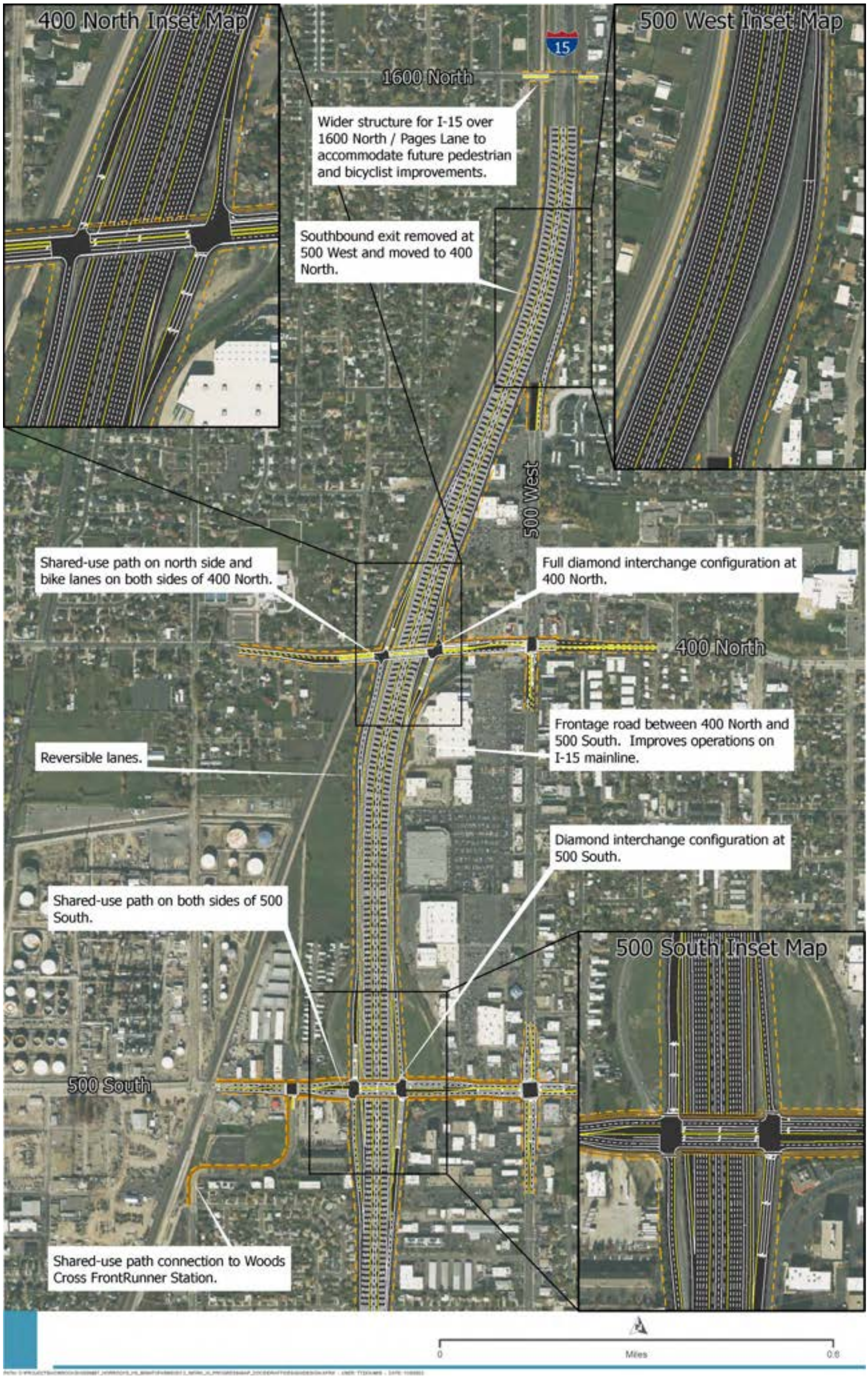

Figure A-47. Centerville Option A Parrish Lane Diamond with NB Connection to East Frontage Road (Reversible I-15 Mainline)

Figure A-48. Centerville Option B Parrish Lane SPUI with NB Connection to East Frontage Road (Reversible I-15 Mainline)

ATTACHMENT B

Salt Lake City Tunnel Options

Tunnel Option A

Tunnel Option B

Tunnel Option C

Tunnel Option D

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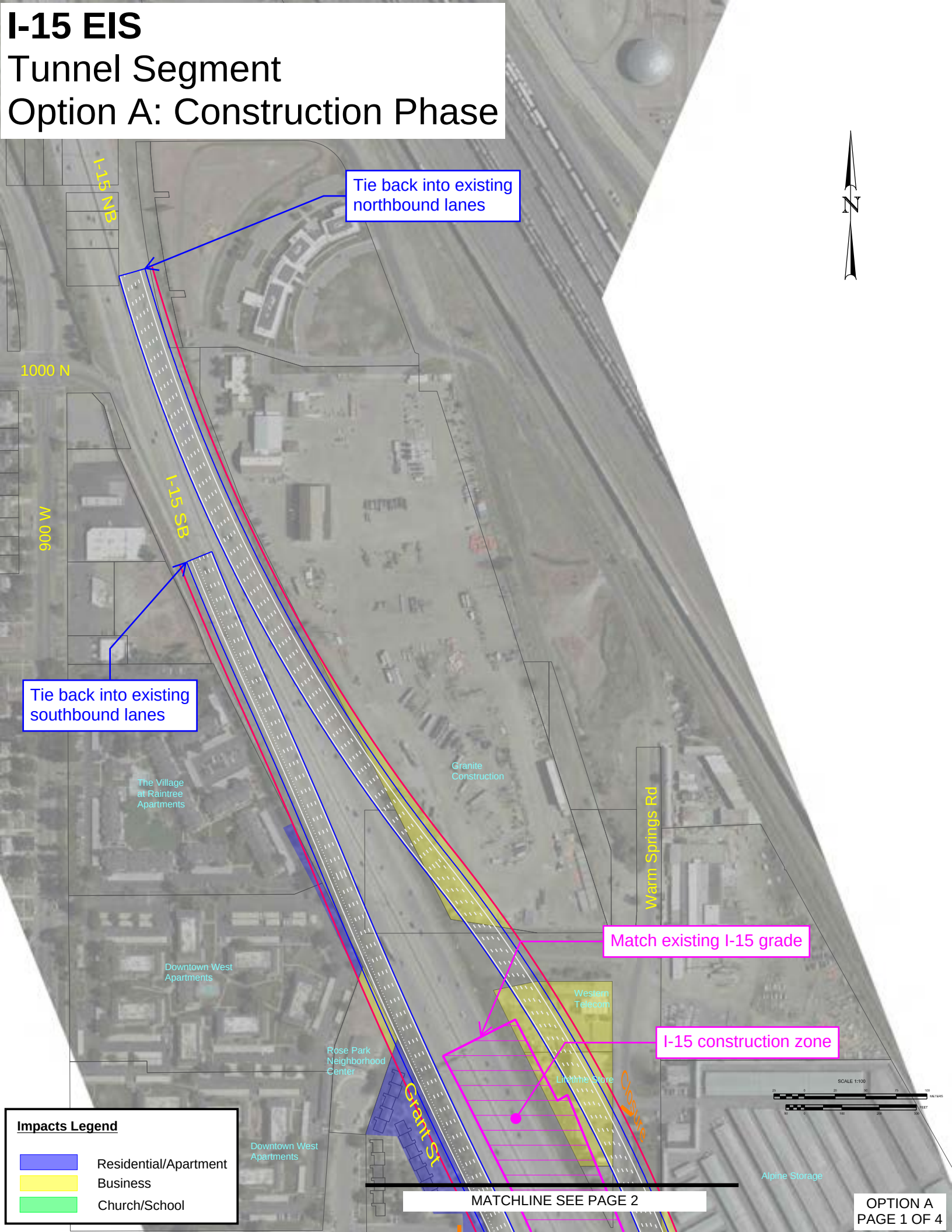
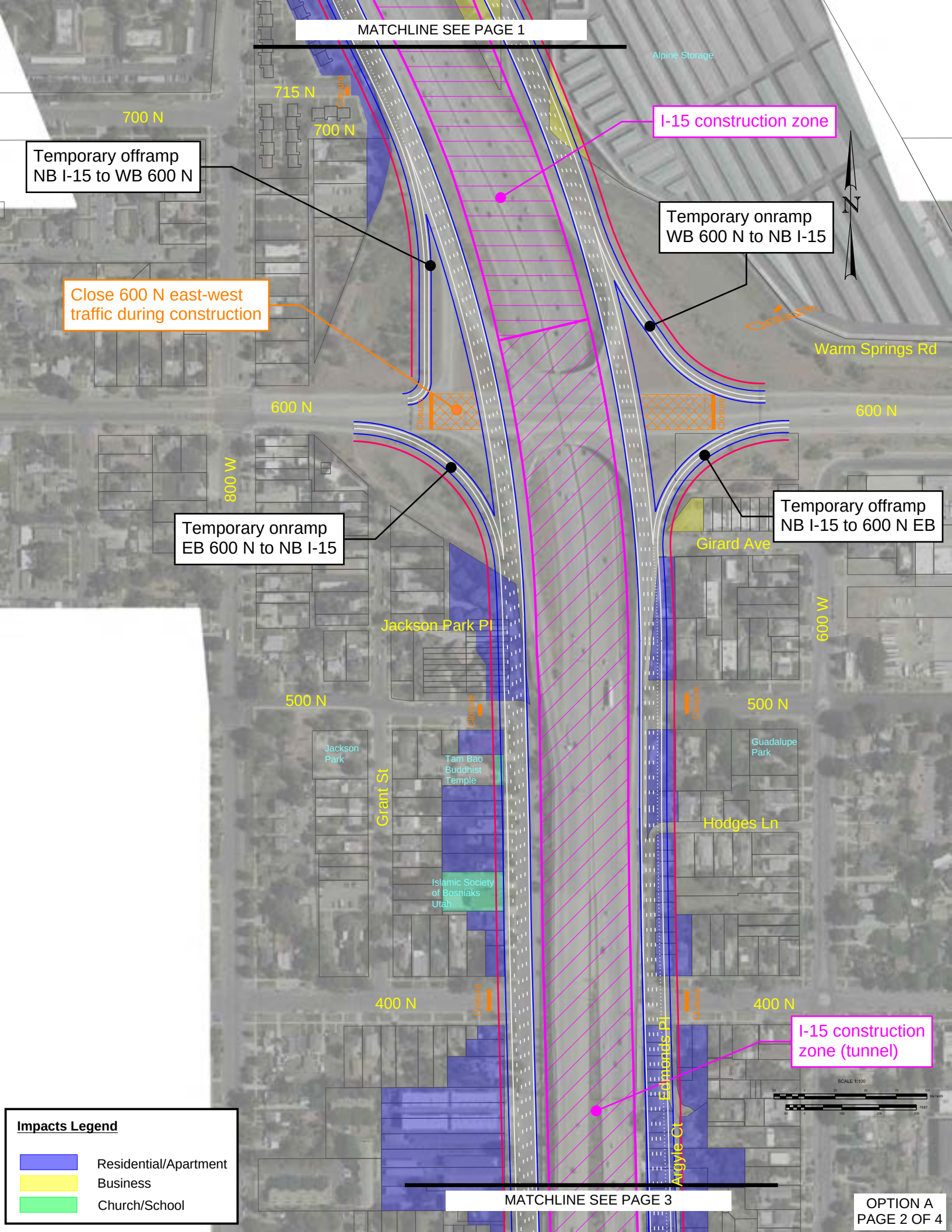
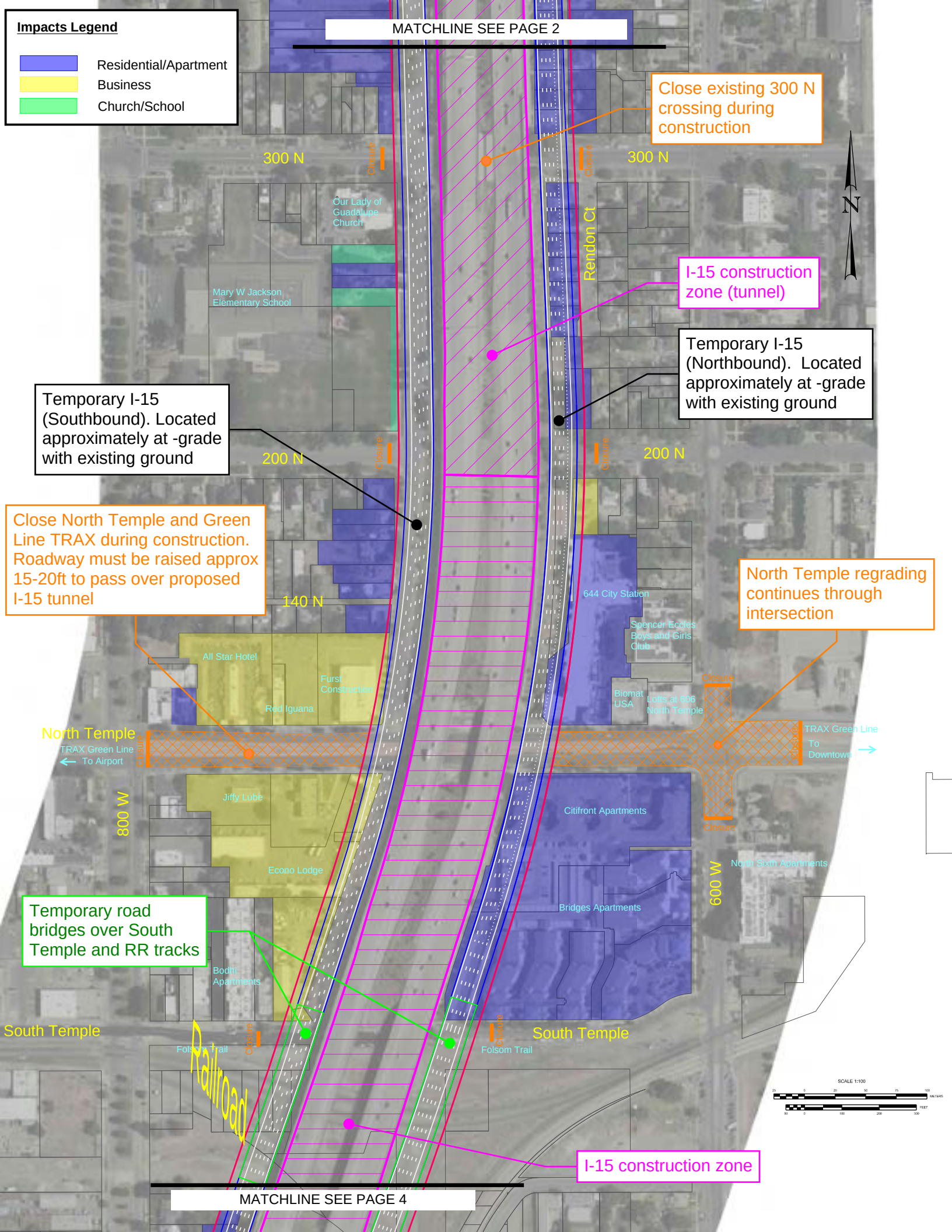
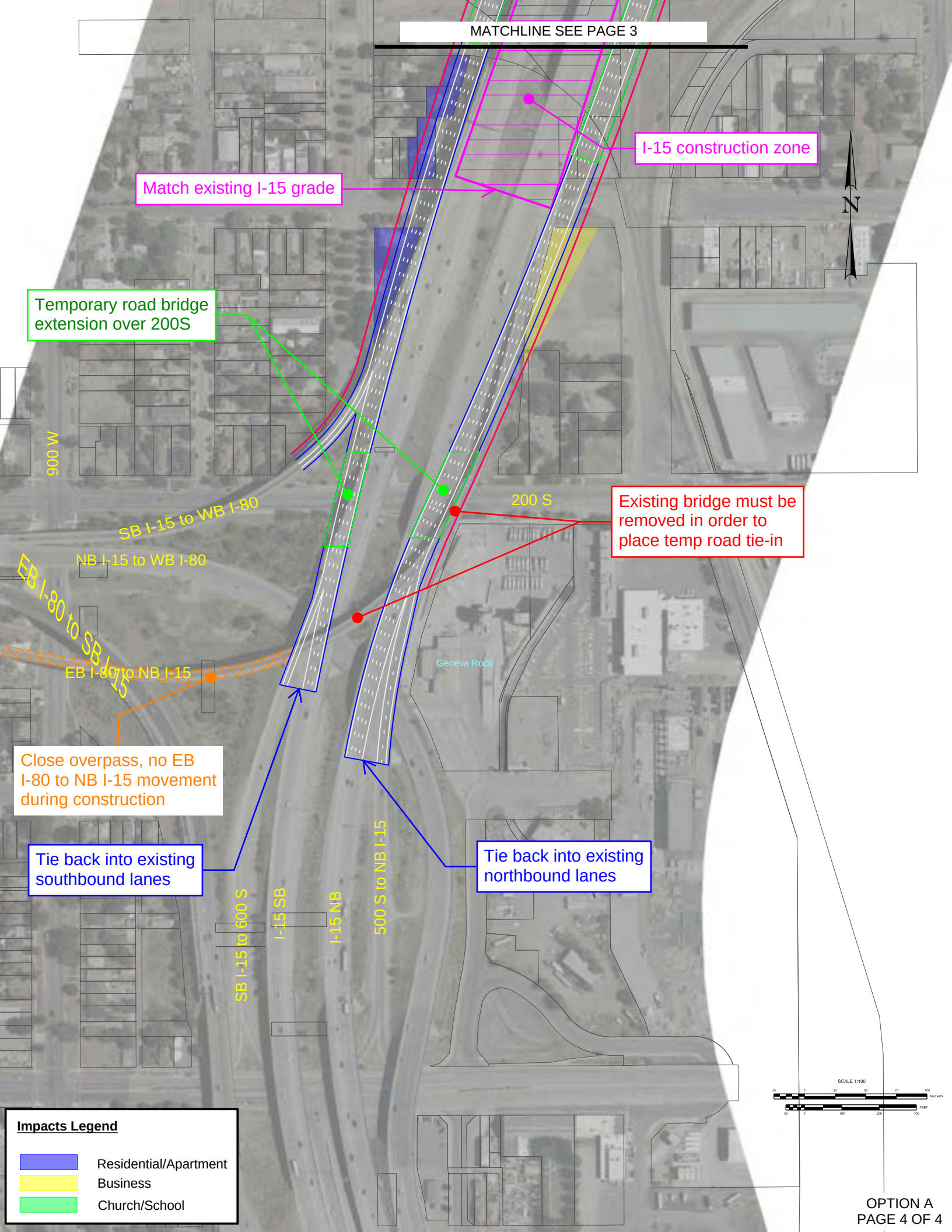
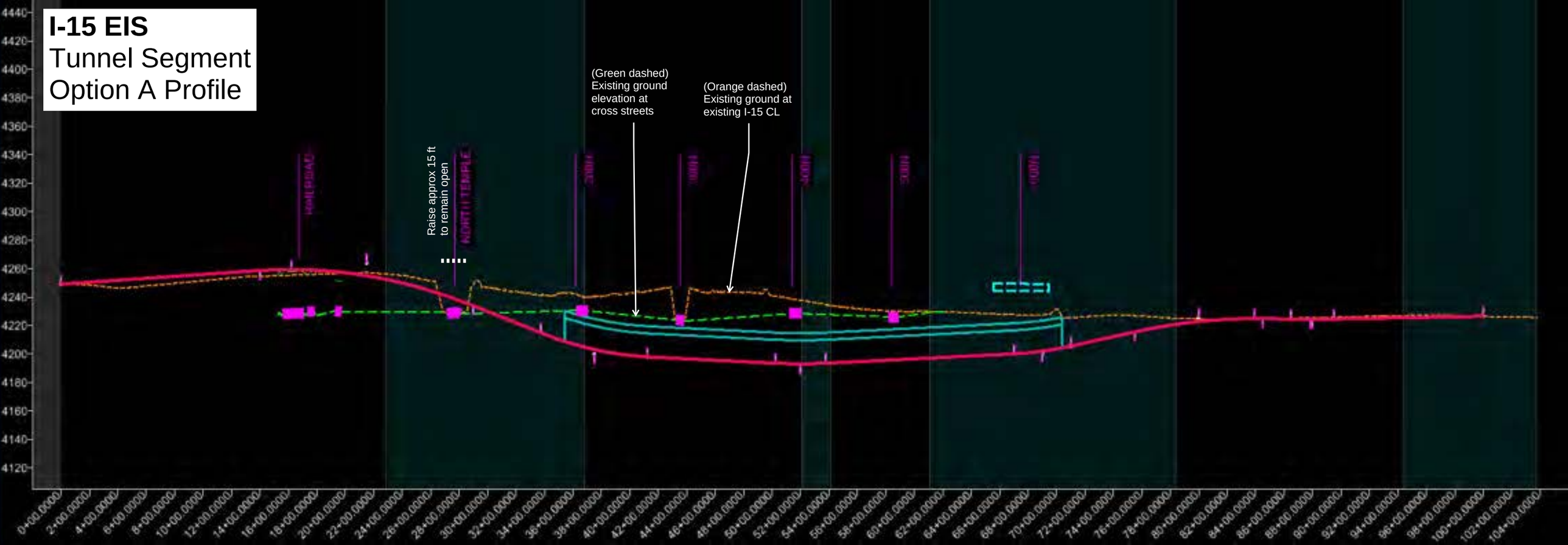
I-15 EIS
Tunnel Segment
Option A: Construction Phase




MATCHLINE SEE PAGE 1
Alpine Storage
715 N
700 N
700 N
I-15 construction zone
Temporary offramp
NB I-15 to WB 600 N
Temporary onramp
WB 600 N to NB I-15
Close 600 N east-west
traffic during construction
Warm Springs Rd
600 N
600 N
800 W
Temporary onramp
EB 600 N to NB I-15
Temporary offramp
NB I-15 to 600 N EB
Girard Ave
Jackson Park Pl
600 W
500 N
500 N
Jackson
Park
Tam Bao
Buddhist
Temple
Grant St
Guadalupe
Park
Hodges Ln
Islamic Society
of Bosniaks
Utah
400 N
400 N
I-15 construction
zone (tunnel)
Edmonds Pl
Argyle Ct
MATCHLINE SEE PAGE 3
Impacts Legend
Residential/Apartment
Business
Church/School
OPTION A
PAGE 2 OF 4


Impacts Legend
Residential/Apartment
Business
Church/School
MATCHLINE SEE PAGE 2
Close existing 300 N crossing during construction
300 N
Closure
Our Lady of Guadalupe Church
Rendon Ct
I-15 construction zone (tunnel)
Mary W Jackson Elementary School
Temporary I-15 (Northbound). Located approximately at -grade with existing ground
Temporary I-15 (Southbound). Located approximately at -grade with existing ground
200 N
Close North Temple and Green Line TRAX during construction. Roadway must be raised approx 15-20ft to pass over proposed I-15 tunnel
140 N
644 City Station
North Temple regrading continues through intersection
Spencer Eccles Boys and Girls Club
All Star Hotel
Furst Construction
Red Iguana
Biomat USA
Lofts at 606 North Temple
North Temple
TRAX Green Line
To Airport
TRAX Green Line
To Downtown
800 W
Jiffy Lube
Citifront Apartments
Econo Lodge
600 W
North Sixth Apartments
Bridges Apartments
Temporary road bridges over South Temple and RR tracks
Bodhi Apartments
South Temple
Folsom Trail
Railroad
I-15 construction zone
MATCHLINE SEE PAGE 4
SCALE 1:100


MATCHLINE SEE PAGE 3
I-15 construction zone
Match existing I-15 grade
N
Temporary road bridge extension over 200S
900 W
SB I-15 to WB I-80
NB I-15 to WB I-80
EB I-80 to SB I-15
EB I-80 to NB I-15
200 S
Existing bridge must be removed in order to place temp road tie-in
Geneva Rock
Close overpass, no EB I-80 to NB I-15 movement during construction
Tie back into existing southbound lanes
Tie back into existing northbound lanes
SB I-15 to 600 S
I-15 SB
I-15 NB
500 S to NB I-15
SCALE 1:100
METERS
FEET
Impacts Legend
Residential/Apartment
Business
Church/School


I-15 EIS
Tunnel Segment
Option A Profile
(Green dashed)
Existing ground
elevation at
cross streets
(Orange dashed)
Existing ground at
existing I-15 CL
Raise approx 15 ft
to remain open
4440
4420
4400
4380
4360
4340
4320
4300
4280
4260
4240
4220
4200
4180
4160
4140
4120
0+00.0000
2+00.0000
4+00.0000
6+00.0000
8+00.0000
10+00.0000
12+00.0000
14+00.0000
16+00.0000
18+00.0000
20+00.0000
22+00.0000
24+00.0000
26+00.0000
28+00.0000
30+00.0000
32+00.0000
34+00.0000
36+00.0000
38+00.0000
40+00.0000
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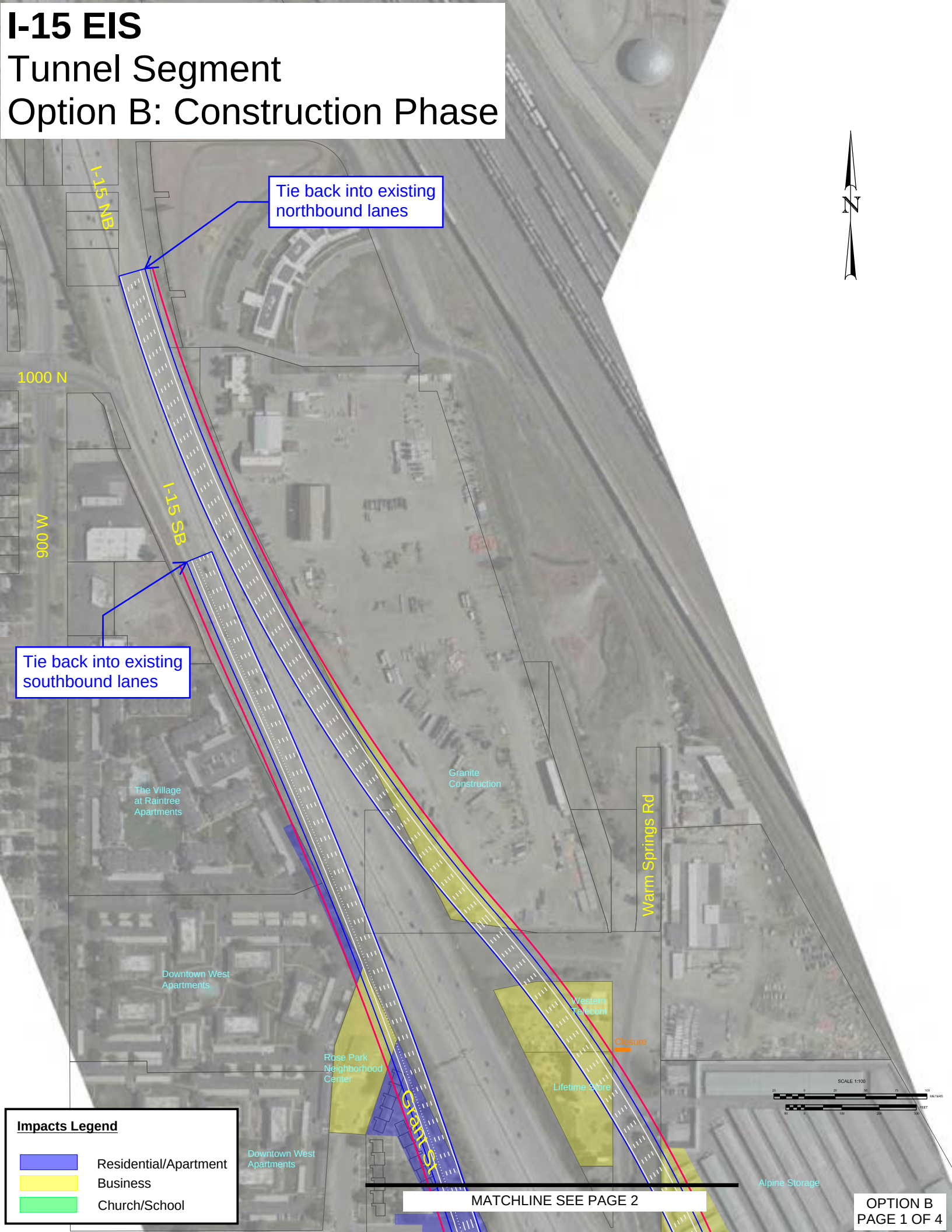
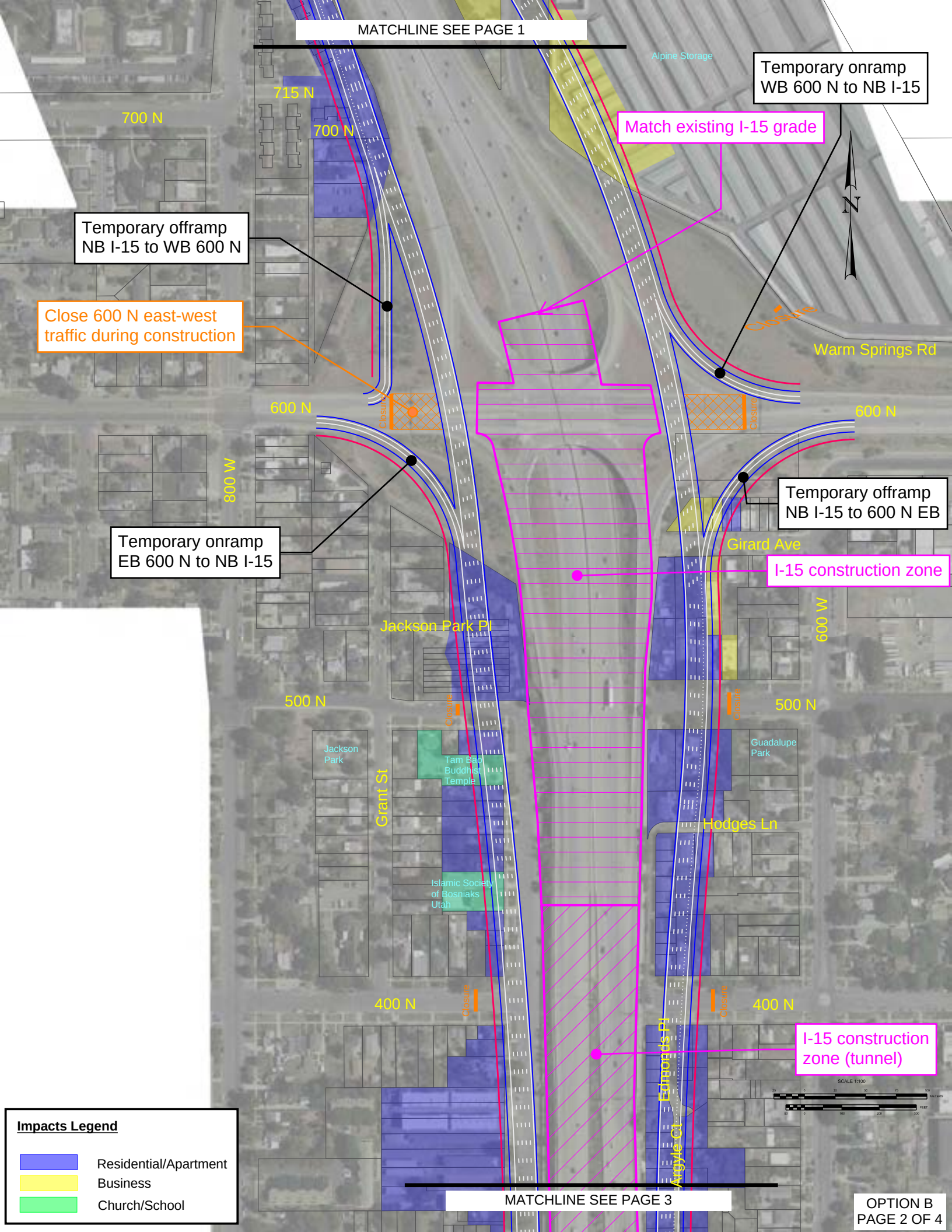
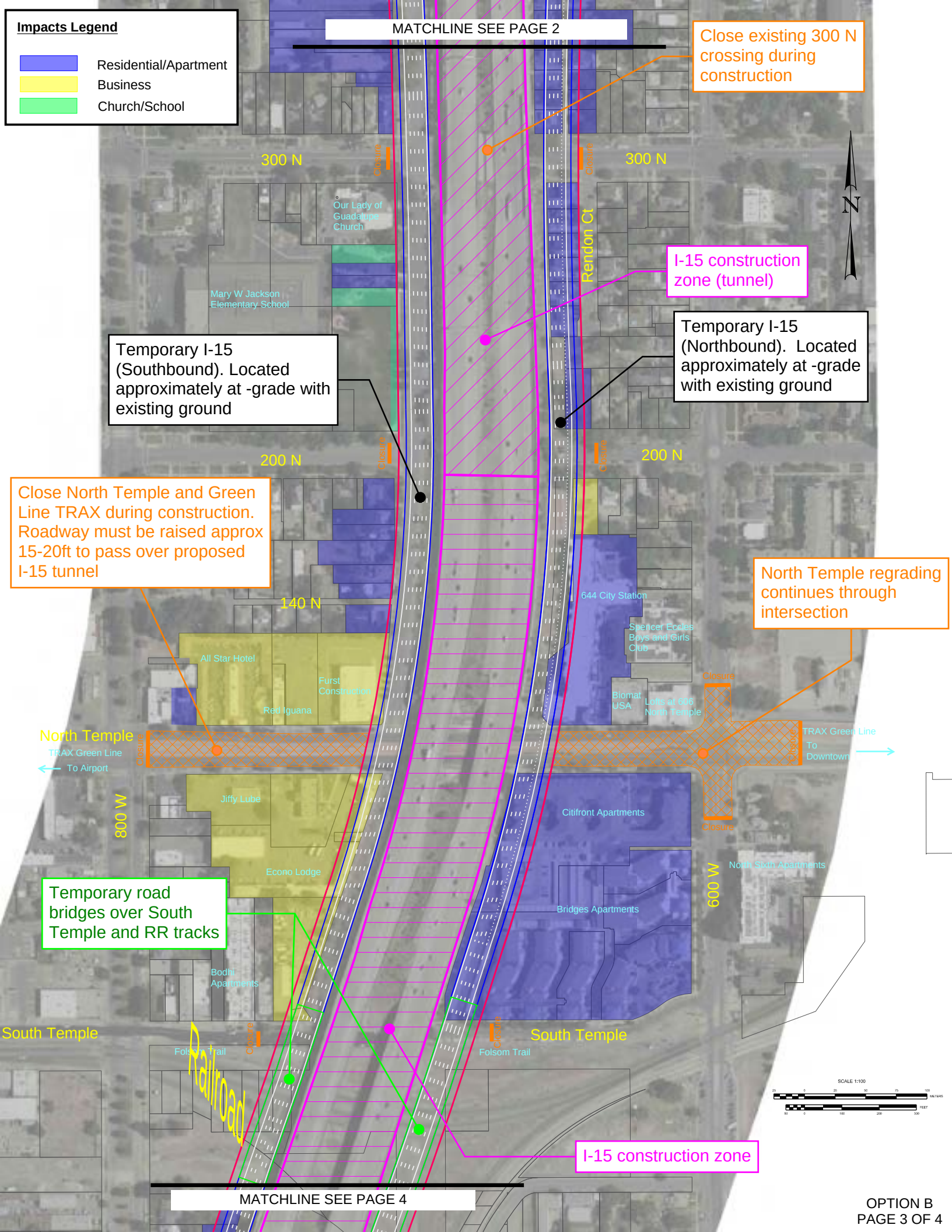
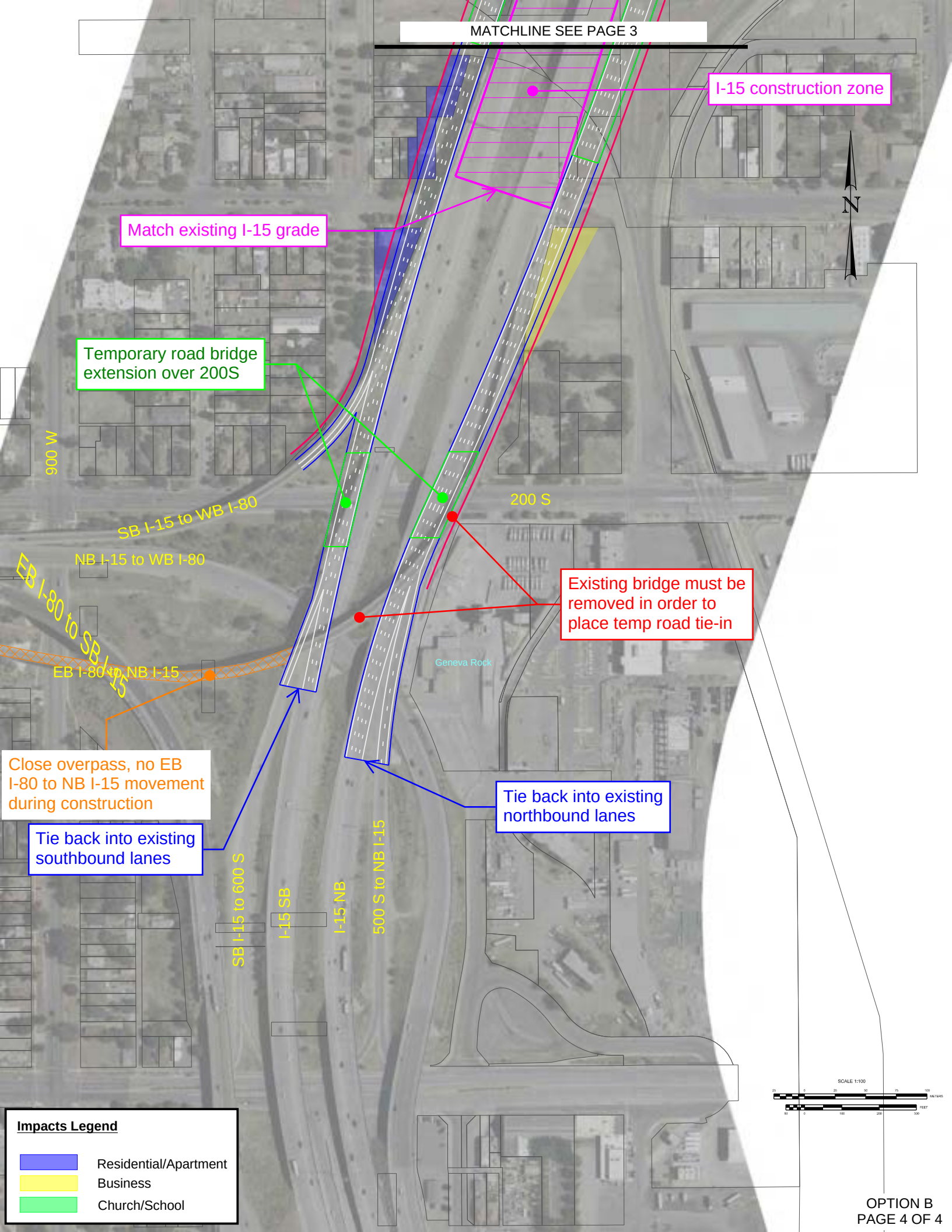
44+00.0000
46+00.0000
48+00.0000
50+00.0000
52+00.0000
54+00.0000
56+00.0000
58+00.0000
60+00.0000
62+00.0000
64+00.0000
66+00.0000
68+00.0000
70+00.0000
72+00.0000
74+00.0000
76+00.0000
78+00.0000
80+00.0000
82+00.0000
84+00.0000
86+00.0000
88+00.0000
90+00.0000
92+00.0000
94+00.0000
96+00.0000
98+00.0000
100+00.0000
102+00.0000
104+00.0000

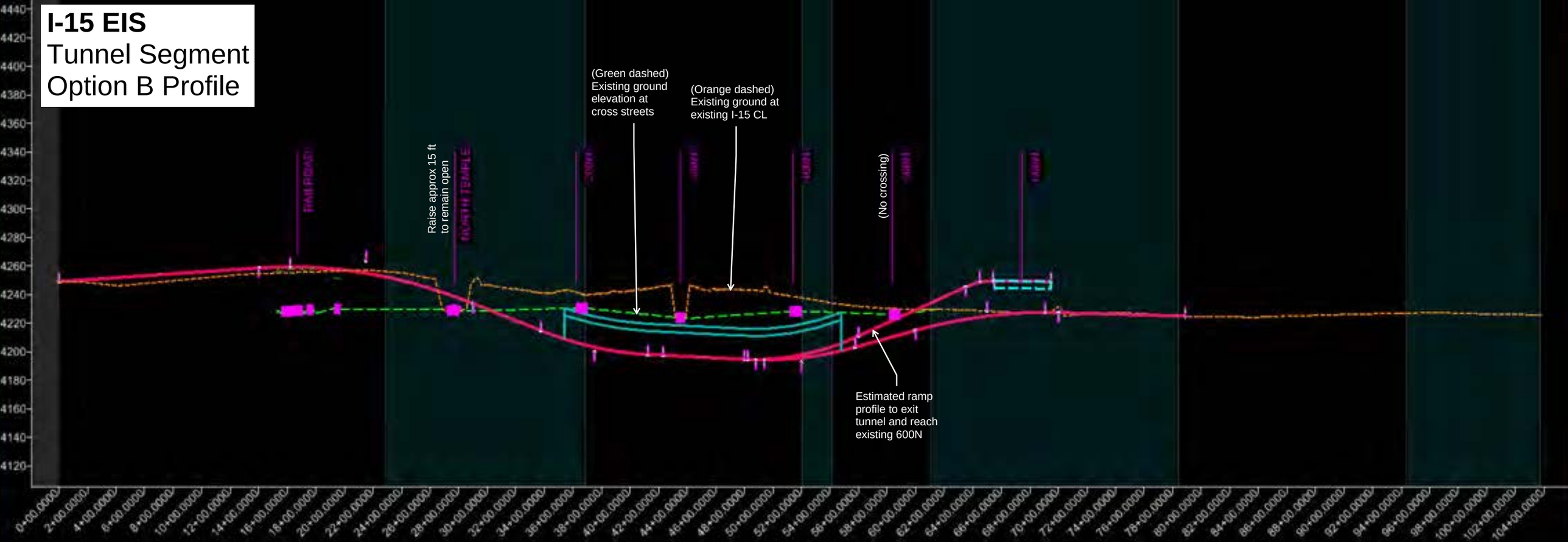
I-15 EIS
Tunnel Segment
Option B: Construction Phase



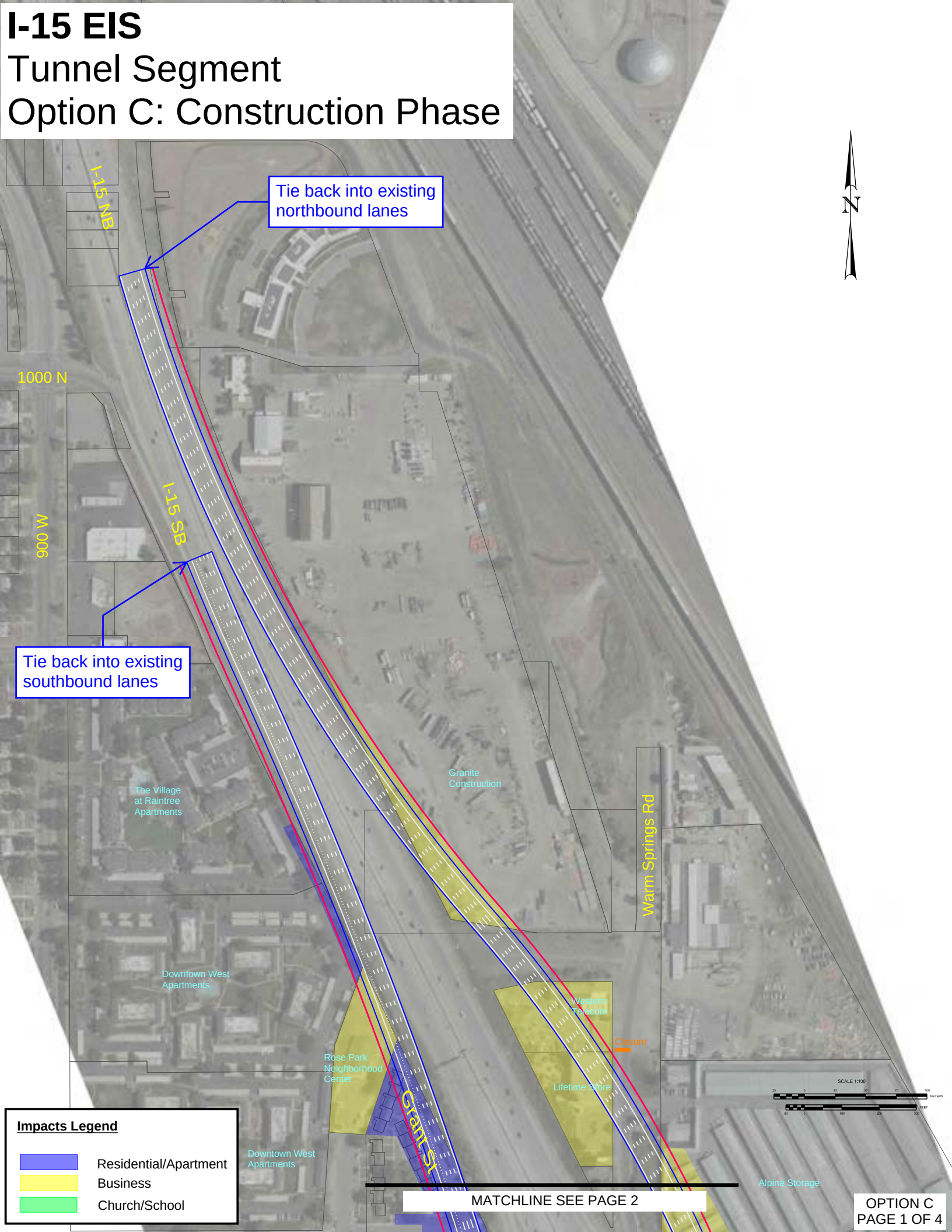

MATCHLINE SEE PAGE 1
Alpine Storage
Temporary onramp
WB 600 N to NB I-15
715 N
700 N
700 N
Match existing I-15 grade
Temporary offramp
NB I-15 to WB 600 N
Close 600 N east-west
traffic during construction
Closure
Warm Springs Rd
600 N
600 N
800 W
Closure
Closure
Temporary offramp
NB I-15 to 600 N EB
Temporary onramp
EB 600 N to NB I-15
Girard Ave
I-15 construction zone
Jackson Park Pl
600 W
500 N
500 N
Closure
Closure
Jackson
Park
Tam Bac
Buddhist
Temple
Guadalupe
Park
Grant St
Hodges Ln
Islamic Society
of Bosniaks
Utah
400 N
400 N
Closure
Closure
Edmonds Pl
I-15 construction
zone (tunnel)
Argyle Ct
SCALE 1:100
METERS
FEET
MATCHLINE SEE PAGE 3
Impacts Legend
Residential/Apartment
Business
Church/School
OPTION B
PAGE 2 OF 4

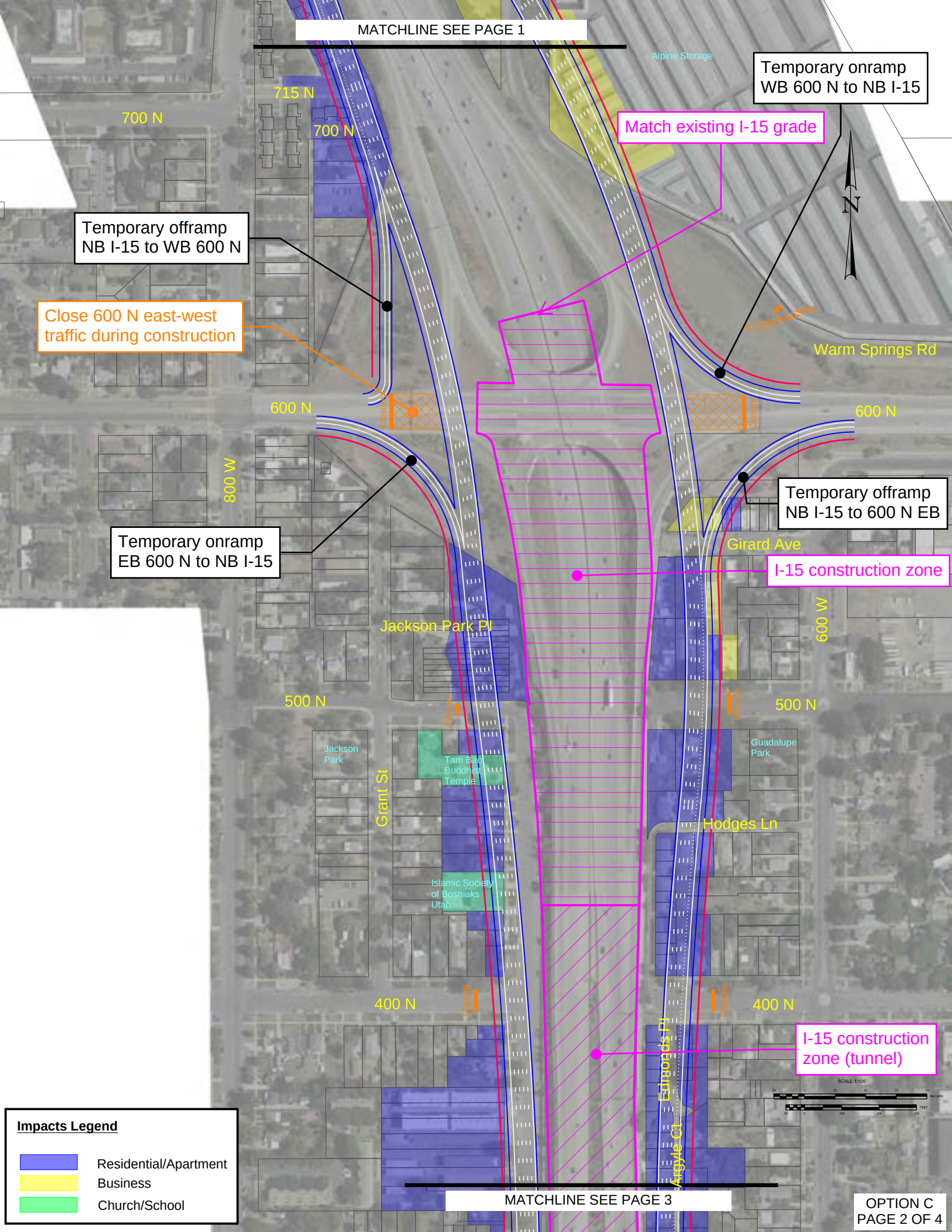

Impacts Legend
Residential/Apartment
Business
Church/School
MATCHLINE SEE PAGE 2
Close existing 300 N crossing during construction
300 N
Closure
300 N
Our Lady of Guadalupe Church
Rendon Ct
I-15 construction zone (tunnel)
Mary W Jackson Elementary School
Temporary I-15 (Northbound). Located approximately at -grade with existing ground
Temporary I-15 (Southbound). Located approximately at -grade with existing ground
200 N
Closure
Closure
200 N
Close North Temple and Green Line TRAX during construction. Roadway must be raised approx 15-20ft to pass over proposed I-15 tunnel
140 N
644 City Station
North Temple regrading continues through intersection
Spencer Eccles Boys and Girls Club
All Star Hotel
Furst Construction
Red Iguana
Biomat USA
Lofts at 606 North Temple
Closure
North Temple
TRAX Green Line
To Airport
Closure
TRAX Green Line
To Downtown
Closure
800 W
Jiffy Lube
Citifront Apartments
Econo Lodge
600 W
North Sixth Apartments
Temporary road bridges over South Temple and RR tracks
Bridges Apartments
Bodhi Apartments
South Temple
Folsom Trail
Closure
Railroad
Closure
South Temple
Folsom Trail
I-15 construction zone
MATCHLINE SEE PAGE 4
N
SCALE 1:100
METERS
FEET

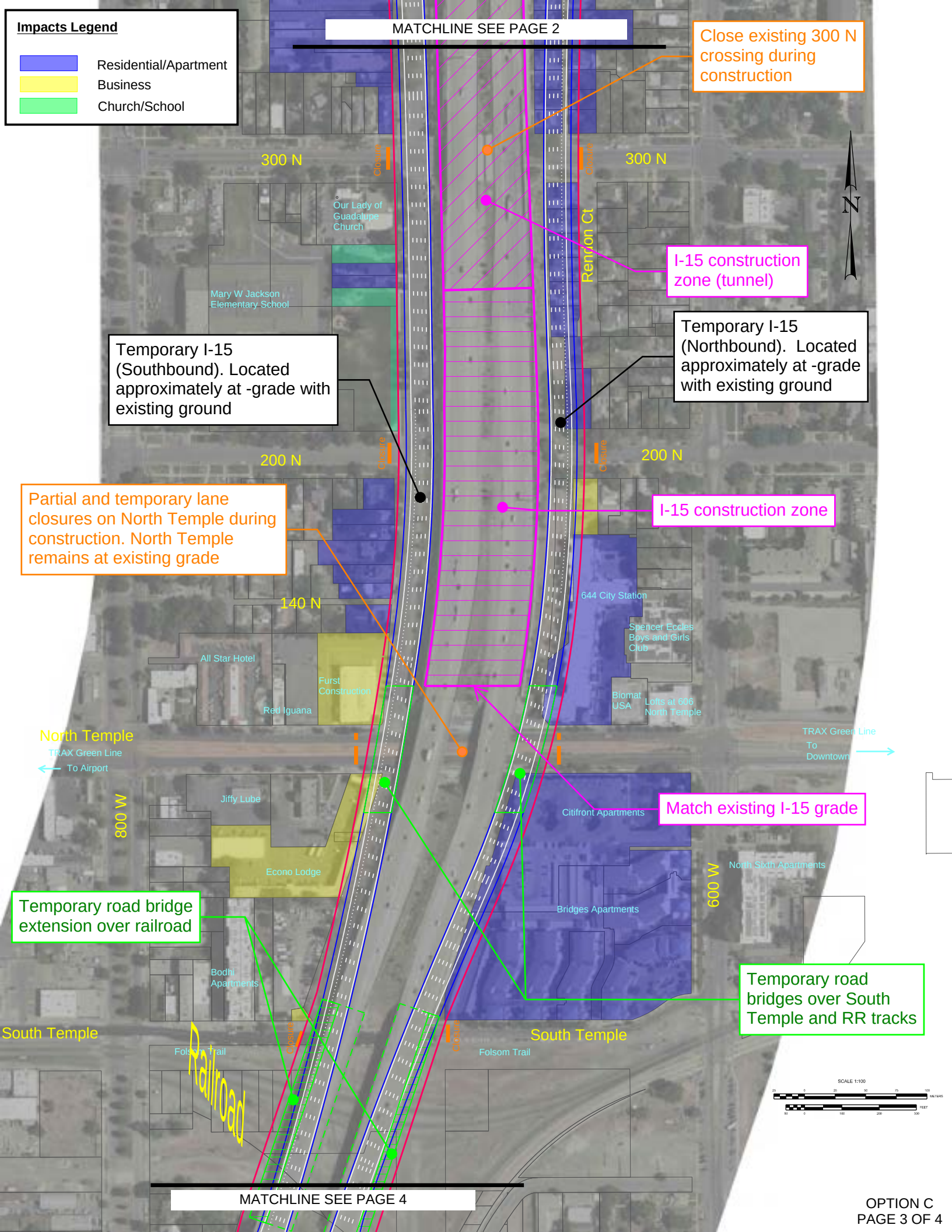

MATCHLINE SEE PAGE 3
I-15 construction zone
Match existing I-15 grade
Temporary road bridge extension over 200S
900 W
200 S
SB I-15 to WB I-80
NB I-15 to WB I-80
EB I-80 to SB I-15
EB I-80 to NB I-15
Existing bridge must be removed in order to place temp road tie-in
Geneva Rock
Close overpass, no EB I-80 to NB I-15 movement during construction
Tie back into existing northbound lanes
Tie back into existing southbound lanes
SB I-15 to 600 S
I-15 SB
I-15 NB
500 S to NB I-15
N
SCALE 1:100
Impacts Legend
Residential/Apartment
Business
Church/School

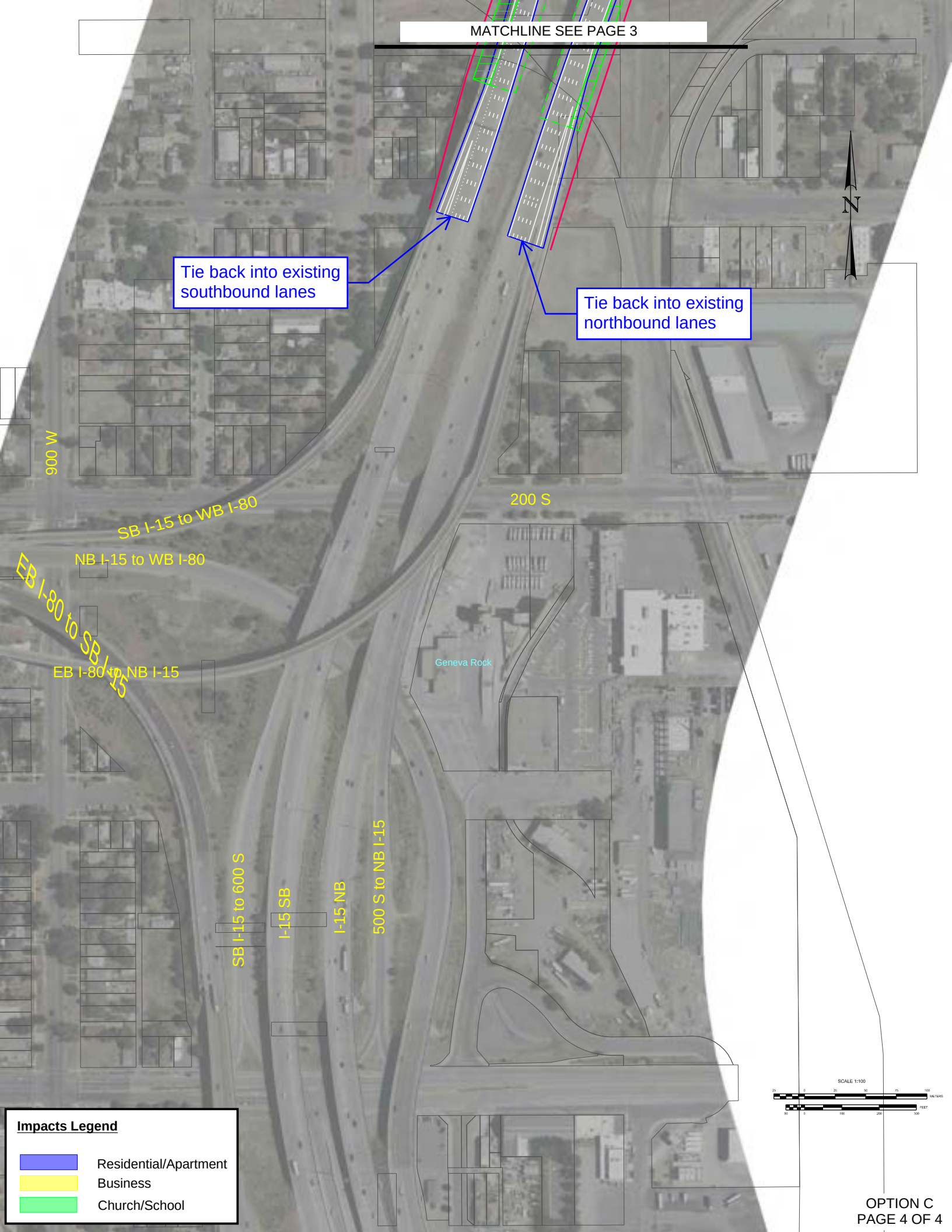

I-15 EIS
Tunnel Segment
Option B Profile
(Green dashed)
Existing ground
elevation at
cross streets
(Orange dashed)
Existing ground at
existing I-15 CL
Raise approx 15 ft
to remain open
(No crossing)
Estimated ramp
profile to exit
tunnel and reach
existing 600N

I-15 EIS
Tunnel Segment
Option C: Construction Phase

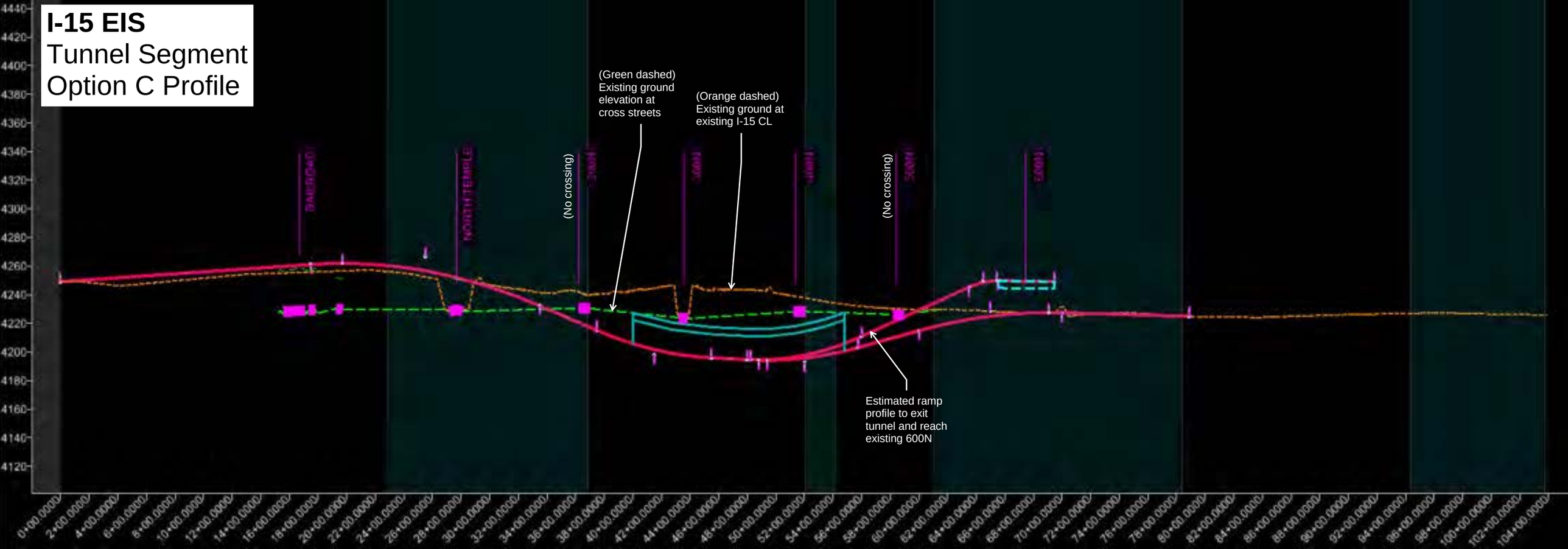



MATCHLINE SEE PAGE 1
Alpine Storage
Temporary onramp
WB 600 N to NB I-15
715 N
700 N
700 N
Match existing I-15 grade
Temporary offramp
NB I-15 to WB 600 N
Close 600 N east-west
traffic during construction
Closure
Warm Springs Rd
600 N
600 N
800 W
Closure
Closure
Temporary offramp
NB I-15 to 600 N EB
Temporary onramp
EB 600 N to NB I-15
Girard Ave
I-15 construction zone
Jackson Park Pl
600 W
500 N
500 N
Closure
Closure
Jackson
Park
Tam Bac
Buddhist
Temple
Guadalupe
Park
Grant St
Hodges Ln
Islamic Society
of Bosniaks
Utah
400 N
400 N
Closure
Closure
Edmonds Pl
Argyle Ct
I-15 construction
zone (tunnel)
SCALE 1:100
METERS
FEET
MATCHLINE SEE PAGE 3
Impacts Legend
Residential/Apartment
Business
Church/School
OPTION C
PAGE 2 OF 4

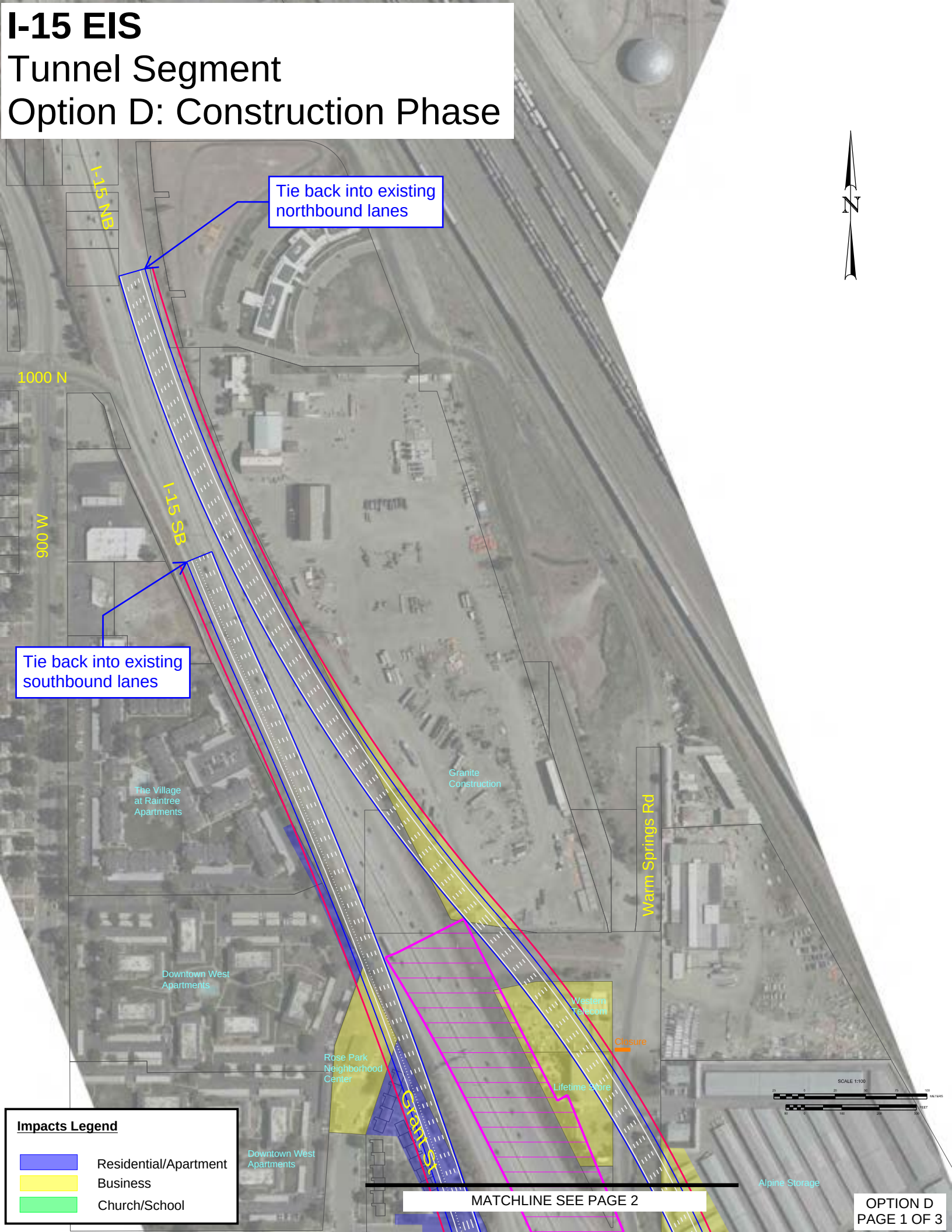

Impacts Legend
Residential/Apartment
Business
Church/School
MATCHLINE SEE PAGE 2
Close existing 300 N crossing during construction
300 N
Closure
Our Lady of Guadalupe Church
Renron Ct
I-15 construction zone (tunnel)
Mary W Jackson Elementary School
Temporary I-15 (Northbound). Located approximately at -grade with existing ground
Temporary I-15 (Southbound). Located approximately at -grade with existing ground
200 N
Partial and temporary lane closures on North Temple during construction. North Temple remains at existing grade
I-15 construction zone
140 N
644 City Station
Spencer Eccles Boys and Girls Club
All Star Hotel
Furst Construction
Red Iguana
Biomat USA
Lofts at 606 North Temple
North Temple
TRAX Green Line
To Airport
TRAX Green Line
To Downtown
800 W
Jiffy Lube
Citifront Apartments
Match existing I-15 grade
Econo Lodge
600 W
North Sixth Apartments
Bridges Apartments
Temporary road bridge extension over railroad
Bodhi Apartments
Temporary road bridges over South Temple and RR tracks
South Temple
Folsom Trail
Railroad
MATCHLINE SEE PAGE 4
SCALE 1:100
OPTION C
PAGE 3 OF 4

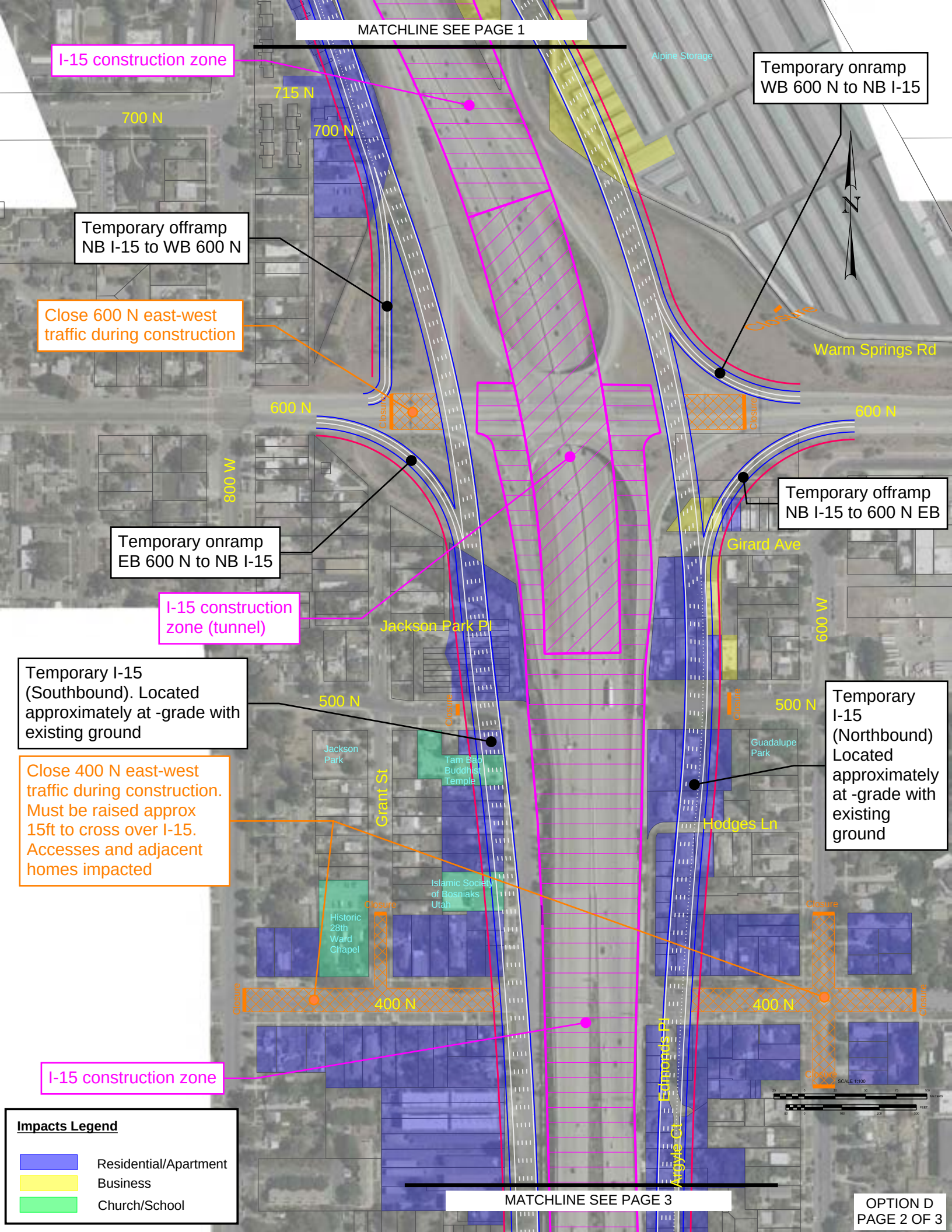

MATCHLINE SEE PAGE 3
Tie back into existing southbound lanes
Tie back into existing northbound lanes
N
900 W
SB I-15 to WB I-80
NB I-15 to WB I-80
EB I-80 to SB I-15
EB I-80 to NB I-15
200 S
Geneva Rock
SB I-15 to 600 S
I-15 SB
I-15 NB
500 S to NB I-15
SCALE 1:100
METERS
FEET
Impacts Legend
Residential/Apartment
Business
Church/School

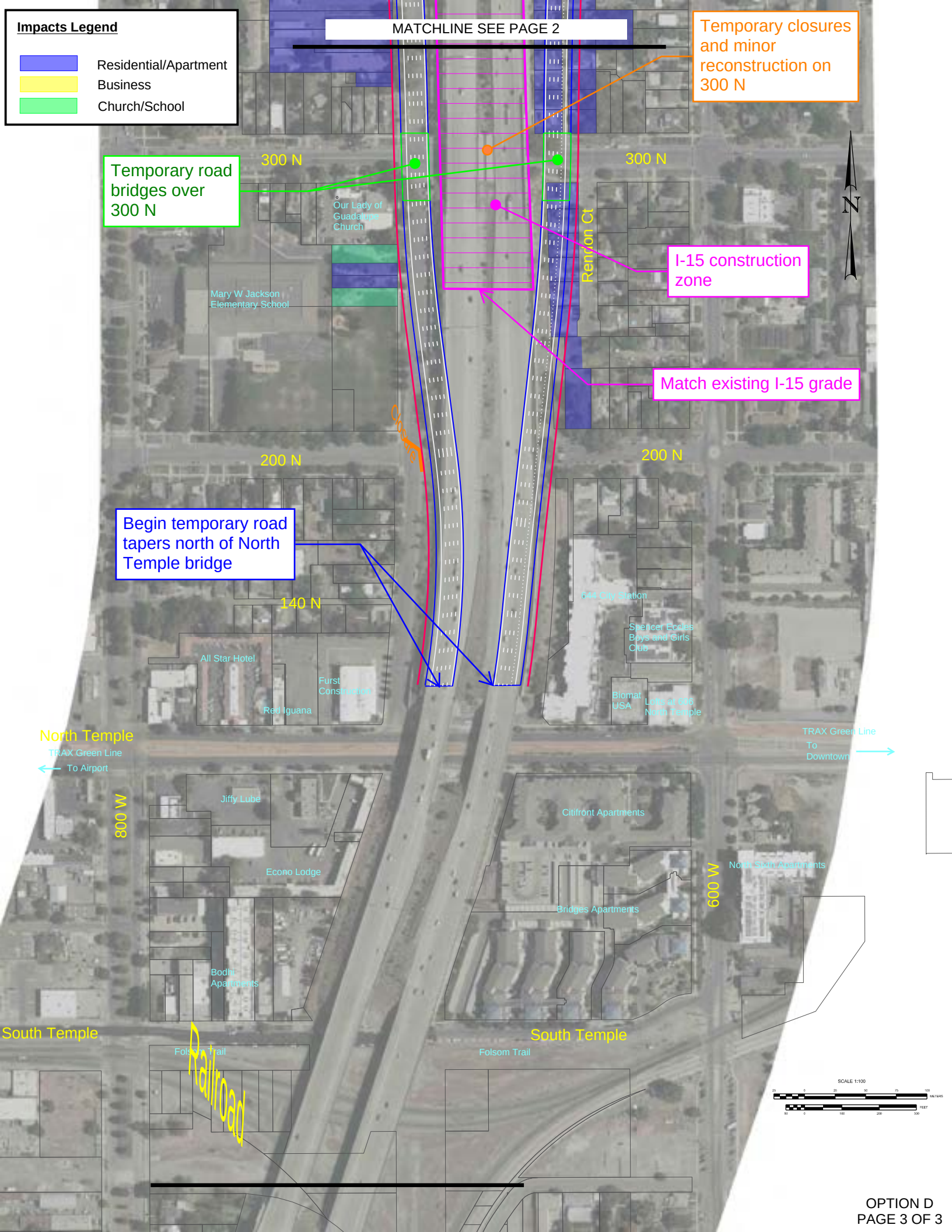
I-15 EIS
Tunnel Segment Option C Profile



I-15 EIS
Tunnel Segment
Option D: Construction Phase




MATCHLINE SEE PAGE 1
I-15 construction zone
Alpine Storage
Temporary onramp WB 600 N to NB I-15
715 N
700 N
700 N
Temporary offramp NB I-15 to WB 600 N
Close
Close 600 N east-west traffic during construction
Warm Springs Rd
600 N
600 N
Closure
Closure
800 W
Temporary offramp NB I-15 to 600 N EB
Girard Ave
Temporary onramp EB 600 N to NB I-15
I-15 construction zone (tunnel)
Jackson Park Pl
600 W
Temporary I-15 (Southbound). Located approximately at -grade with existing ground
500 N
500 N
Closure
Closure
Temporary I-15 (Northbound) Located approximately at -grade with existing ground
Jackson Park
Tam Bac Buddhist Temple
Guadalupe Park
Grant St
Close 400 N east-west traffic during construction. Must be raised approx 15ft to cross over I-15. Accesses and adjacent homes impacted
Hodges Ln
Islamic Society of Bosniaks Utah
Historic 28th Ward Chapel
Closure
Closure
Closure
Closure
400 N
400 N
Closure
Closure
I-15 construction zone
Edmonds Pl
Argyle Ct
SCALE 1:100
Impacts Legend
Residential/Apartment
Business
Church/School
MATCHLINE SEE PAGE 3
OPTION D
PAGE 2 OF 3


Impacts Legend
Residential/Apartment
Business
Church/School
MATCHLINE SEE PAGE 2
Temporary closures and minor reconstruction on 300 N
Temporary road bridges over 300 N
300 N
300 N
Our Lady of Guadalupe Church
Renron Ct
I-15 construction zone
Mary W Jackson Elementary School
Match existing I-15 grade
Crossing
200 N
200 N
Begin temporary road tapers north of North Temple bridge
140 N
644 City Station
Spencer Eccles Boys and Girls Club
All Star Hotel
Furst Construction
Red Iguana
Biomat USA
Lofts at 686 North Temple
North Temple
TRAX Green Line
To Airport
TRAX Green Line
To Downtown
800 W
Jiffy Lube
Citifront Apartments
Econo Lodge
600 W
North Sixth Apartments
Bridges Apartments
Bodhi Apartments
South Temple
Folsom Trail
South Temple
Folsom Trail
Railroad
SCALE 1:100
METERS
FEET

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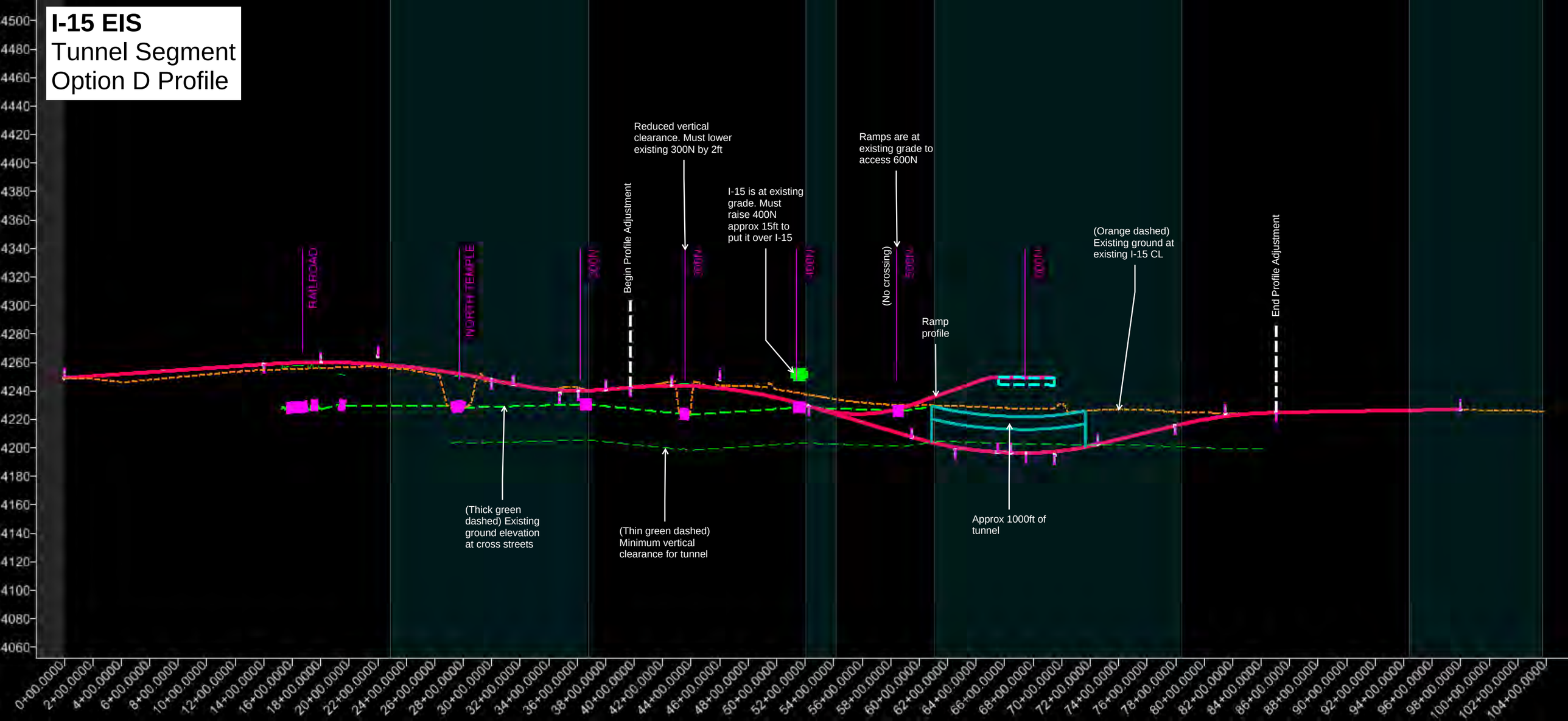
I-15 EIS
Tunnel Segment
Option D Profile



ATTACHMENT C

Public Involvement Materials for Draft Alternatives

November 2022

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I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Public Involvement Materials for Draft Alternatives November 2022

I-15 Environmental Impact Statement Farmington to Salt Lake City

Lead agency:
Utah Department of Transportation

March 3, 2023

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Contents

Tables

Figures

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1.0 Draft Alternatives Screening Outreach Summary

During the draft alternatives screening process, the study team gave presentations at 34 city council, community council, advisory group, and planning commission meetings. The presentation slides and boards from the public meetings are appended to the end of this document. Table 1 below summarizes the presentations by date and location. Figure 1 following the table shows the locations of presentations and signs throughout the study area. Section 2.1, *Public Involvement Collateral*, includes the mailers and factsheets made available during the meetings. Section 2.2, *Public Input Presentation Content*, includes the boards and slides presented at virtual and in-person meetings.

Table 1. City Council, Community Council, Advisory Group, and Planning Commission Presentations

Date	Entity	Location
10/31/2022	Utah Transit Authority	250 South 600 West
11/1/2022	Davis County Commission	28 E. State St.
11/1/2022	Farmington City	160 S. Main St.
11/1/2022	Farmington City Council	160 S. Main St.
11/1/2022	Woods Cross City Council	1555 South 800 West
11/1/2022	Centerville City Council	250 N. Main St.
11/1/2022	West Bountiful City Council	550 North 800 West
11/2/2022	Salt Lake County	2001 S. State St., Suite N2-100
11/2/2022	Guadalupe School	Virtual
11/2/2022	Wasatch Front Regional Council	3600 Constitution Blvd.
11/3/2022	Farmington High School	Virtual
11/4/2022	Salt Lake City Planning Department	349 South 200 East, Suite 150
11/7/2022	Central Local Area Working Group (LAWG)	550 North 200 West
11/8/2022	Centerville City Recreation Department	Virtual
11/8/2022	Southern LAWG	622 West 500 North
11/8/2022	Bountiful City Council	795 S. Main St.
11/9/2022	City of North Salt Lake	10 E. Center St.
11/9/2022	Northern LAWG	120 S. Main St.
11/10/2022	Utah Department of Transportation (UDOT) (Legislative Briefing)	754 North 800 West
11/14/2022	UDOT	Virtual
11/15/2022	UDOT	1105 West 1000 North
11/15/2022	City of North Salt Lake	10 E. Center St.
11/16/2022	UDOT	550 North 200 West
11/16/2022	Capitol Hill Neighborhood Council	280 West 500 North
11/21/2022	Salt Lake City Bicycle Advisory Board	349 South 200 East
11/30/2022	Reagan Outdoor Advertising, Inc.	1775 N. Warm Springs Rd.
12/1/2022	University of Utah City and Metropolitan Planning Dept.	1255 W. Clark Ave.
12/5/2022	Perspectives on Housing and Gentrification	855 California Ave.
12/6/2022	NeighborWorks	631 North Temple
12/7/2022	Rose Park Community Council	1575 West 1000 North
12/8/2022	Glovers Lane Neighborhood	43 W. Glovers Lane
12/8/2022	Community Listening Session	155 North 1000 West
1/3/2023	Salt Lake City Council	451 S. State St.
1/5/2023	Glovers Lane Neighborhood	160 S. Main St.
1/11/2023	Salt Lake City Communications and Transportation Representatives	451 S. State St.
1/12/2023	Farmington State Street	364 Clark Circle
1/9/2023	Wasatch Front Regional Council	Virtual

Figure 1. Locations of Outreach during the Draft Alternatives Screening Process

2.0 Public Involvement Materials

2.1 Public Involvement Collateral

The following collateral was made available during the draft alternatives public comment period:

- Alternative factsheets in English and Spanish
- Mailers to residents in English and Spanish
- Virtual participant guides in English and Spanish
- Comment form for the in-person open houses

Copies of all collateral are presented below.

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Alternatives Development Update

As part of its mission to improve quality of life through transportation, UDOT has initiated an environmental study along the I-15 corridor between the US-89 interchange in Farmington and 400 South in Salt Lake City.

The study has identified the purpose of the study and defined the transportation needs along the I-15 corridor and the surrounding communities. The public was asked to comment on the Purpose and Need of the study in Spring 2022. With the public's input and based on additional technical analysis and engineering the study team has identified potential improvements - known as alternatives - within the corridor. These alternatives look at improvements to I-15, area interchanges as well as improvement to the walking and biking facilities throughout the study area.

LET YOUR VOICE BE HEARD

Now that a range of alternatives has been identified, UDOT is inviting those who live in and use the corridor to give the study team feedback.

OPEN HOUSE AND MEETING OPTIONS:

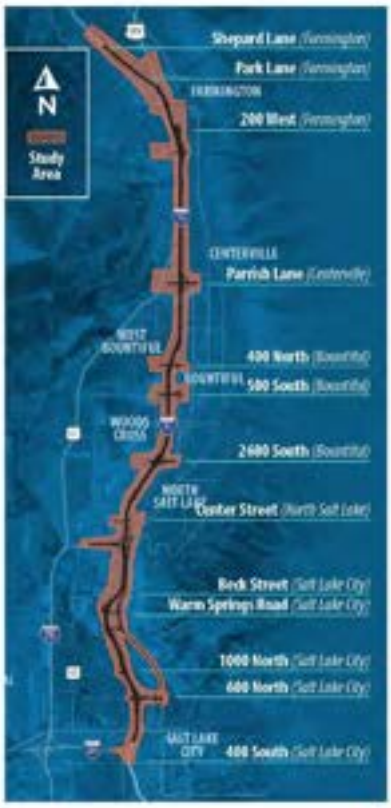
November 14
Virtual Meeting, 5:00-7:00 p.m.
Visit **i15eis.udot.utah.gov** to learn how to participate.

November 15
Rose Park Elementary
1105 West 1000 North, Salt Lake City
5:00-7:00 p.m.

November 16
South Davis Recreation Center
550 North 200 West, Bountiful
5:00-7:00 p.m.

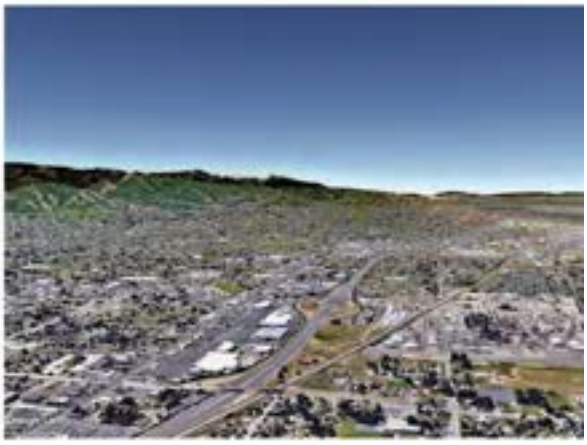
AVAILABLE AT THE OPEN HOUSES:
- Kid's activities
- Food
- Translation services

TRANSPORTATION ASSISTANCE AVAILABLE:
To learn more visit **i15eis.udot.utah.gov/Transportation**



I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Scan to see draft alternatives



STUDY TEAM CONTACT INFO

- Phone: **385-220-5797**
- Email: **i15eis@utah.gov**
- Website: **i15eis.udot.utah.gov**
- Join our Facebook group to stay up to date: **www.facebook.com/groups/udoti15eis**

Comment period November 10 through December 16, 2022

Following the current public input period, the study team will refine the alternatives and evaluate the impacts of each. Once complete, the study team plans to release the draft Environmental Impact Statement for public review the fall of 2023.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated May 26, 2022, and executed by FHWA and UDOT.

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Actualización del desarrollo de alternativas

Como parte de su misión de mejorar la calidad de vida a través del transporte, el UDOT ha iniciado un estudio ambiental a lo largo del corredor I-15 entre el intercambio US-89 en Farmington y 400 South en Salt Lake City.

El estudio ha identificado su propósito y ha definido las necesidades de transporte a lo largo del corredor de la I-15 y las comunidades circundantes. Se pidió al público que hiciera comentarios sobre el propósito y la necesidad del estudio en la primavera de 2022. Con los comentarios del público y basándose en análisis técnicos e ingeniería adicionales, el equipo del estudio ha identificado posibles mejoras, conocidas como alternativas, dentro del corredor. Estas alternativas contemplan la mejora de la I-15, los intercambios de la zona y la mejora de las instalaciones para peatones y ciclistas en toda la zona de estudio.

HAGA QUE SE ESCUCHE SU VOZ

Ahora que se ha identificado una serie de alternativas, el UDOT invita a quienes viven y utilizan el corredor a dar su opinión al equipo del estudio.

OPCIONES PARA LAS JORNADAS ABIERTAS Y REUNIONES:

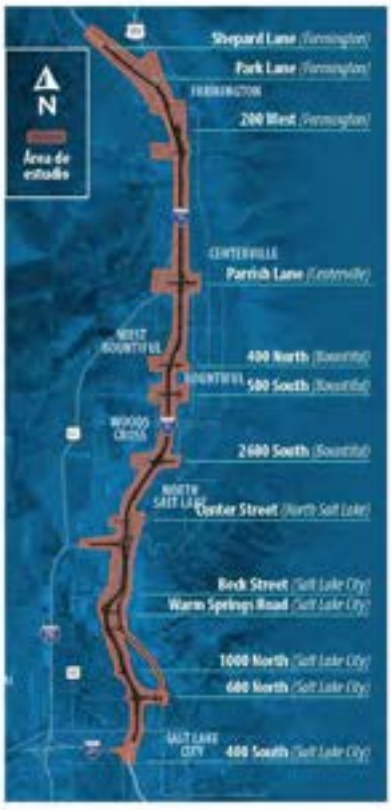
14 de noviembre
Reunión virtual, de 5:00 p. m. a 7:00 p. m.
Visite **i15eis.udot.utah.gov** para obtener información sobre cómo participar.

15 de noviembre
Rose Park Elementary
1105 West 1000 North, Salt Lake City,
de 5:00 p. m. a 7:00 p. m.

16 de noviembre
South Davis Recreation Center
550 North 200 West, Bountiful
De 5:00 p. m. a 7:00 p. m.

DISPONIBLE EN LAS JORNADAS ABIERTAS:
- Actividades para niños
- Comida
- Servicios de traducción

ASISTENCIA DE TRANSPORTE DISPONIBLE:
Para más información, visite **i15eis.udot.utah.gov/Transportation**

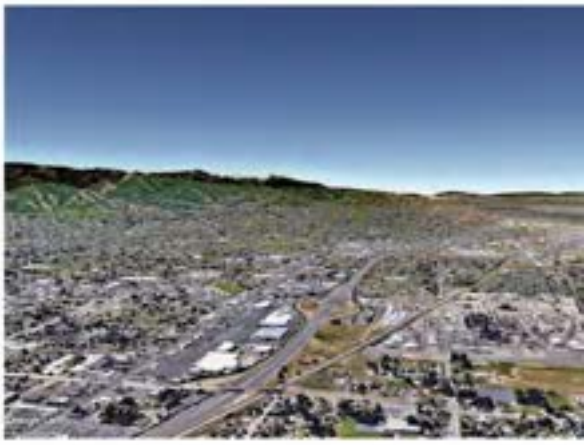


I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Escanee para ver proyectos de alternativas

INFORMACIÓN DE CONTACTO DEL EQUIPO DEL ESTUDIO

- Teléfono: **385-220-5797**
- Correo electrónico: **i15eis@utah.gov**
- Página web: **i15eis.udot.utah.gov**
- Facebook para mantenerse actualizado: **www.facebook.com/groups/udoti15eis**



Período para recibir comentarios: del 10 de noviembre al 16 de diciembre de 2022

Tras el actual período de comentarios del público, el equipo del estudio perfeccionará las alternativas y evaluará los impactos de cada una de ellas. Una vez completado, el equipo del estudio tiene previsto publicar el borrador de la Declaración de Impacto Ambiental para su revisión pública en otoño de 2023.

La revisión ambiental, la consulta y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo o han sido realizadas por el UDOT de conformidad con el artículo 327 del título 23 del Código de los Estados Unidos y un Memorando de Entendimiento del 26 de mayo de 2022, y ejecutadas por la FHWA y el UDOT.

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

Interested in plans to improve travel between Farmington and Salt Lake City?

THIS IS YOUR COMMUNITY. LET YOUR VOICE BE HEARD.

As part of its mission to improve quality of life through transportation, UDOT has initiated an environmental study along the I-15 corridor between the US-89 interchange in Farmington and 400 South in Salt Lake City. The study team has identified transportation needs and potential improvements for all users within the corridor. UDOT is inviting those who live in and use the corridor to give the study team feedback on the alternatives being studied as part of the Environmental Impact Statement (EIS). Public comment is an important part of the study process, and we welcome your input and insight on the potential solutions UDOT has prepared.

VIRTUAL MEETING

November 14
5:00-7:00 p.m.
To learn how to participate, visit the website

IN-PERSON OPEN HOUSES

November 15
Rose Park Elementary
1105 West 1000 North
Salt Lake City
5:00-7:00 p.m.

November 16
South Davis Recreation Center
550 North 200 West
Bountiful
5:00-7:00 p.m.

Same content shown at both events

AVAILABLE AT THE OPEN HOUSES:

- Kid's activities
- Food
- Translation services

TRANSPORTATION ASSISTANCE AVAILABLE

Visit **i15eis.udot.utah.gov/Transportation** to learn more.

If you are not able to attend an open house or meeting, you can visit the study website to view a recording of the virtual presentation, learn more about UDOT's environmental study and the alternatives, find ways to engage, and provide your feedback during the comment period: **November 10 - December 16, 2022.**

Scan to see draft alternatives

STUDY TEAM CONTACT INFO

- Phone: **385-220-5797**
- Email: **i15eis@utah.gov**
- Website: **i15eis.udot.utah.gov**
- Join our Facebook group to stay up to date: **www.facebook.com/groups/udoti15eis**

For those without internet access or needing accommodations including but not limited to translation or captioning, please notify the project team at 385-220-5797 or i15eis@utah.gov for assistance with viewing materials or providing comments by November 10, 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 UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated May 26, 2022, and executed by FHWA and UDOT.

UDOT

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

¿Está interesado en planes para mejorar el tránsito entre Farmington y Salt Lake City?

ESTA ES SU COMUNIDAD. HAGA QUE SU VOZ SEA ESCUCHADA.
Como parte de su misión de mejorar la calidad de vida a través del transporte, el UDOT ha iniciado un estudio ambiental a lo largo del corredor I-15 entre el intercambio US-89 en Farmington y 400 South en Salt Lake City. El equipo del estudio ha identificado las necesidades de transporte y las posibles mejoras para todos los usuarios dentro del corredor. El UDOT está invitando a quienes viven y usan el corredor a dar su opinión sobre las alternativas que se están estudiando como parte de la Declaración de Impacto Ambiental (Environmental Impact Statement, EIA). Los comentarios públicos son una parte importante del proceso de estudio, y agradecemos sus comentarios y opiniones sobre las posibles soluciones que ha preparado el UDOT.

ENCUENTRO VIRTUAL

14 de noviembre
De 5:00 p. m. a 7:00 p. m.
Para saber cómo participar, visite el sitio web

JORNADA PRESENCIAL ABIERTA

15 de noviembre
Rose Park Elementary
1105 West 1000 North
Salt Lake City
De 5:00 p. m. a 7:00 p. m.

16 de noviembre
South Davis Recreation Center
550 North 200 West
Bountiful
De 5:00 p. m. a 7:00 p. m.

Mismo contenido mostrado en ambos eventos

DISPONIBLE EN LAS JORNADAS ABIERTAS:
- Actividades para niños
- Comida
- Servicios de traducción

ASISTENCIA DE TRANSPORTE DISPONIBLE

Visite **i15eis.udot.utah.gov/Transportation** para obtener más información.

Si no puede asistir a una jornada abierta o una reunión, puede visitar el sitio web del estudio para ver una grabación de la presentación virtual, obtener más información sobre el estudio ambiental del UDOT y las alternativas, encontrar formas de participar y proporcionar sus comentarios durante el periodo de comentarios: **del 10 de noviembre al 16 de diciembre de 2022.**

Escanee para ver proyectos de alternativas

INFORMACIÓN DE CONTACTO DEL EQUIPO DEL ESTUDIO

Teléfono: **385-220-5797**
Correo electrónico: **i15eis@utah.gov**
Página web: **i15eis.udot.utah.gov**
Únase a nuestro grupo de Facebook para mantenerse actualizado:
www.facebook.com/groups/udoti15eis

Las personas que no tienen acceso a Internet o necesitan adaptaciones como traducción o subtítulos, entre otras, deben informar al equipo del proyecto llamando al 385-220-5797 o escribiendo a i15eis@utah.gov para obtener ayuda para ver los materiales o proporcionar comentarios antes del 10 de noviembre de 2022. La revisión ambiental, la consulta y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo o han sido realizadas por el UDOT de conformidad con el artículo 327 del título 23 del Código de los Estados Unidos y un Memorando de Entendimiento del 26 de mayo de 2022, y ejecutadas por la FHWA y el UDOT.

UDOT

VIRTUAL PUBLIC MEETING PARTICIPANT GUIDE

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

ABOUT THE MEETING

Monday, Nov. 14, 2022 | 5:00 - 7:00 p.m.
Presentation begins at 5:00 p.m. with Q&A to follow.

- The meeting platform being used is Zoom; there is a 1,000 participant capacity.
- If the meeting reaches capacity, others may leave and open up spaces so check back often. A live-stream of the meeting will be broadcast on the UDOT I-15 Farmington to Salt Lake City EIS Facebook group to accommodate additional viewers.
- A presentation will be given at the start of the meeting. If you join late, you will miss the presentation. A question and answer period will follow the presentation.
- The meeting will be recorded as part of the study record. It will be available to view on the study website within a couple of days.

JOINING THE MEETING FROM A COMPUTER OR AN APP

- ☑ Visit the website **i15eis.udot.utah.gov** on the day of the meeting to access the meeting link.
- ☑ Ensure you have either speakers or headphones to listen to the meeting.

LISTENING TO THE MEETING ON A PHONE

Call in to listen to the meeting from a phone by dialing:
(719) 359-4580 | **Meeting ID:** 871 9694 0716

USING THE QUESTION & ANSWER FUNCTION (FROM SMARTPHONE OR COMPUTER)

- During the meeting, click the Question & Answer icon, enter your question in the box and press send.

DURING THE MEETING

- Only the panelists will be speaking during the meeting. All participants will be muted upon entry.
- Following the conclusion of the presentation, the study team will answer as many questions as possible during the remaining time.
- Participants will be able to ask questions through the Question & Answer function.
- Submitting a question during the meeting does not guarantee it will be answered. The study team will collect all questions submitted during the meeting and respond to these according to commonly asked subjects.
- Please respect the panelists and presenter. Questions or comments that include foul language, threats or obscenity will not be answered. Individuals submitting these types of questions may be removed from the meeting.
- While useful to the study team, comments submitted during the meeting are not considered official comments and will not be included in the study record. Please submit comments on the EIS through the official study channels (email, website, or letter mailed to the study team) during the public comment period of November 10 - December 16, 2022.
- The study team will use our best available resources to respond to questions submitted in all languages. A Spanish translator will be available during the meeting, and an online translation service will be used to respond to questions asked in languages other than English and Spanish.

Website: i15eis.udot.utah.gov
Email: i15eis@utah.gov

I-15 EIS Study Team
392 E. Winchester St., Ste 300
Salt Lake City, UT 84107

Individuals Requiring Accommodations
For those without internet access or needing accommodations including but not limited to translation or captioning, please notify the project team at 385-220-5797 for assistance with participating in the meeting, viewing materials or providing comments.

AFTER THE MEETING

To view a recording of the public meeting, visit the study website.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated May 26, 2022, and executed by FHWA and UDOT.

UDOT

GUÍA PARA PARTICIPANTES DE LA REUNIÓN PÚBLICA VIRTUAL

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

SOBRE LA REUNIÓN

Lunes, 14 de noviembre de 2022 | 5:00 a 7:00 p. m.

La presentación comienza a las 5:00 p. m. y, luego, se hará una sesión de preguntas y respuestas.

- Se utilizará la plataforma de reuniones Zoom; hay una capacidad de 1.000 participantes.
- Si la reunión alcanza su capacidad máxima, es posible que otras personas dejen la reunión y liberen espacios, de manera que le recomendamos que vuelva a intentar conectarse con frecuencia. La reunión se transmitirá en vivo en el grupo de Facebook del Informe de Impacto Ambiental de la I-15 de Farmington a Salt Lake City del Departamento de Transporte de Utah para admitir a más espectadores.
- Se hará una presentación al comienzo de la reunión. Si se une tarde, se perderá la presentación. Luego de la presentación, se hará una sesión de preguntas y respuestas.
- La reunión se grabará como parte del expediente del estudio. Estará disponible para su consulta en el sitio web del estudio en un par de días.

CÓMO UNIRSE A LA REUNIÓN DESDE UNA COMPUTADORA O UNA APLICACIÓN

- ☑ Visite la página web **i15eis.udot.utah.gov** el día de la reunión para acceder al enlace de la reunión.
- ☑ Asegúrese de tener altavoces o auriculares para escuchar la reunión.

CÓMO ESCUCHAR LA REUNIÓN POR TELÉFONO

Para escuchar la reunión desde un teléfono, llame al:
(719) 359-4580 | **Id. de la reunión:** 871 9694 0716

CÓMO UTILIZAR LA FUNCIÓN DE PREGUNTAS Y RESPUESTAS (DESDE UN TELÉFONO INTELIGENTE O COMPUTADORA)

- Durante la reunión, haga clic en el ícono de preguntas y respuestas, escriba su pregunta en el recuadro y envíela.

DURANTE LA REUNIÓN

- Durante la reunión, solo hablarán los panelistas. Todos los participantes serán silenciados al conectarse.
- Una vez concluida la presentación, el equipo del estudio responderá tantas preguntas como sea posible durante el tiempo restante.
- Los participantes podrán hacer preguntas a través de la función de preguntas y respuestas.
- El envío de una pregunta durante la reunión no garantiza que se responda. El equipo del estudio recopilará todas las preguntas enviadas durante la reunión y las responderá en función de los temas más preguntados.
- Le pedimos que respete a los panelistas y al presentador. No se responderán las preguntas o los comentarios que incluyan lenguaje soez, amenazas u obscenidades. Las personas que envíen este tipo de preguntas pueden ser eliminadas de la reunión.
- Aunque los comentarios enviados durante la reunión son útiles para el equipo del estudio, estos no se consideran comentarios oficiales y no se incluirán en el expediente del estudio. Le solicitamos que envíe sus comentarios sobre el Informe de Impacto Ambiental a través de los canales oficiales del estudio (correo electrónico, página web o carta enviada por correo postal al equipo del estudio) durante el período de comentarios públicos que va del 10 de noviembre al 16 de diciembre de 2022.
- El equipo del estudio utilizará los mejores recursos que tiene disponibles para responder a las preguntas enviadas en todos los idiomas. Habrá un traductor de español disponible durante la reunión, y se utilizará un servicio de traducción en línea para responder a las preguntas formuladas en idiomas distintos del inglés y el español.

Sitio web: i15eis.udot.utah.gov
Correo electrónico: i15eis@utah.gov

I-15 EIS Study Team
392 E. Winchester St., Ste 300
Salt Lake City, UT 84107

Personas que requieren adaptaciones
En el caso de personas que no tengan acceso a Internet o necesiten adaptaciones, como, por ejemplo, traducciones o subtítulos, les solicitamos que lo notifiquen al equipo del proyecto al 385-220-5797 para obtener asistencia para participar en la reunión, ver materiales o hacer comentarios.

DESPUÉS DE LA REUNIÓN

Para ver una grabación de la reunión pública, visite el sitio web del estudio.

La revisión ambiental, la consulta y otras acciones requeridas por las leyes ambientales federales pertinentes para este proyecto están siendo o han sido realizadas por el Departamento de Transporte de Utah de conformidad con el artículo 327 del Título 23 del Código de los Estados Unidos y un Memorando de Entendimiento de fecha 26 de mayo de 2022, y ejecutadas por la Administración Federal de Carreteras y el Departamento de Transporte de Utah.

UDOT

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

COMMENT FORM

CONTACT INFORMATION (Optional)

Date _____

Name _____

Phone _____ - _____ - _____

Email _____

Address _____

Would you like to receive email updates? **Yes** or **No**

The purpose of the I-15 study is to improve safety, replace aging infrastructure, provide better mobility for all users, strengthen the state and local economy, and better connect communities along I-15 from Farmington to Salt Lake City.

ALTERNATIVES:

Mainline
- 5 GP + 1 HOV
- 5 GP/2 Reversible/5 GP

Salt Lake
- Option A: 600 N. CD and 2100 N. full diamond interchange
- Option B: 600 N SPUI and 1800 N full diamond interchange

NSL/Woods Cross
- Option A: New I-215/U.S. 89 local interchange and 2600 S. Diamond
- Option B: New I-215/U.S. 89 local interchange and 2600 S. SPUI

Bountiful/West Bountiful
- Option A: 500 S. Diamond & 400 N./500 W. ½ diamond
- Option B: 500 S. Diamond and 400 N./500 W. ¼ diamond at 400 N.
- Option C: CD for 500 S./400 N./500 W.

Centerville/Parrish
- Option A: Parrish Lane Diamond with NB connection to east frontage road
- Option B: Parrish Lane SPUI with NB connection to east frontage road

Farmington
- Option A: Existing 200 W SB on ramp and NB off ramp
- Option B: Glovers Lane SPUI
- Option C: 200 W. full interchange

Where did you hear about the I-15 EIS Study? _____

MAIL TO

I-15 EIS Study Team
392 E. Winchester St., Ste 300
Salt Lake City, UT 84107

OTHER WAYS TO COMMENT

i15eis.udot.utah.gov
i15eis@utah.gov

The environmental review, consultation and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated May 26, 2022 and executed by FHWA and UDOT.

I-15 ENVIRONMENTAL IMPACT STATEMENT Farmington to Salt Lake City

UDOT

2.2 Public Input Presentation Content

The following pages include the draft alternatives presentation boards and slides. These boards and slides were presented to the during the outreach meetings and printed on large boards for display at the in-person open houses on November 15 and 16, 2023.

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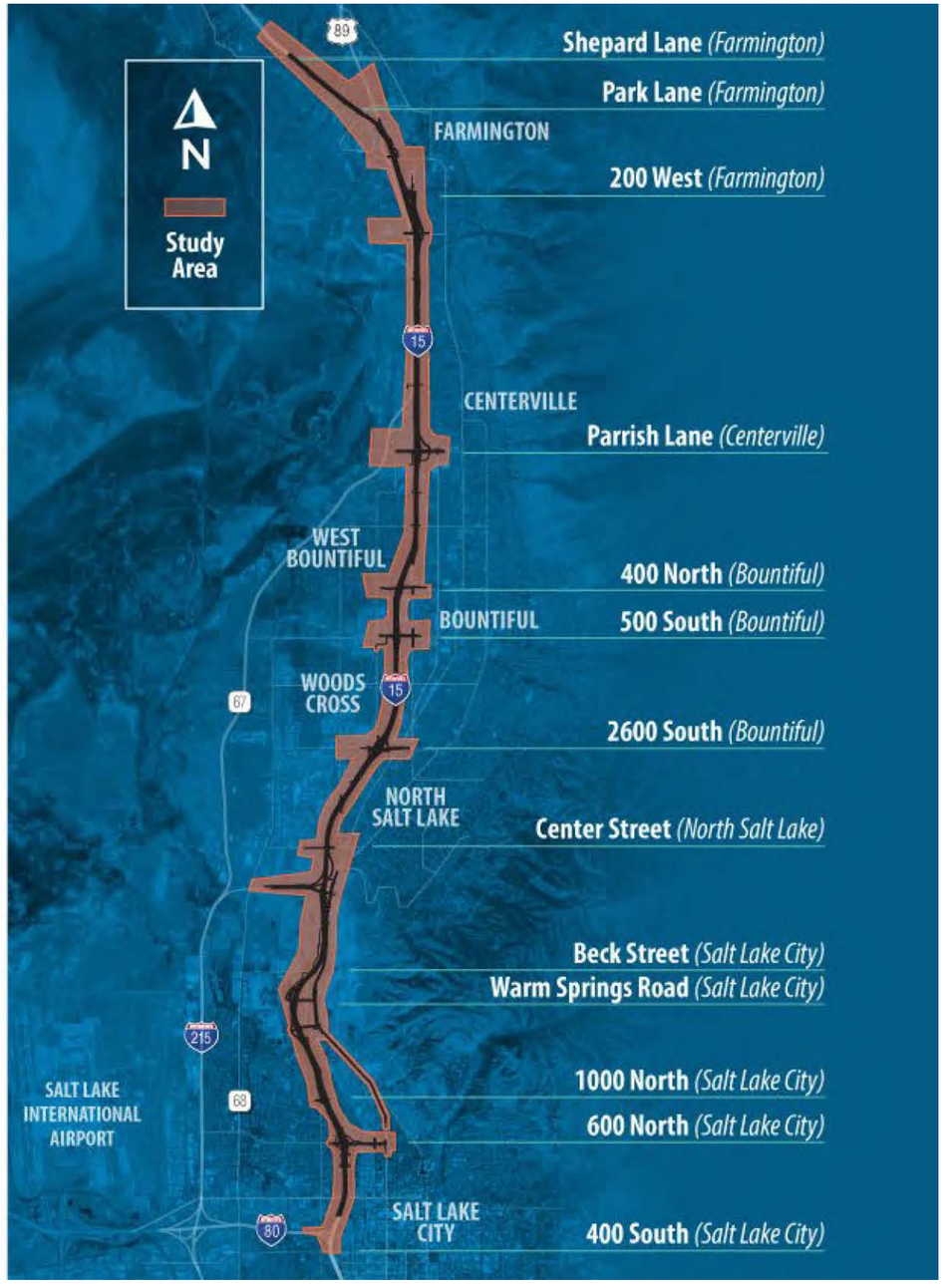
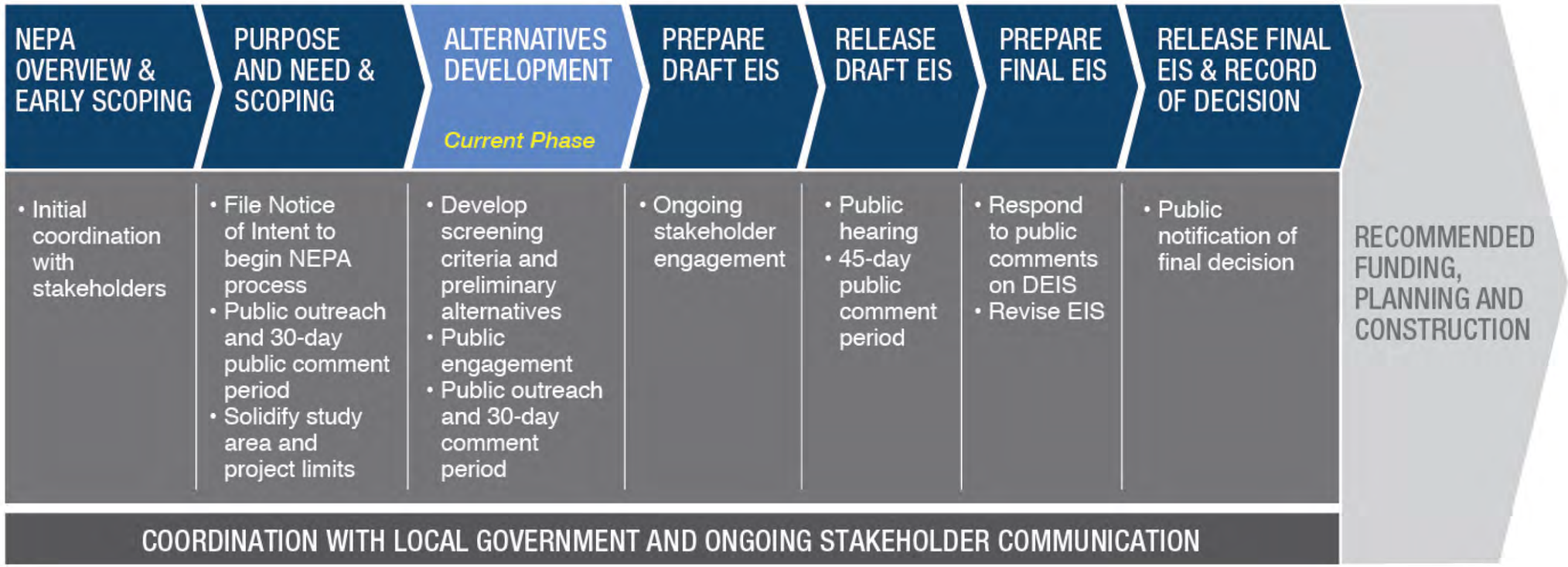
Today's Topics

- I-15 EIS process
- Draft Alternatives
- How and why to provide feedback
- Questions for the I-15 EIS Team



I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City
UDOT Keeping Utah Moving

Environmental Study Timeline



Quality of Life

BETTER MOBILITY

GOOD HEALTH

CONNECTED COMMUNITIES

STRONG ECONOMY

Study Purpose and Need

Improve Safety

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

Better Connect Communities

- Be consistent with planned land use, growth objectives, and transportation plans.
- Support the planned FrontRunner Double Track projects and enhance access and connectivity to FrontRunner, regional transit and trails, and across I-15.

Strengthen the Economy

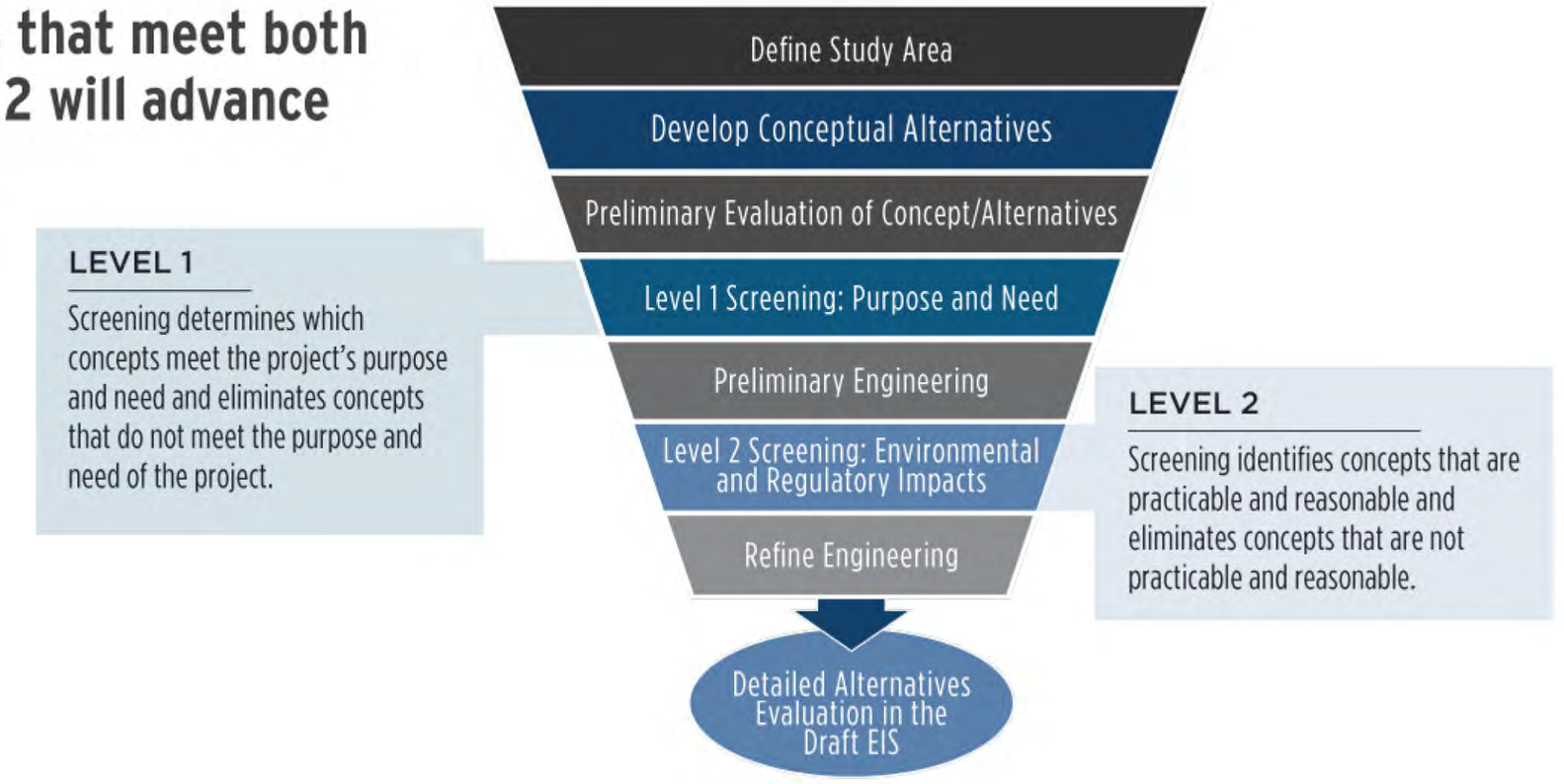
- Replace aging infrastructure on I-15.
- Enhance the economy by reducing travel delay on I-15.

Improve Mobility for All Users

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

Alternatives Screening Process

Only alternatives that meet both Level 1 and Level 2 will advance for further study



LEVEL 1

Screening determines which concepts meet the project's purpose and need and eliminates concepts that do not meet the purpose and need of the project.

LEVEL 2

Screening identifies concepts that are practicable and reasonable and eliminates concepts that are not practicable and reasonable.

I-15 EIS Screening Criteria - Level 1

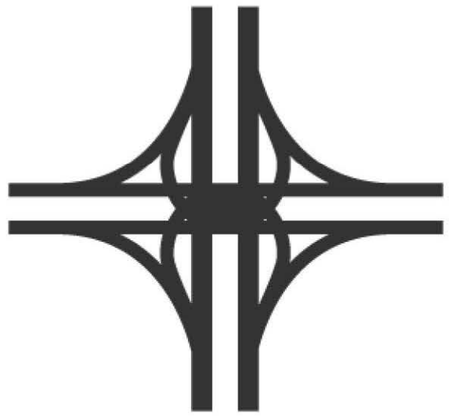
QUALITY OF LIFE CATEGORY	CRITERION	MEASURE
IMPROVE SAFETY	Improve the safety and operations of the I-15 mainline, interchanges, bicycle and pedestrian crossings, and connected roadway network.	• Does the concept meet UDOT's safety standards (such as curvature, lane and shoulder widths, access, and sight distance)? (Yes/No) • Does the concept meet UDOT's operational standards (such as traffic weaving, ramp operations, queuing, etc.)? (Yes/No) • Can the concept be designed to reduce conflicts between motorized and nonmotorized modes? (Yes/No) • Does the concept improve bicycle and pedestrian accommodations at cross streets or interchanges? (Yes/No)
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)
	Support the planned FrontRunner Double Track projects and enhance access and connectivity to FrontRunner, regional transit and trails, and across I-15.	• Does the concept provide sufficient space for UTA to construct the planned FrontRunner Double Track project? (Yes/No) • 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 USERS	Improve mobility and operations on the I-15 mainline, I-15 interchanges, connected 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? • Does the concept improve average speed on I-15 during the AM and PM peak periods?

I-15 EIS Screening Criteria - Level 2

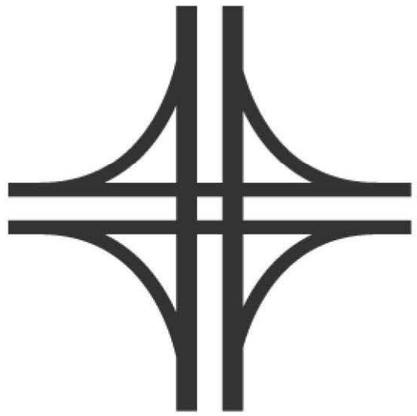
CRITERION	MEASURE
IMPACTS TO THE NATURAL ENVIRONMENT	• Acres and types of aquatic resources (wetlands, streams, and springs) • Linear feet of ditches and creeks affected • Acres of floodplains affected
ACCESS TO TRANSIT AND NONMOTORIZED FACILITIES	• Number and relative quality of connections to regional transit facilities and regional trails
IMPACTS TO SECTION 4(F) AND SECTION 6(F) RESOURCES	• Number and type of Section 4(f) uses • Number and type of Section 6(f) conversions
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 • Potential impacts and benefits to low-income or minority populations (environmental justice populations)
COST, TECHNOLOGY, AND LOGISTICS	• Estimated project cost (general) • Constructability given available technology • Logistical considerations

Terms

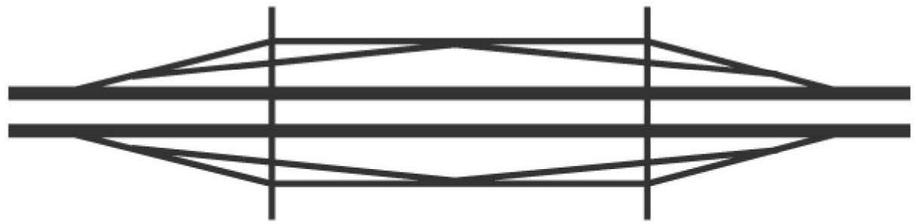
SPUI - SINGLE POINT URBAN INTERCHANGE



DIAMOND INTERCHANGE



CD - COLLECTOR DISTRIBUTOR



MAINLINE: Used to reference the main set of travel lanes on I-15

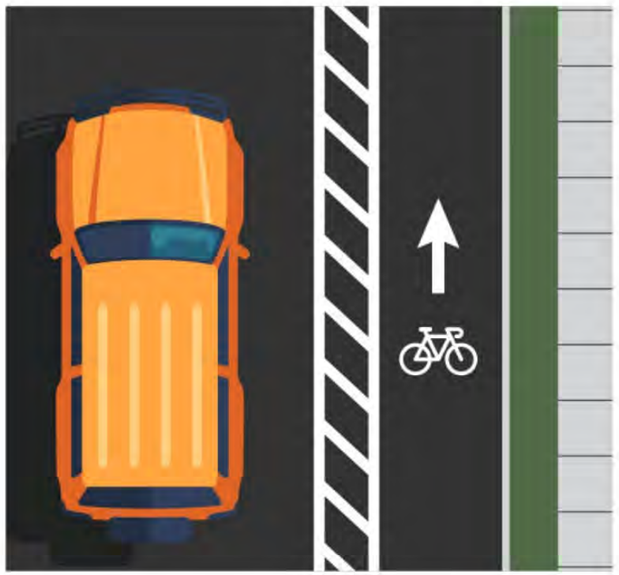
GENERAL PURPOSE: Lanes on I-15 that have no limitations or particular use (such as HOV lanes or CD lanes)

REVERSIBLE: Lanes used for one direction of travel at a time

HIGH-OCCUPANCY TOLL (HOT) LANE: Lanes where a motorist must either have companion passengers or pay a toll for use

Terms

BUFFERED BIKE LANE



SUP - SHARED USE PATH

NB: Northbound

SB: Southbound

Proposed Walking and Biking Improvements

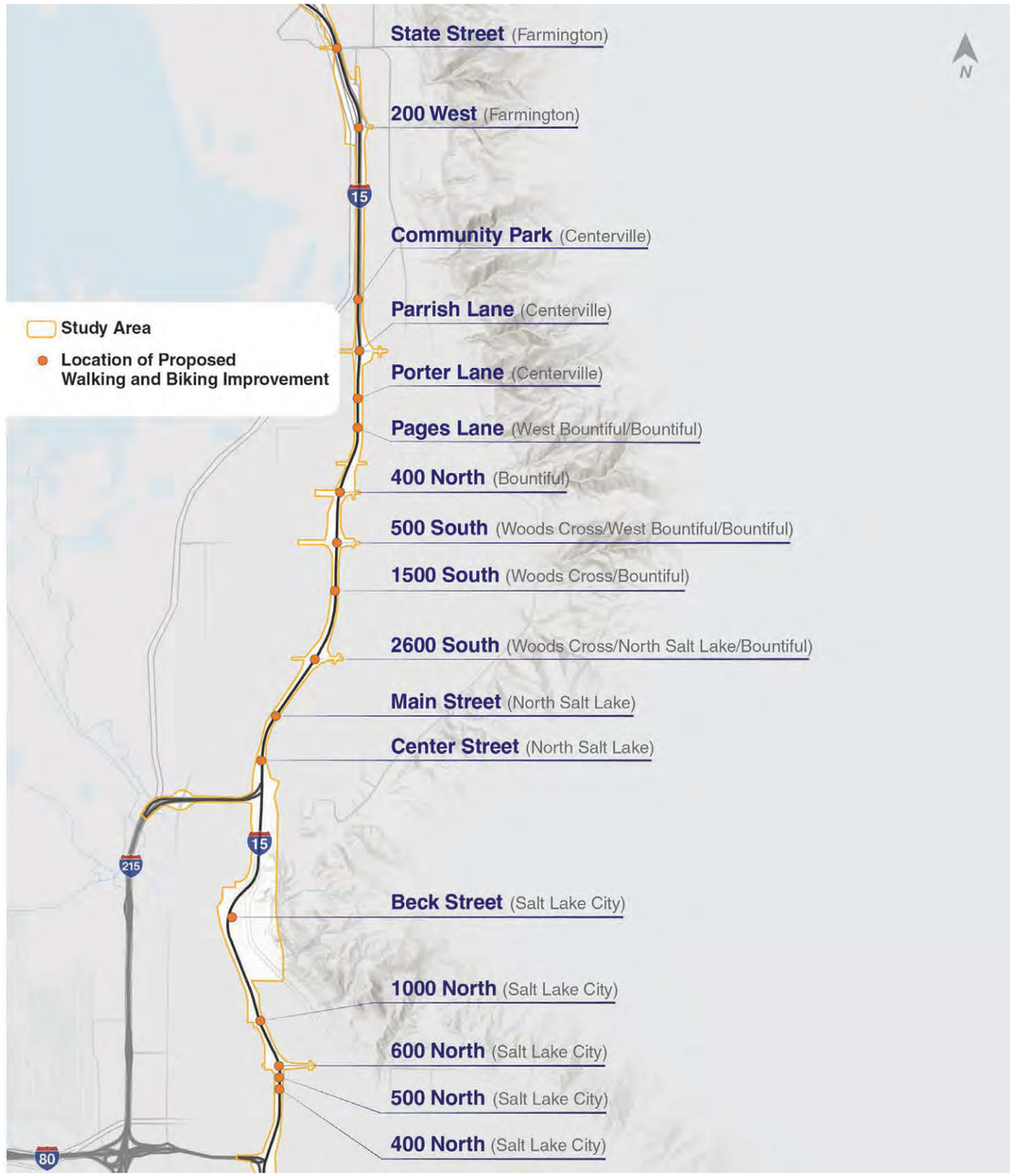
Slow it down

Minimize exposure to conflicts

Provide adequate sight distance

Keep it direct

Access for all



I-15 ENVIRONMENTAL IMPACT STATEMENT Farmington to Salt Lake City UDOT Keeping Utah Moving

Alternatives Overview

Interchange Areas

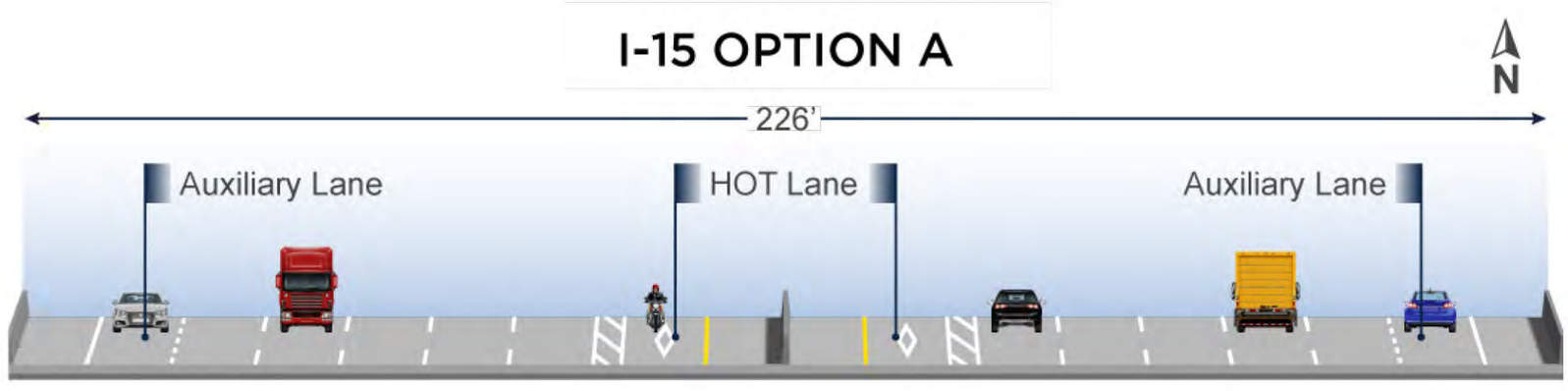
GEOGRAPHIC AREA	LIMITS	Interchange and Bicyclist and Pedestrian Crossing Options		
		A	B	C
SALT LAKE COUNTY	400 South to county boundary	**600 North CD and 2100 North full diamond interchange** • Buffered bike lanes and 8' sidewalks on both sides of 600 North. • 12' SUP on 1000 North that crosses under I-15 and connects to Warm Springs Road east of I-15.	**600 North SPUI and 1800 North full diamond interchange** • Buffered bike lanes on both sides of 600 North. • 8' sidewalk on the south side of 600 North. • 14' grade-separated SUP on the north side of 600 North. • New 12' SUP between 1000 North and 1800 North on new frontage road on the west side of I-15. New 12' SUP on the north side of 1800 North that crosses I-15 and the railroads to connect to SUP along US-89.	**NA**
NORTH SALT LAKE AND WOODS CROSS	County boundary to 1500 South	**New I 215/U.S. 89 local interchange and 2600 South diamond** • Buffered bike lanes with 8' sidewalk on north side of 2600 South and 12' SUP on south side of 2600 South.	**New I-215/US-89 local interchange and 2600 South SPUI** • Buffered bike lanes on both sides of 2600 South. • 8' sidewalk on north side of 2600 South. • 14' grade-separated SUP on south side of 2600 South.	**NA**
BOUNTIFUL AND WEST BOUNTIFUL	1500 South to Pages Lane/1600 North	**500 South diamond and 400 North/500 West half diamond**	**500 South diamond and 400 North/500 West 3/4 diamond at 400 North with NB on ramp at 500 West**	**CD for 500 South/400 North with NB on ramp at 500 West**
CENTERVILLE	Pages Lane/1600 North to Farmington boundary	**Parrish Lane diamond with NB connection to east frontage road** • 12' SUP on both sides of Parrish Lane. • Grade-separated 14' SUP crossing over I-15 and railroads at 400 South/Porter Lane.	**Parrish Lane SPUI with NB connection to east frontage road** • 14' SUP on the north side of Parrish Lane. • Grade-separated 14' SUP crossing of I 15 and railroads at 200 North.	**NA**
FARMINGTON	Centerville boundary to US-89	**Existing 200 West SB on ramp and NB off ramp** • Glovers Lane bridge over I-15 and the railroads is widened to include a 10' sidewalk on the north side, a 6' sidewalk on the south side, and buffered bike lanes on both sides to match the facilities going over Legacy Parkway.	**Glovers Lane SPUI** • New grade-separated 14' SUP on the north side of Glovers Lane. • Buffered bike lanes on both sides and 8' sidewalk on north side of Glovers Lane.	**200 West full interchange** • SUP connections on 200 West and Frontage Road. • Glovers Lane bridge over I-15 and the railroads is widened to include a 10' sidewalk on the north side, a 6' sidewalk on the south side, and buffered bike lanes on both sides to match the facilities going over Legacy Parkway.

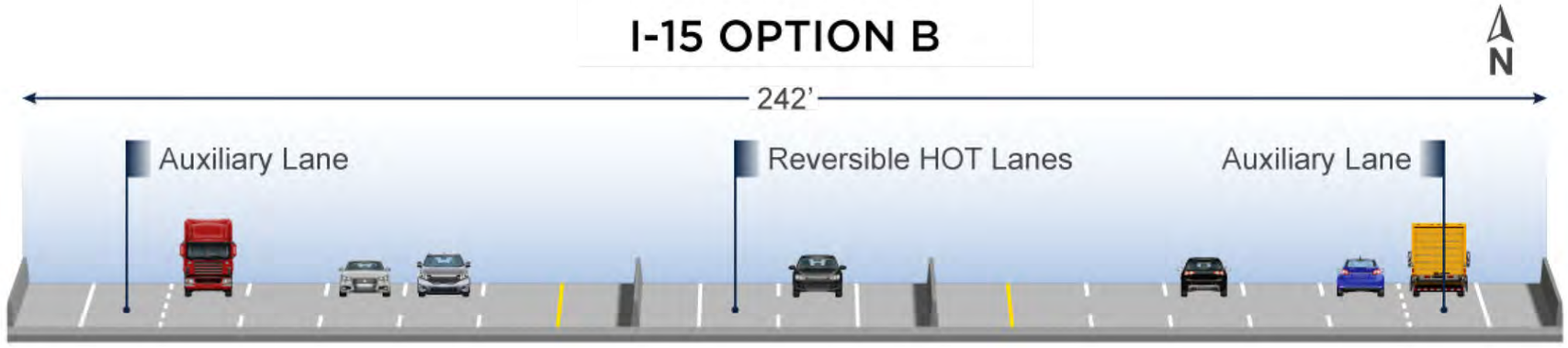
Alternatives Overview

Between Interchanges

GEOGRAPHIC AREA	LIMITS	Bicyclist and Pedestrian Crossing Features (for all options in the geographic location)
SALT LAKE COUNTY	400 South to county boundary	• 400 North new sidewalks and roadway crossing under I-15. • 500 North new SUP crossing under I-15. • New US-89 12' SUP between Eagle Ridge Drive in North Salt Lake and Wall Street/200 West in Salt Lake City.
NORTH SALT LAKE AND WOODS CROSS	County boundary to 1500 South	• New US-89 12' SUP between Eagle Ridge Drive in North Salt Lake and Wall Street/200 West in Salt Lake City • Center Street buffered bike lanes on both sides, 6' sidewalk on north side, and 12' SUP improvements on south side of Center Street between I-15 and 400 West. • Wider bridge over Main Street to accommodate future bike/pedestrian improvements. • 800 West – new underpass of I-15 with new 12' SUP. 12' SUP connection between 800 West and 2600 South on west side of I-15. • Wider bridge over 1500 South to accommodate future bike/pedestrian improvements.
BOUNTIFUL AND WEST BOUNTIFUL	1500 South to Pages Lane/1600 North	• New SUP connection from 500 South to Woods Cross FrontRunner station west of I-15. • 12' SUP on both sides of 500 South. • Buffered bike lanes on both sides of 400 North. • 12' SUP on the north side of 400 North. Wider bridge over 1600 North/Pages Lane to accommodate future bike/pedestrian improvements.
CENTERVILLE	Pages Lane/1600 North to Farmington boundary	• New grade-separated 14' SUP crossing at Centerville Park over I-15/railroad lines/Legacy Parkway
FARMINGTON	Centerville boundary to US-89	• State Street/Clark Lane bridge over I-15 and the railroads is widened to include buffered bike lanes and sidewalks on both sides that match the facilities going over Legacy Parkway.

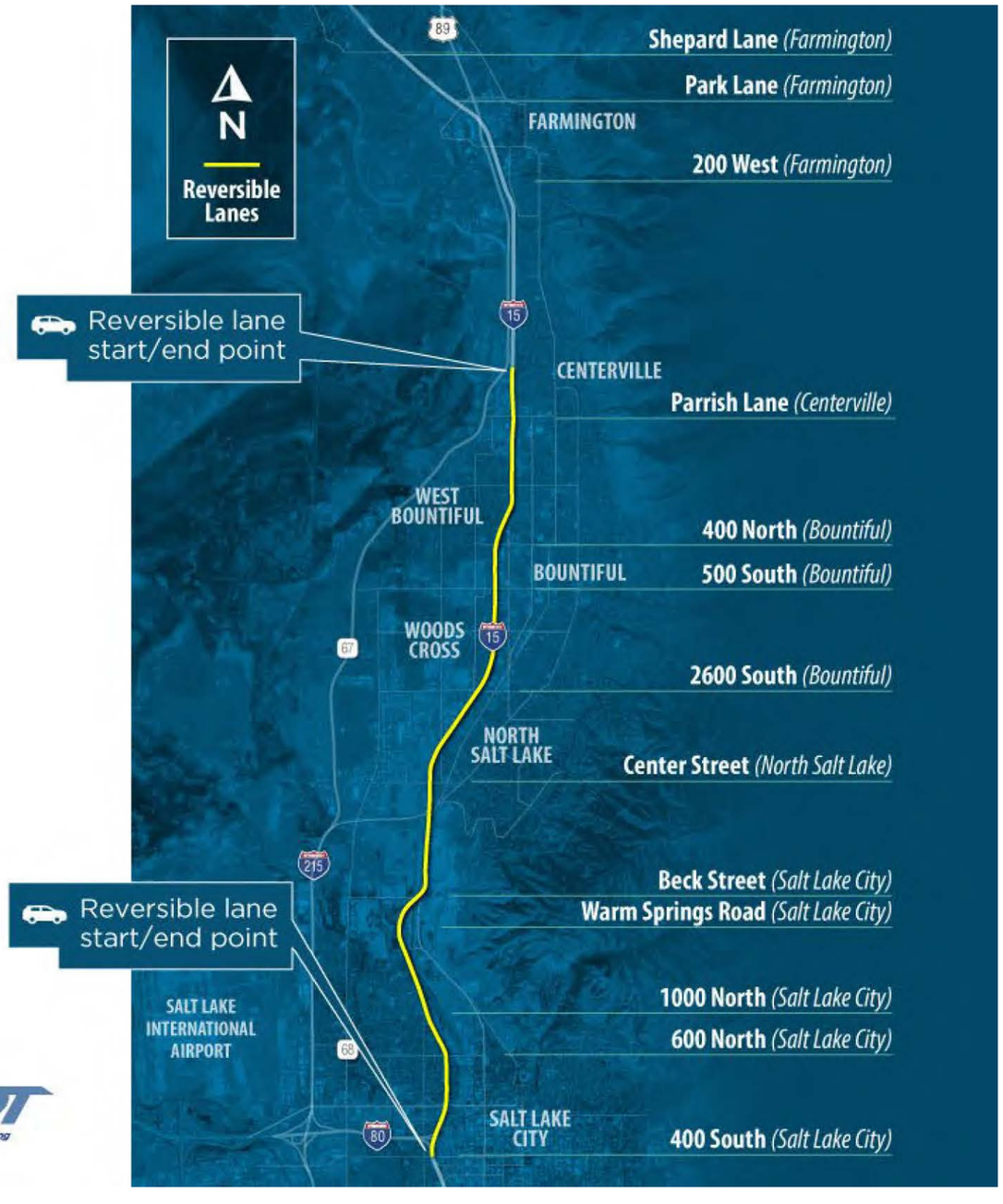
I-15 Mainline Alternatives



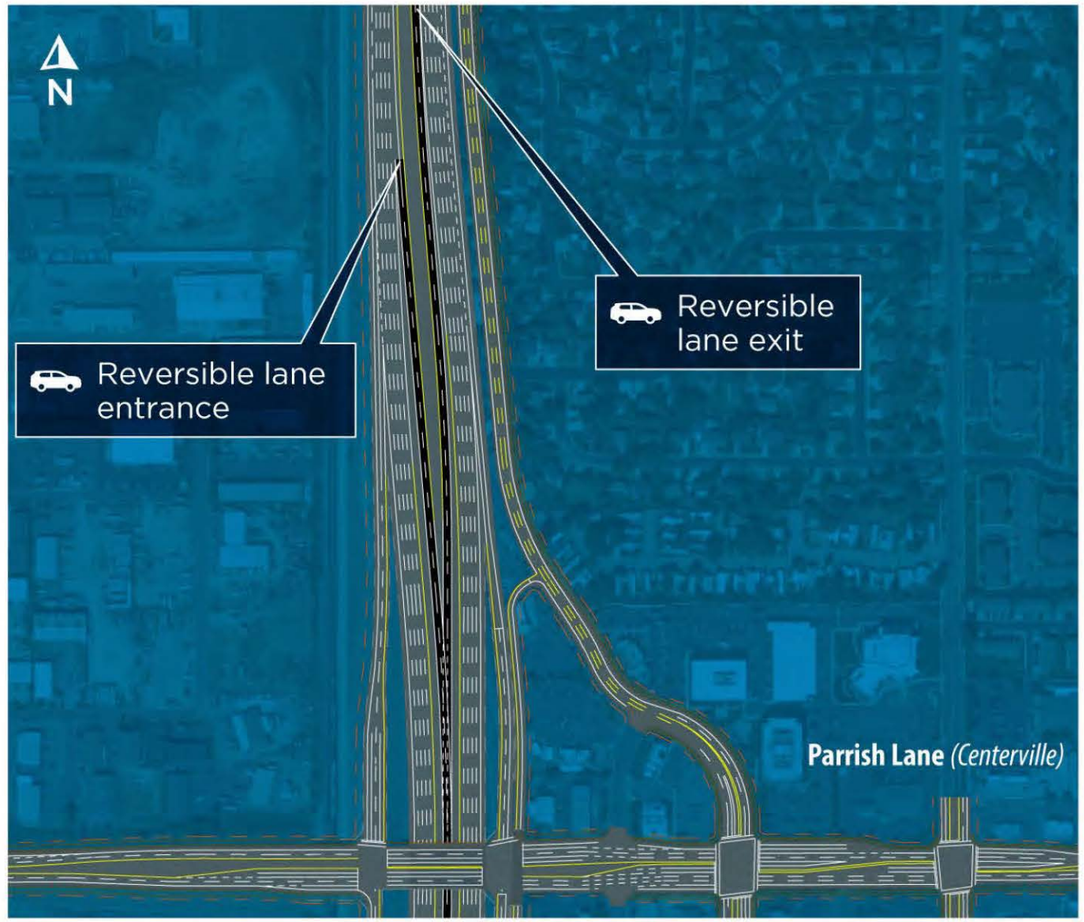


Reversible Lanes

- Southbound in the AM
- Northbound in the PM
- Barrier separated with access only at endpoints



Reversible Lanes - Connections



I-15 Mainline Alternatives - Travel Times

4-HR PEAK PERIOD AVERAGE TRAVEL TIME

SCENARIO	SB - AM PEAK *(MINUTES)*	NB - AM PEAK *(MINUTES)*
2019 EXISTING	18	19
2050 NO BUILD	55	66
OPTION A *(Traditional HOT)*	28	30
OPTION B *(Reversible HOT)*	21	22

4-HR PEAK PERIOD AVERAGE SPEED

SCENARIO	SB - AM PEAK *(MILES PER HOUR)*	NB - AM PEAK *(MILES PER HOUR)*
2019 EXISTING	60	57
2050 NO BUILD	20	16
OPTION A *(Traditional HOT)*	39	36
OPTION B *(Reversible HOT)*	51	49

Farmington - Option A

200 West southbound on-ramp and northbound off-ramp

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City
UDOT Keeping Utah Moving

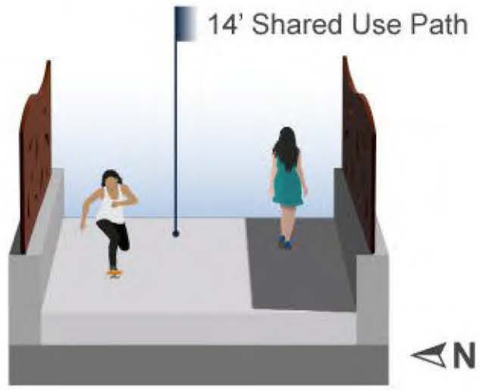
Farmington - Option B

Glovers Lane SPUI

Farmington - Option B

Glovers Lane SPUI

GLOVERS LANE

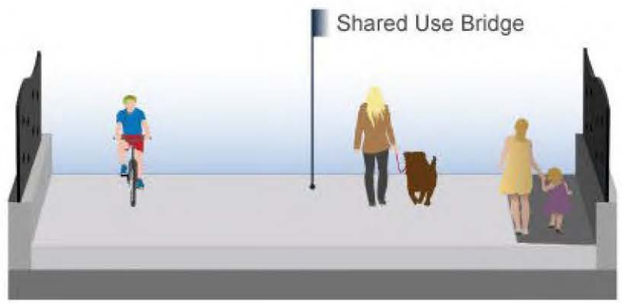


Farmington - Option C

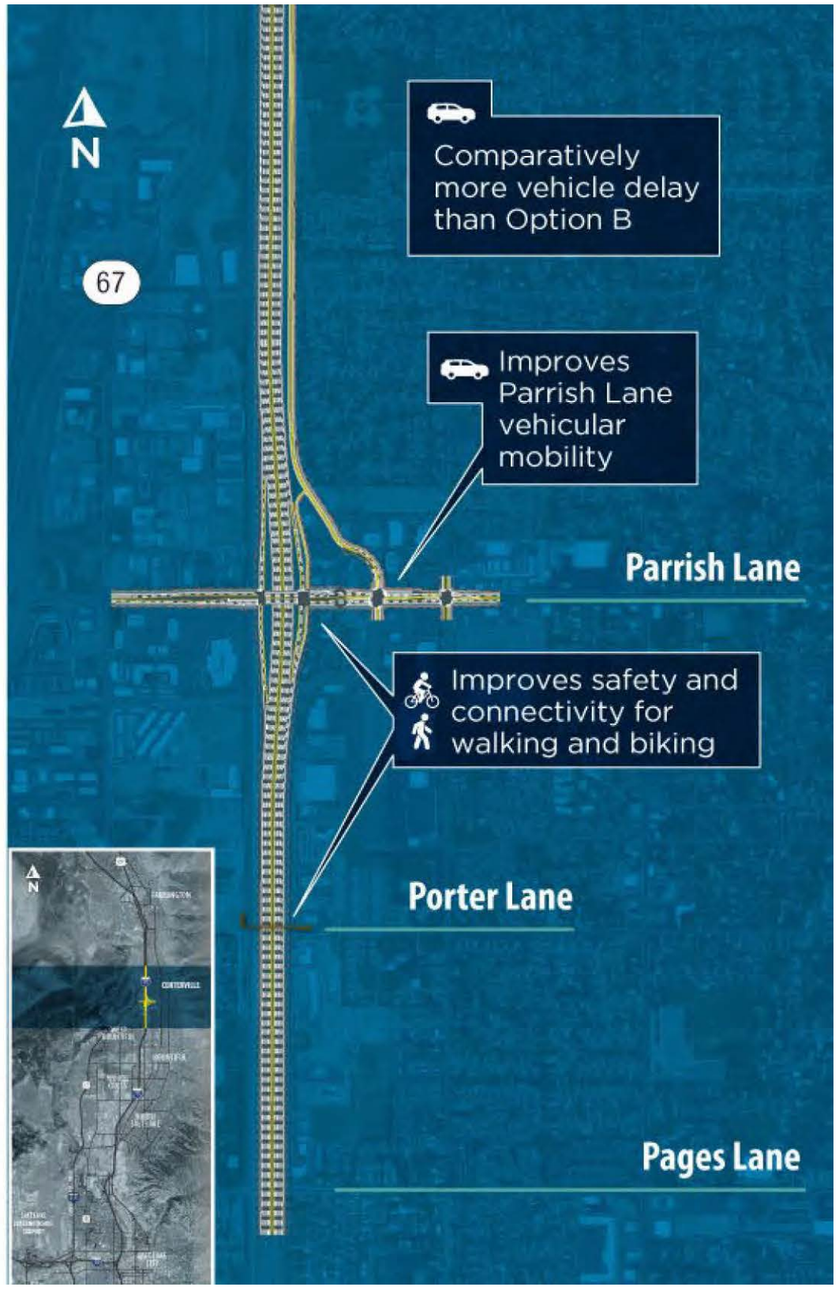
200 W. full interchange

Centerville/Parrish - Option A

Parrish Lane diamond with northbound connection to east frontage road



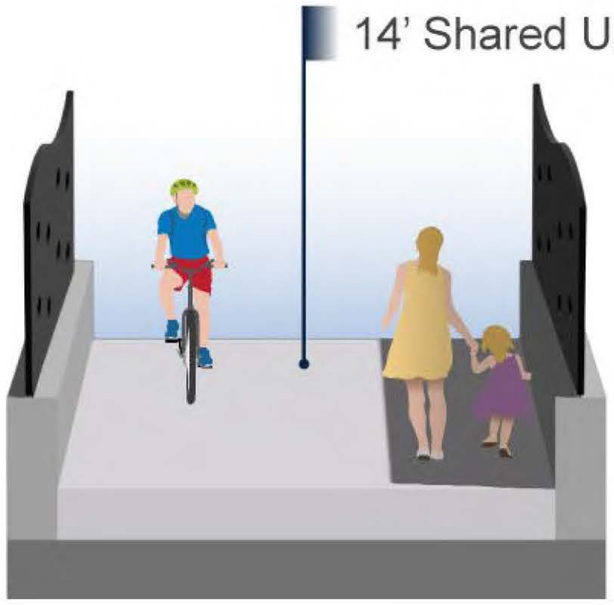
PORTER LANE/ 400 SOUTH

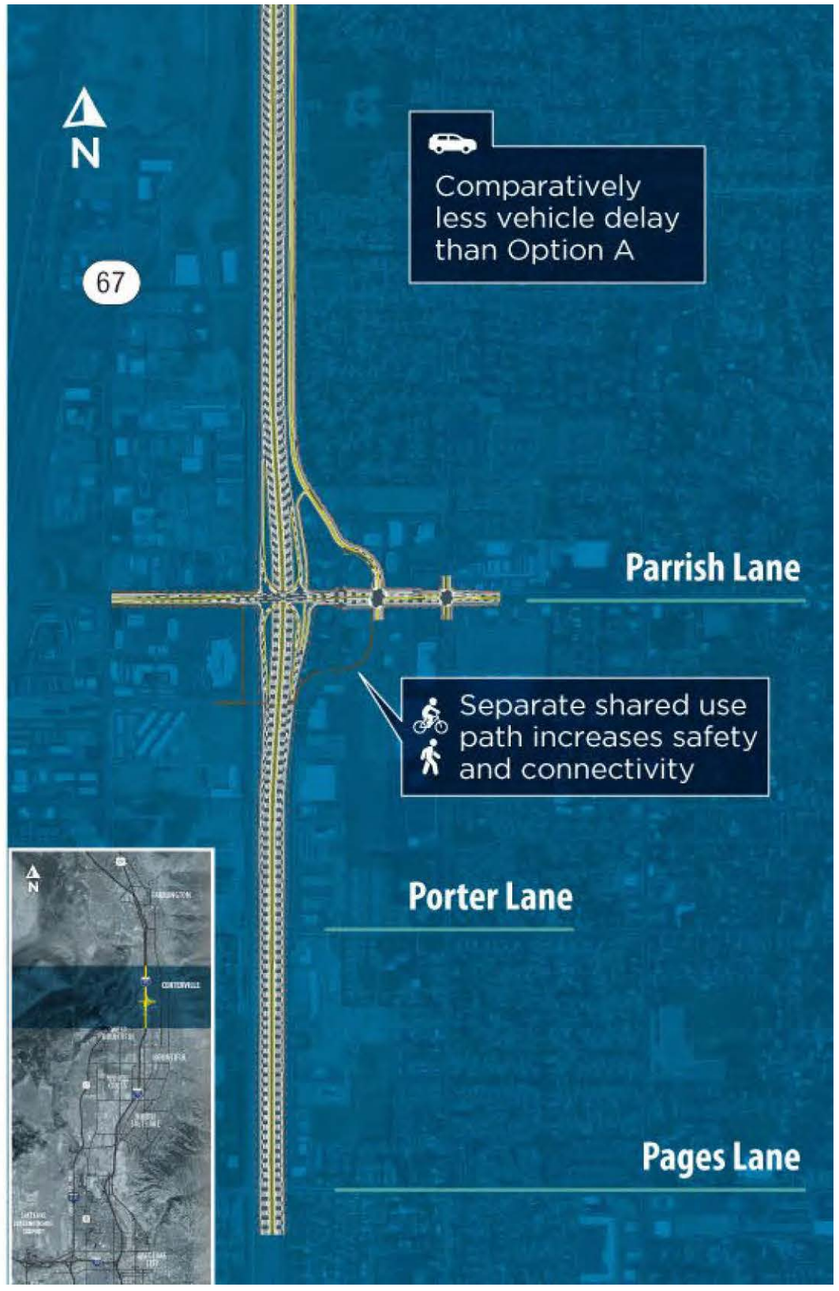


Centerville/Parrish - Option B

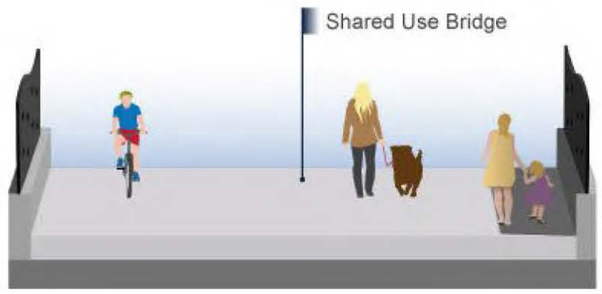
Parrish Lane SPUI with northbound connection to east frontage road

PARRISH LANE/400 NORTH





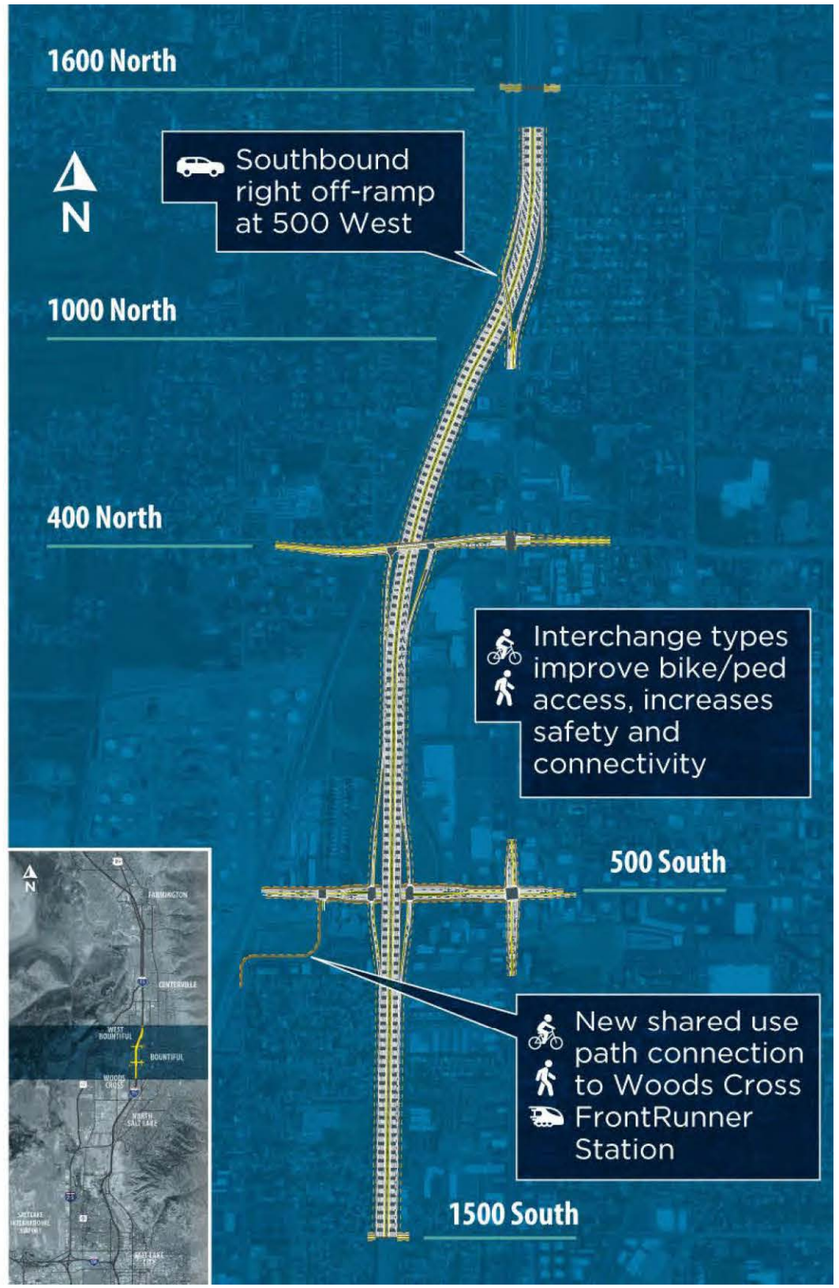
Centerville - I-15 Crossings



CENTERVILLE COMMUNITY PARK BRIDGE

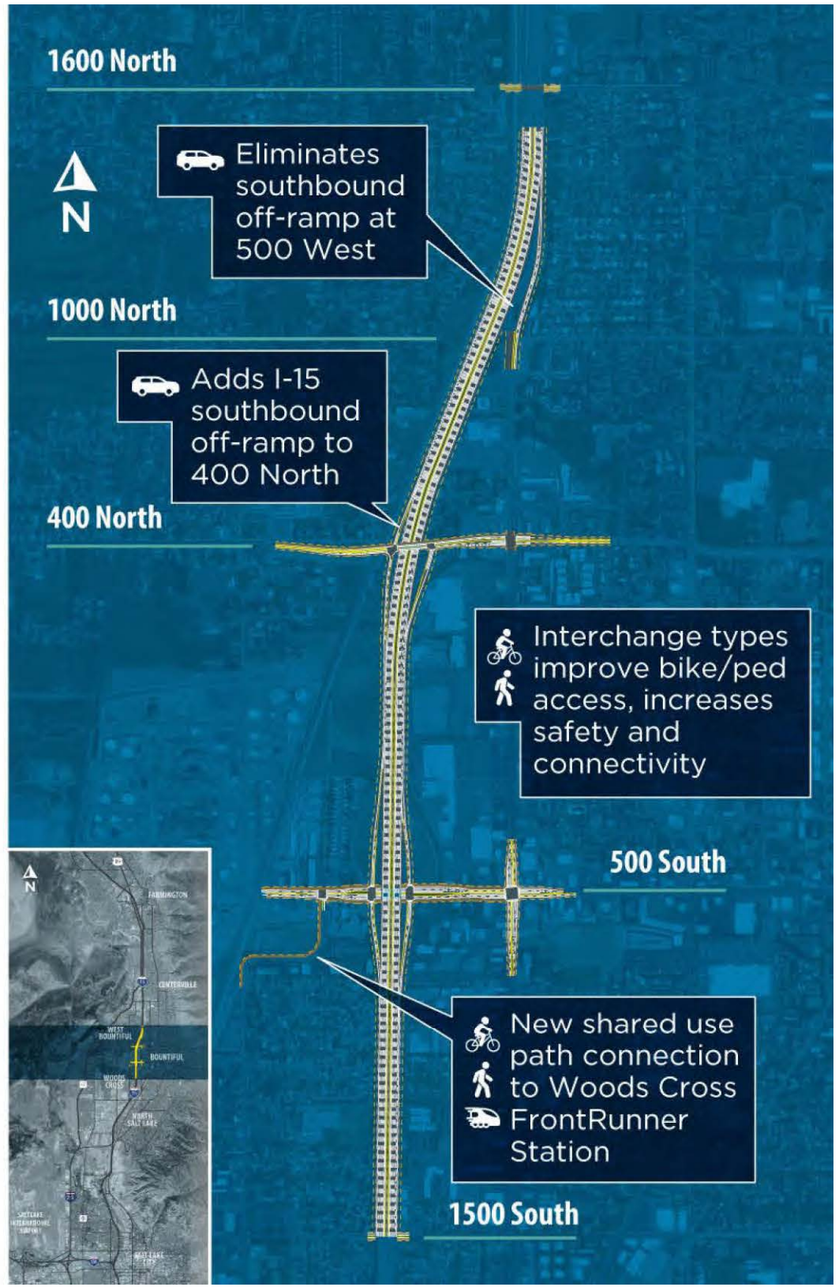
Bountiful/West Bountiful - Option A

500 S. diamond and 400 N./500 W. half diamond



Bountiful/West Bountiful - Option B

500 S. diamond and 400 N./500 W. ¾ diamond at 400 N.



I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

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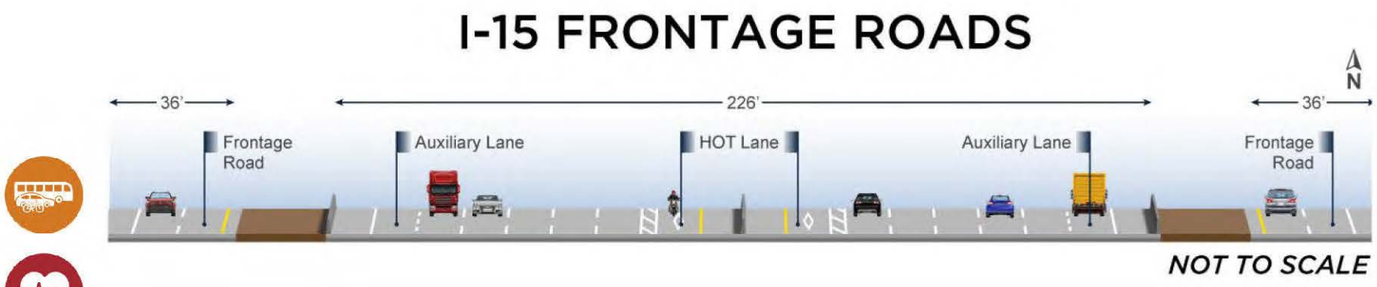
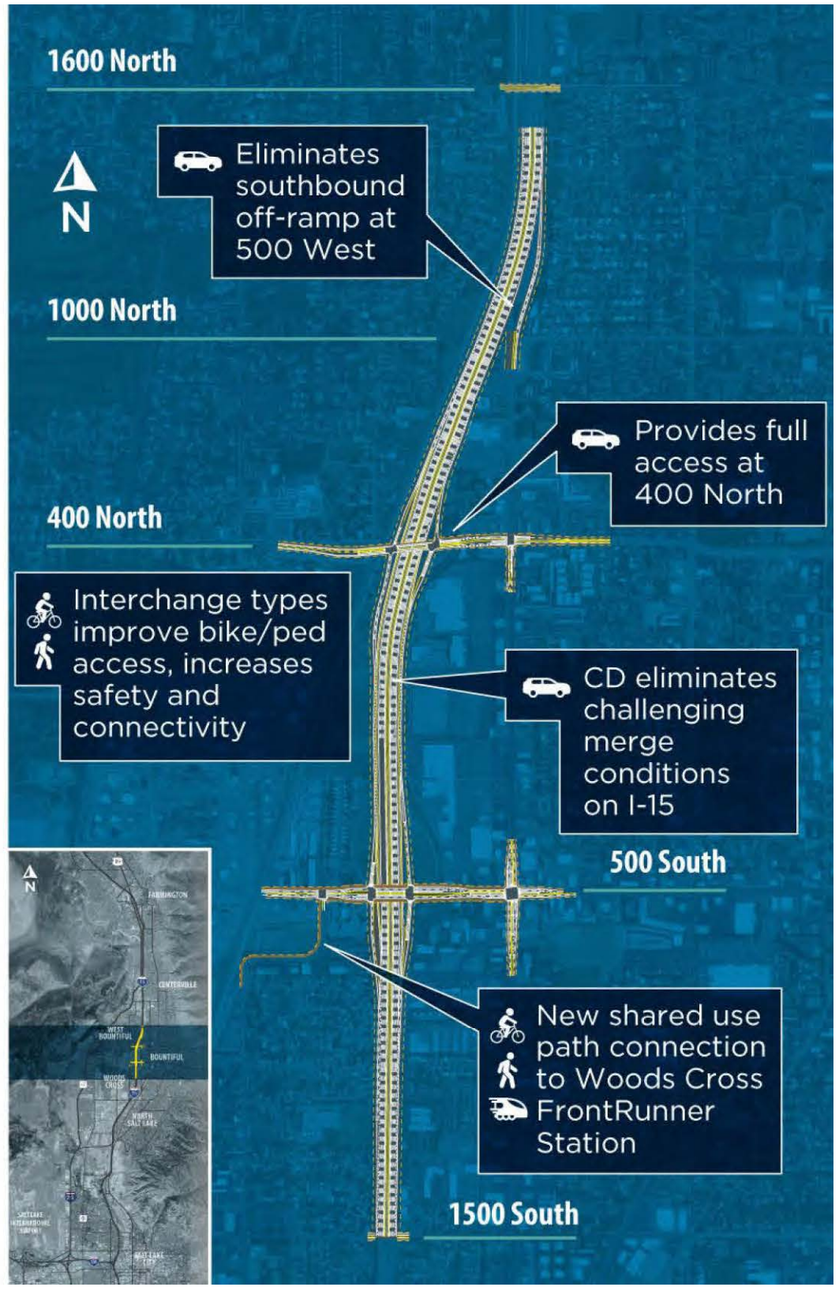
Bountiful/West Bountiful - Option C

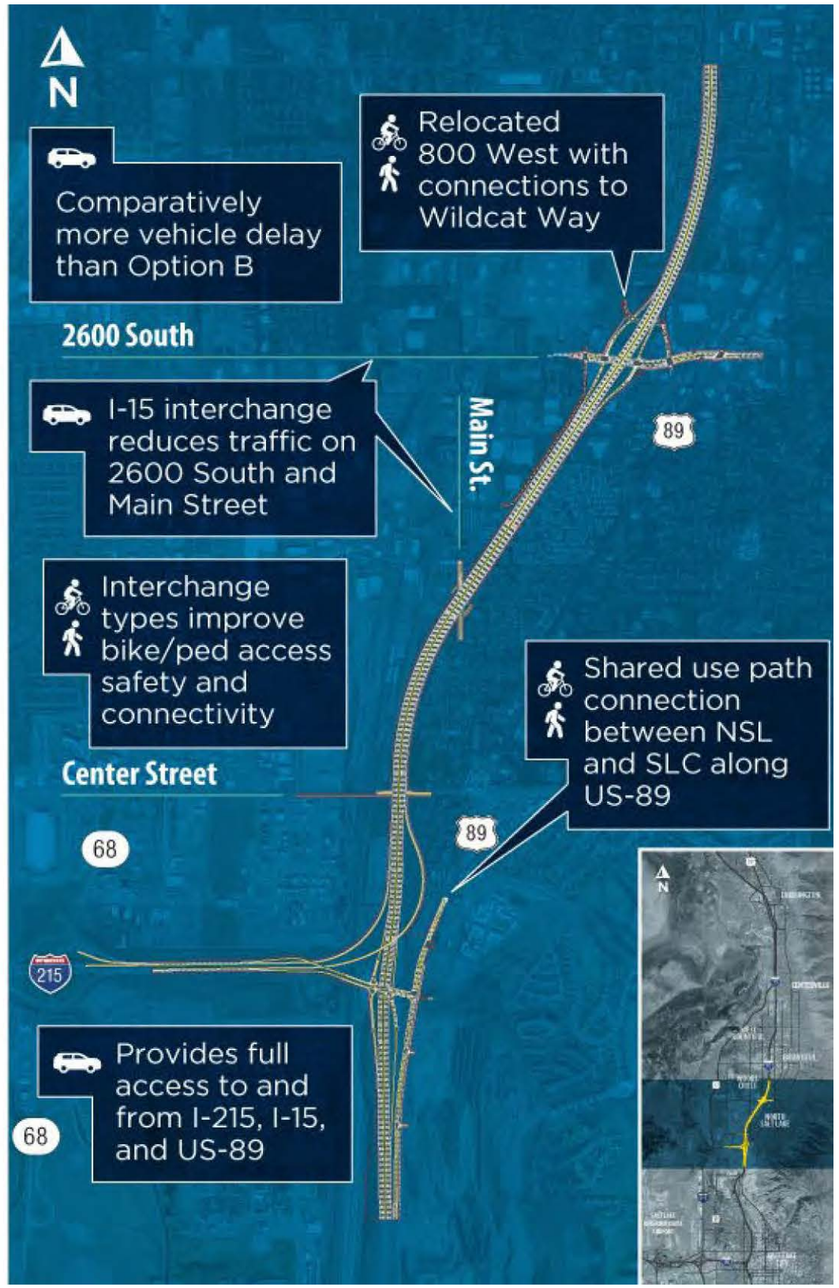
CD for 500 S./400 N./500 W.





North Salt Lake/ Woods Cross - Option A

New I-215/US-89 local interchange and 2600 S. diamond (includes removal of SB Center St. off-ramp)



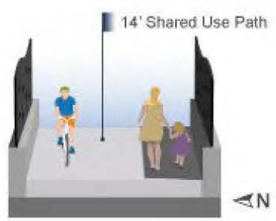
I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City
UDOT Keeping Utah Moving

North Salt Lake/Woods Cross - Option B

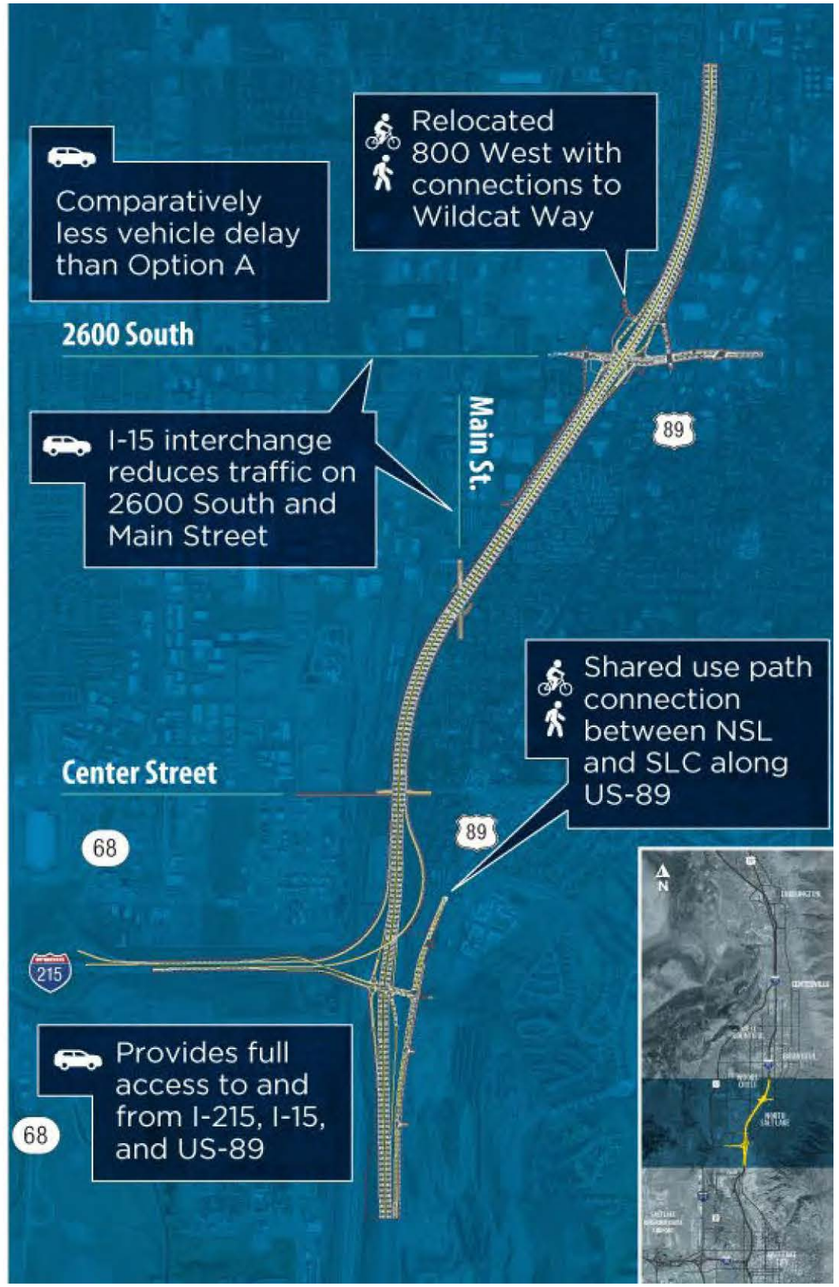
New I-215/US-89 local interchange and 2600 S. SPUI + Removal of SB Center St. off-ramp

2600 SOUTH

2600 SOUTH



800 WEST



I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

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North Salt Lake/Woods Cross - I-15 Crossings

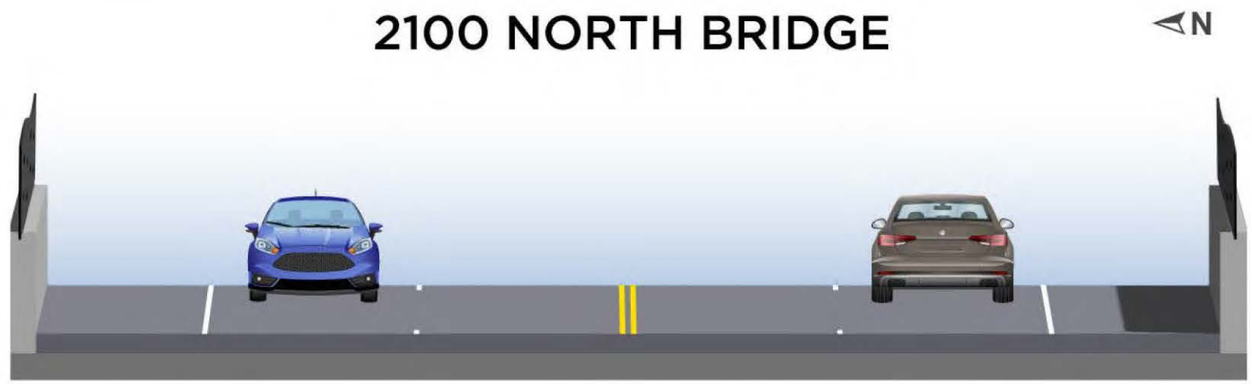
1500 SOUTH

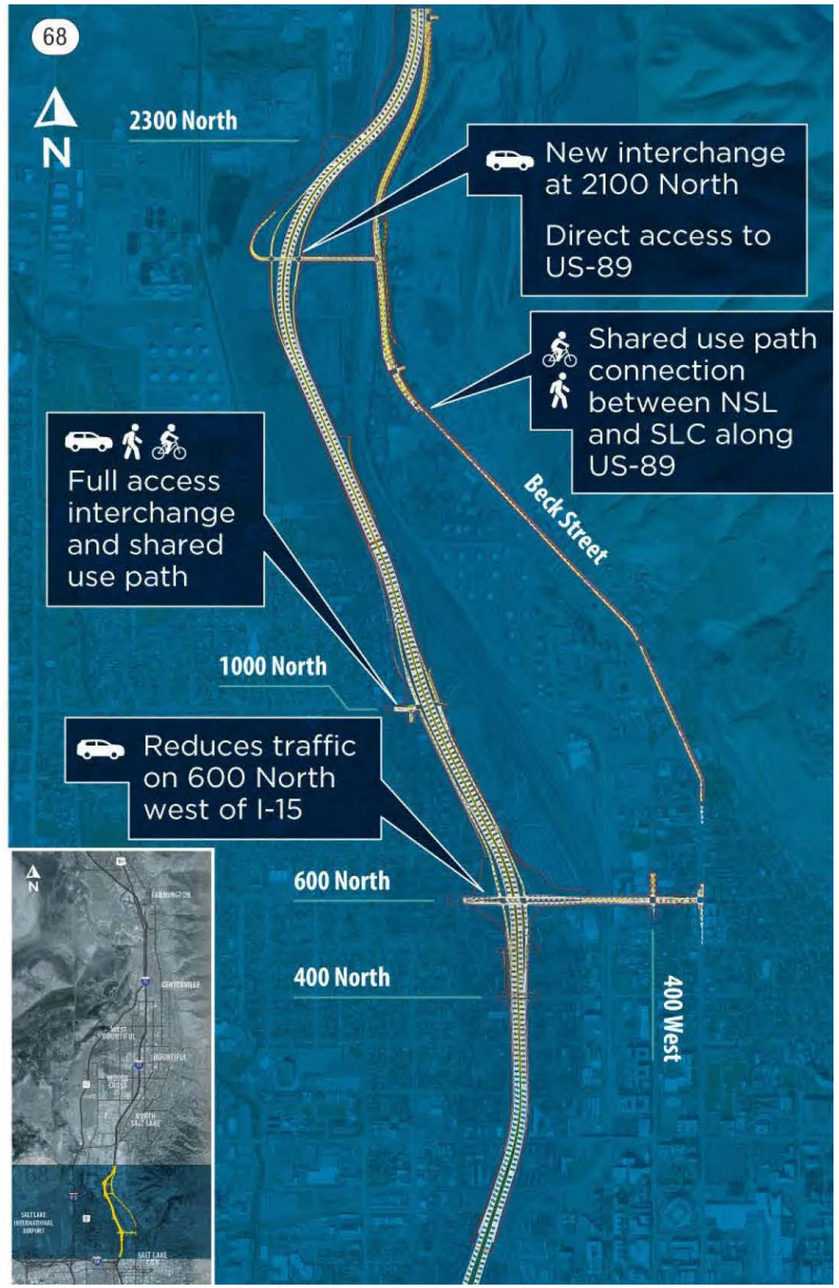
MAIN STREET

CENTER STREET

Salt Lake - Option A

600 N. CD and 2100 N. full diamond interchange



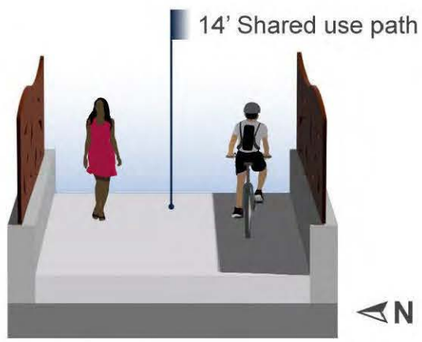


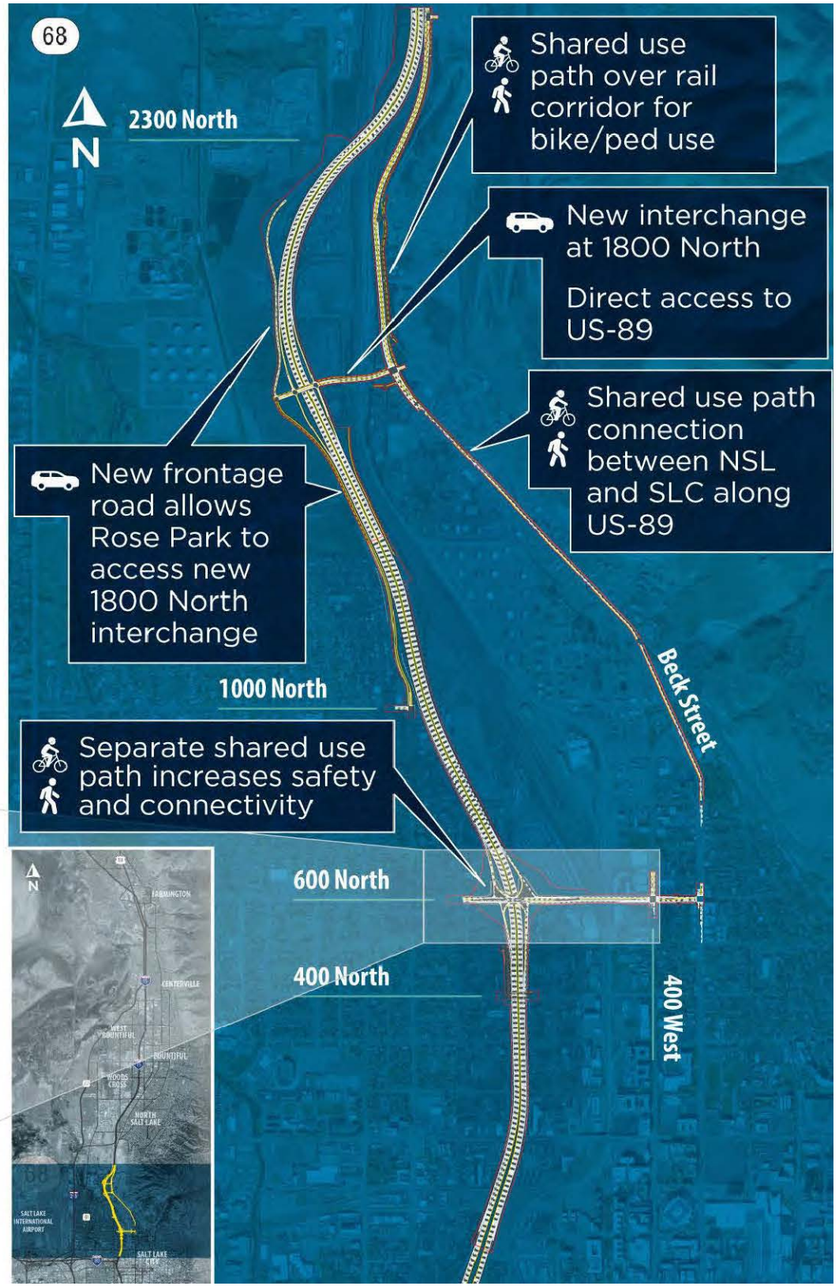
Salt Lake - Option B

600 N. SPUI and 1800 N. full diamond interchange

600 NORTH

600 NORTH





I-15 ENVIRONMENTAL IMPACT STATEMENT
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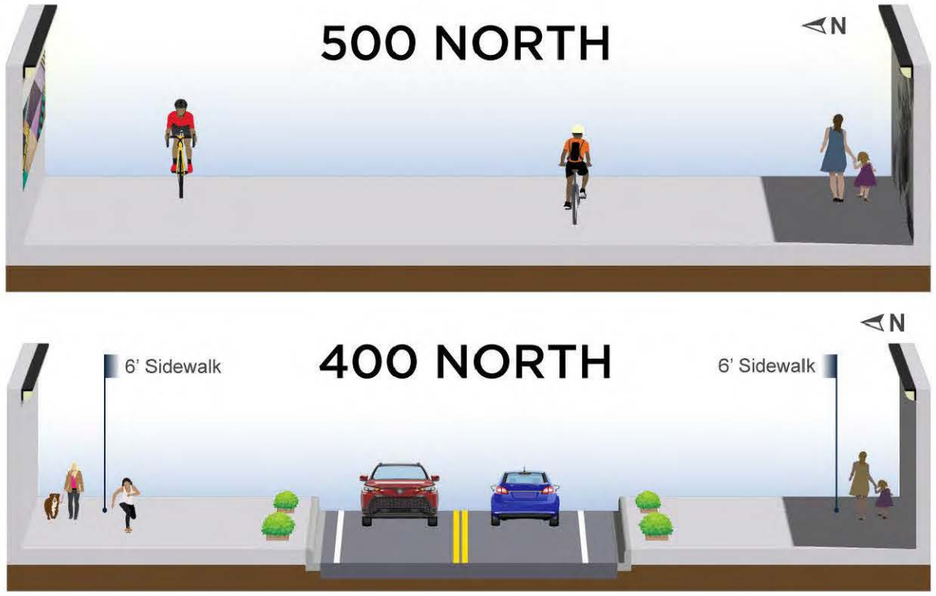
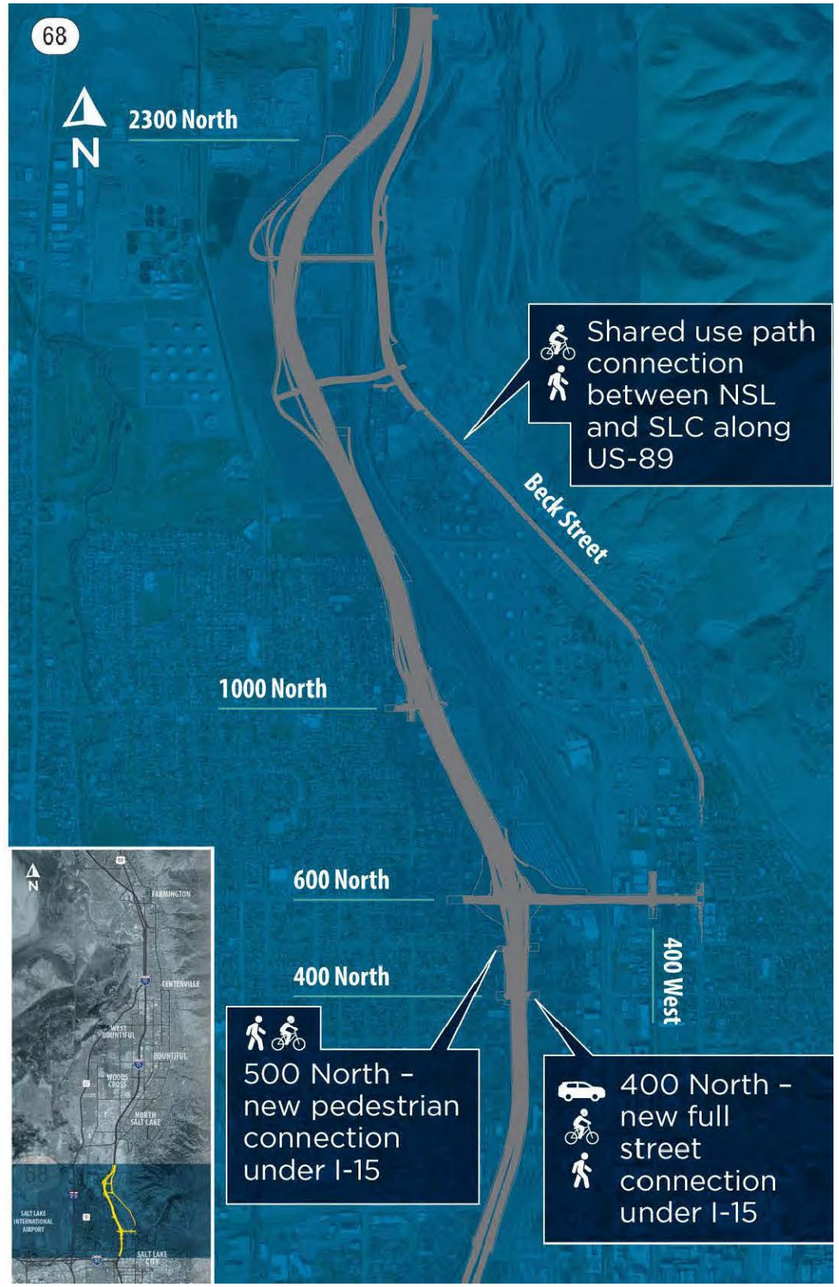
New Connections





Public Comments

Comment period November 10-December 16, 2022

Email: **i15eis@utah.gov**

Website: **i15eis.udot.utah.gov**

Mail: **I-15 EIS Study Team**
392 E. Winchester St., Ste 300
Salt Lake City, UT 84107

Only comments received during the formal comment periods will be documented and included in the final EIS.

Public Comments

What should I comment on?

Improve Safety

- Which alternatives address safety in areas/ways you care about?
- Are there safety issues you don't see addressed in the alternatives?

Better Connect Communities

- Do these alternatives help to better connect you to the places you want to travel?
- Which alternatives best align with how you see the future of transportation in your area?

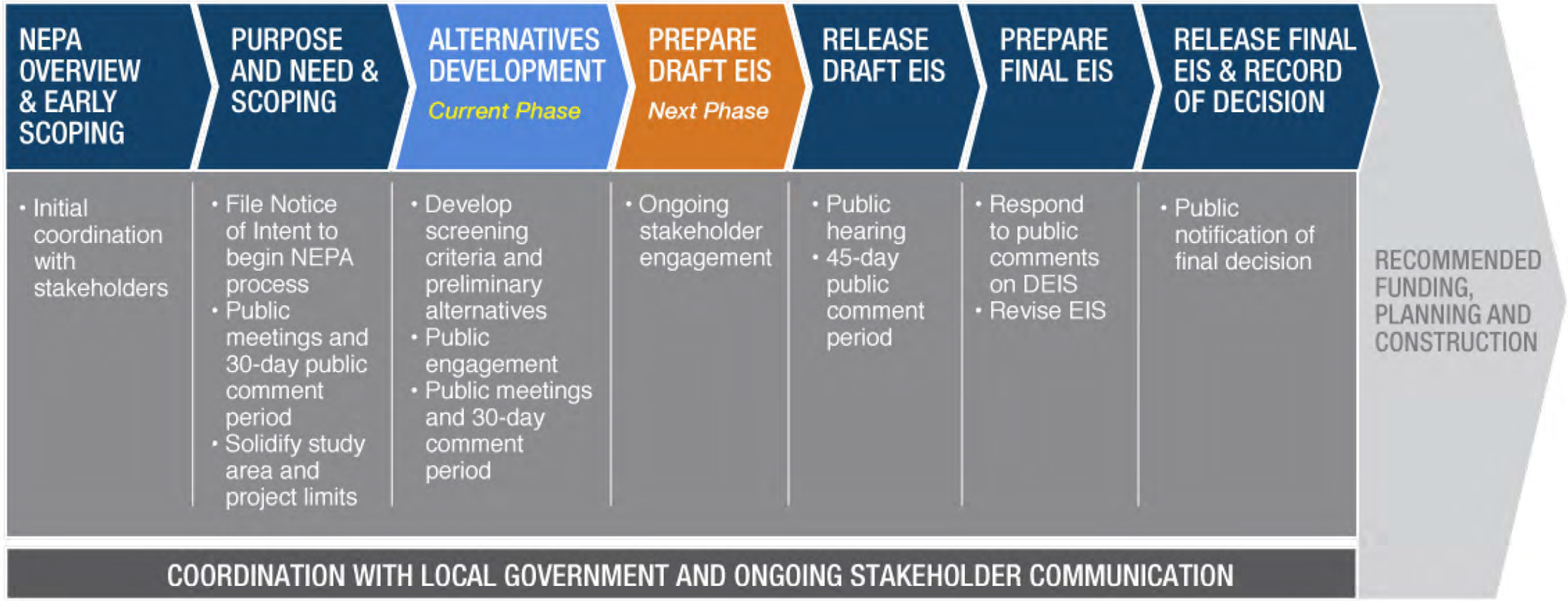
Strengthen the Economy

- What do you think of the trade-offs between the 5+1 and reversible options for I-15?

Improve Mobility for All Users

- Are there walking and biking connections you saw that work better than others?
- Were there improvements/connections you hoped to see that you didn't?

Next Steps


NEPA OVERVIEW & EARLY SCOPING
PURPOSE AND NEED & SCOPING
ALTERNATIVES DEVELOPMENT
Current Phase
PREPARE DRAFT EIS
Next Phase
RELEASE DRAFT EIS
PREPARE FINAL EIS
RELEASE FINAL EIS & RECORD OF DECISION
• Initial coordination with stakeholders
• File Notice of Intent to begin NEPA process
• Public meetings and 30-day public comment period
• Solidify study area and project limits
• Develop screening criteria and preliminary alternatives
• Public engagement
• Public meetings and 30-day comment period
• Ongoing stakeholder engagement
• Public hearing
• 45-day public comment period
• Respond to public comments on DEIS
• Revise EIS
• Public notification of final decision
RECOMMENDED FUNDING, PLANNING AND CONSTRUCTION
COORDINATION WITH LOCAL GOVERNMENT AND ONGOING STAKEHOLDER COMMUNICATION

Study Team Contact Information

Phone: **385-220-5797**

Email: **i15eis@utah.gov**

Website: **i15eis.udot.utah.gov**

Join our Facebook group to stay up to date:
facebook.com/groups/udoti15eis

El UDOT tiene ideas.
Usted tiene comentarios. Reunámonos.

ÚNASE A NOSOTROS PARA REVISAR LAS ALTERNATIVAS EN UNA JORNADA ABIERTA VIRTUAL O PRESENCIAL:

14 de noviembre
De 5 p. m. a 7 p. m.
Reunión virtual

15 de noviembre
De 5 p. m. a 7 p. m.
Rose Park Elementary

16 de noviembre
De 5 p. m. a 7 p. m.
South Davis Recreation Center

Más información en **i15eis.udot.utah.gov**

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

UDOT Keeping Utah Moving

UDOT has ideas. You have feedback. Let's get together.

JOIN US TO REVIEW ALTERNATIVES AT A VIRTUAL OR IN-PERSON OPEN HOUSE:

November 14
5-7 p.m.
Virtual Meeting

November 15
5-7 p.m.
Rose Park Elementary

November 16
5-7 p.m.
South Davis Recreation Center

Learn more at **i15eis.udot.utah.gov**

I-15 ENVIRONMENTAL IMPACT STATEMENT
Farmington to Salt Lake City

UDOT
Keeping Utah Moving

ATTACHMENT D

Draft Alternatives Comment Summary

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Appendix D: Draft Alternatives Comment Summary

D.1 Summary of Comments Received during the Draft Alternatives Comment Period

This summary provides a high-level overview of public and agency comments submitted during the draft alternatives comment period that ran from November 10, 2022, through January 13, 2023. This summary represents views or opinions of individual commenters; therefore, comments can conflict with one another and might not be factually correct. During the comment period, 2,890 comments were received.

Common Themes

- Requests to extend the comment period
- Comments against adding lanes to Interstate 15 (I-15) and/or against widening I-15
- Comments against adding capacity on I-15 because it will only lead to more traffic congestion due to induced demand
- Widening I-15 could cause unjust or inequitable impacts
- Support for widening and/or improving I-15
- Requests to increase transit capacity (bus and trains)
- Requests to divert project funds to transit or to the Utah Transit Authority (UTA) specifically
- Do not take homes, do not displace families, do not impact communities
- Concerns for relocations during an affordable-housing crisis
- Concerns for air quality
- Concerns for noise
- Concerns for climate change
- Concerns for inequitable impacts to neighborhoods in western Salt Lake City
- Frustration with the environmental process
- Support for no action as the best solution
- Support for increasing bicycle and pedestrian facilities and access across I-15
- Concerns that Utah will become similar to Los Angeles or Houston
- Desire for narrow, walkable streetscapes or transit-oriented development
- Comments in support of the Rio Grande Plan
- Requests for more-detailed impact information

Comment Period Extension

- Concern that 36 days is not enough time to review the screening report, and requests to extend the comment period

Active Transportation, Bicycle, and Pedestrian Accommodations

- Comments in support of the proposed improvements to bicycle and pedestrian infrastructure
- Bicycle and pedestrian infrastructure should be separated from roads for safety
- On-street bicycle and pedestrian infrastructure should be barrier-separated
- Pedestrian and bicycle improvements are a distraction from UDOT's goals for the I-15 corridor
- Eliminate right turns on red traffic signals for bicyclist and pedestrian safety

Proposed Project Cost

- Widening I-15 is too expensive
- Do not use taxpayer money to widen I-15
- Requests to divert project funds to transit projects or to UTA specifically

Environmental Justice

- Concerns for low-income and minority residents near I-15
- Comments discussing past redlining in Salt Lake City (*redlining* is the historic, discriminatory practice of outlining areas with sizable minority presence or high rates of poverty in red ink on maps as areas where services or investments such as credits, loans, insurance, healthcare, etc., would be withheld)
- Frustration with the perceived lack of collaboration with local communities, stakeholders, or homeowners
- Statement that I-15 is a social and economic barrier that divides communities

Environmental and Natural Resources

- Concerns for air quality
- Requests for air quality analysis specific to I-15
- Comment that the U.S. Environmental Protection Agency (EPA) is studying Salt Lake City for air quality concerns
- Concerns for increased noise or impacts from noise (both existing noise and future noise)
- Concerns for noise impacts during construction
- Concerns for climate change
- Statement that the U.S. Transportation Secretary will be contacted to assess climate impacts

- Concerns for bird habitat
- Concerns for the Great Salt Lake and requests to save the lake

Residential or Commercial Property Impacts

- Do not take homes, do not displace families, do not impact communities
- Concerns for residential relocations
- Home values will go down; will UDOT compensate homeowners for indirect impacts?
- Comments on the lack of affordable housing in the study area
- Concerns for access to businesses
- Concerns for impacts to businesses

Public Engagement Process

- Request for a more in-depth community engagement process
- Requests for more detail regarding specific public outreach and efforts
- Comments stating that all homeowners near I-15 should have been contacted directly
- Perception that the public is learning of this project after decisions have been made
- Comments stating that UDOT should provide more notice and more meetings to reach more people

Traffic Congestion

- Concern that, if lanes are added to I-15, traffic will increase due to induced demand
- Comments suggesting that no amount of additional lanes will fix traffic congestion due to induced demand
- Comments stating transit is the solution to traffic congestion
- Traffic in 2050 is going to be terrible; UDOT needs to properly plan now
- I-15 should have two high-occupancy/toll or high-occupancy vehicle (HOT/HOV) lanes in each direction to manage congestion
- Comment against HOT/HOV lanes during rush hour
- Comments against HOT/HOV lanes in general
- Comments that HOT/HOV lane use should be enforced or that HOT/HOV lanes do not work because they are not enforced
- Requests to make the current HOT/HOV lane a truck-only lane
- Requests to implement congestion pricing during peak times to reduce traffic and fund transit
- Comments that the travel demand models overestimate future traffic by 10% or 30%

- Comments that the travel demand model is not accounting for more people working from home in the future
- Requests to lower the speed limit on I-15 to 55 miles per hour (mph) to increase safety and improve air quality
- Requests to review the traffic model, calibration, assumptions, etc.
- Comments that traffic can be improved with electronic enforcement

Transit

- Requests to expand transit offerings to reduce congestion
- Requests to expand transit offerings to eliminate the need to widen I-15
- Comments that transit is the sustainable, holistic, or equitable solution
- Requests to double-track and electrify or otherwise expand FrontRunner commuter rail
- Requests to expand TRAX light rail service between Ogden and Salt Lake City
- Requests to expand TRAX service to West Valley
- Requests to expand transit service to include all days of the week and/or more frequent headways
- Requests to make public transit free
- Request for cost comparison of expanding FrontRunner and transit versus expanding I-15
- Requests to transfer project funds to UTA
- Comments in support of the Rio Grande Plan and requests to relocate rail lines to make the Rio Grande area the new central rail terminal for Salt Lake City
- Request to upgrade Salt Lake City's central rail terminal
- Comments that transit does not support the locations or the times of day that are useful
- Comments that transit does not support shift work; suggestion to study manufacturing schedules and available public transit
- Support for increased bus rapid transit
- Requests to increase the size of station parking lots
- UDOT should research Tokyo's public transit
- UTA should bring back bus line 313
- UDOT proposed transit (gondola and buses) for Little Cottonwood Canyon; requests for transit-focused solutions for I-15
- Requests to increase bus service in the Cottonwood canyons
- Requests to pay bus drivers a better wage so vacant driver positions can be filled
- Lack of transit in Utah forces car ownership
- Convert HOT/HOV lanes to bus-only or train-only transit to reduce traffic congestion

Social Influences / Land Use Suggestions

- Comments to move people, not cars
- Encourage or incentivize people to live where they work
- Encourage people to work from home or incentivize businesses to allow more work-from-home opportunities
- Encourage carpooling
- Avoid car-centric development and encourage transit-oriented development
- The best or most successful communities are not car-centric; improve city planning in Utah
- Incentivize transit or bicycle modes; disincentivize driving cars
- Designate some roads as bicycle-only and remove cars
- Support for no action and the resulting traffic congestion on I-15 as the means to force more people to transit modes or travel outside peak periods
- The goal should not be to make roads so terrible that they force bus use (comment in support of widening I-15)
- Increase density of urban development to improve walkability and travel by other modes
- UDOT should put money toward driver education to reduce problematic driving behaviors or develop marketing campaigns to discourage aggressive driving
- Suggestions that expanding transit does not have any negative impacts or has limited negative impacts—for example, does not relocate residents, improves air quality, better return on investments, lower per-user or societal costs, etc.
- Requests that state and local agencies work together or assumptions that the agencies are not working together
- Owners of heavy-duty vehicles should pay more in taxes to cover the cost of road repairs, or the State of Utah should impose expensive licensing fees to limit commercial truck use of I-15
- Implement a voucher system for e-bikes with the project funds
- Transit should be subsidized to make it more attractive, or request to use project funds to cover transit fares
- Some cities are removing highways; Utah should do the same
- Use eminent domain for affordable housing near employment centers instead
- Incentivize employers to provide nearby affordable housing
- The State of Utah is missing an opportunity to make a real improvement and make the area a unique example in the West
- The State of Utah should provide rebates for hybrid and electric vehicles
- Make improvements to I-15 self-financing; do not use taxpayer money

- Drivers should be required to schedule a time to drive on I-15
- Exits should be spaced 20 miles apart to encourage public transportation use
- Perception that Utah cannot handle more growth, and requests to limit development or encourage less growth

Quality of Life

- General comments about how the project threatens Utah's quality of life

Good Health Comments

- Widening I-15 will increase pollution and decrease health for residents that live near it
- Request for a case study to summarize public health impacts of living next to I-15
- Concerns for safety during construction
- Widening I-15 will increase traffic and increase accidents
- Support for the bicycle and pedestrian improvement concepts
- Concerns for climate change
- Concerns for the Great Salt Lake and water quality in general
- Save the Great Salt Lake instead
- People are not using the bike facilities; this is just a "feel-good" addition
- Transit is safe
- Noise of construction will reduce the health of nearby residents
- Free-flowing traffic will improve air quality and health of residents
- Widening I-15 will make residents' asthma worse
- Impacts to mental health, not just physical health

Better Connect Communities Comments

- The proposed underpasses in Salt Lake City will not benefit the community
- I-15 is a barrier that divides communities; this project will increase the divide
- Comments asking which homes will be acquired
- Transit brings people together; car drivers are isolated

Improve Mobility for All Modes Comments

- Widening I-15 will not improve mobility for all modes

Strengthen the Economy Comments

- Widening I-15 will not improve the economy
- Increasing transit will benefit the economy through higher land values (S-Line examples)
- Increased transit improves the economy because residents would not have to pay to maintain their cars or pay for gas, freeing up more disposable income
- Widening I-15 is a waste of taxpayer money
- Smaller highways benefit the economy more than wide interstates
- Question whether federal dollars will be used to keep costs down for Utah taxpayers
- Concerns that widening I-15 will increase operations and maintenance costs for UDOT
- Request for information pre- and post-construction on residential values
- Improved transportation allows more people to purchase homes in more-affordable areas

Proposed Design Refinements – General

See specific alternatives below for alternative-specific suggestions.

- Requests to include physical barriers for on-street bike lanes for safety
- Requests for more noise walls
- Paint lines and striping on I-15 are difficult to see and need to be improved
- I-15 should be two levels instead of being widened; build high, not wide
- I-15 should be constructed in a tunnel or buried
- Build alternate routes to I-15 instead of widening I-15
- Requests for better signage and wayfinding for bicyclists and pedestrians
- Create a truck corridor between Ogden and Payson (north and south) and from Magna to the entrance to Parley's Canyon (east and west)
- Support for right angles at ramp ends to improve pedestrian and bicyclist safety
- Request for raised crosswalks for visibility
- Better traffic signal timing for bicyclists and pedestrians; priority for bicyclists and pedestrians at signals
- Use asphalt, not concrete, for noise reduction
- Single-point urban interchanges (SPUIs) are confusing; include better signage closer to the intersection
- Reduce the speed on I-15
- Build narrow lanes of 11 to 11.5 feet wide rather than the UDOT standard of 12 feet wide to calm traffic or to reduce the width of I-15

- Request for vehicle specific lanes—truck-only, bus-only, motorcycle-only, etc.
- Shared-use paths should be grade-separated from the rail tracks
- Improve lighting along I-15 for safety

Screening Measures Comments

- Suggestions to use bicyclist and pedestrian–specific measures for screening

Alternatives Comments

- Repave existing roads before starting new projects
- Requests to start the alternatives development process over and develop a hybrid, holistic, more equitable, or transit-focused option
- Transit options should be prioritized first and studied, then roadway options considered in the future
- Frustration with the limited number of I-15 options considered
- Comments against widening I-15 to 20 or more lanes
- Comments to widen Legacy Parkway instead of widening I-15
- Comments to widen Legacy Parkway and Interstate 215 (I-215), not I-15
- Requests to create a reversible-lane system on Legacy Parkway similar to that in Seattle with gates on the off- and on-ramps to alter the directional flow of traffic
- Requests to convert existing HOV/HOT lanes to limited-access bypass lanes for general traffic
- Add a truck bypass on the west side of the Great Salt Lake to remove through truck traffic from I-15
- Comments to implement minimum speed limits for lanes to improve traffic flow on I-15 and eliminate the need for another lane
- Include above-grade high-speed rail with express shuttle system to stations
- Request by the SMART Transportation Union that an overpass over the North Salt Lake Railyard Terminal accommodate future widening of the railyard and FrontRunner
- Remove I-15
- Bury I-15
- Convert all lanes on I-15 to HOT lanes to reduce congestion and fund transit projects
- Implement a flexible, reversible system that will adjust the lanes open by the direction of dominant traffic flow or accidents—that is, open more lanes in a direction when an accident closes several lanes
- Add two lanes in each direction, not one, to make more of a difference in reducing congestion
- Incorporate a light rail system down the center of I-15

No-action Alternative

- Support for no action in the context of rebuilding I-15 in its current configuration
- Support for no action in the context of doing nothing at all
- Support for no action and the resulting traffic congestion on I-15 as the means to force more people to use transit
- Perception that the No-action Alternative protects homes and saves taxpayers money
- Support for repair of aging infrastructure on I-15 or fixing bridges but not widening
- It's too soon to know whether widening I-15 is necessary; UDOT should wait for the West Davis Corridor to be constructed first, then review the traffic characteristics

I-15 Mainline – General Widening 5+1 (Option A)

- Comments against widening I-15 (Option A)
- Support for widening I-15 (Option A)
- Support for widening I-15 as the most economical option to manage Utah's growth
- Comments stating this is not a long-term solution due to induced demand

I-15 Mainline – Reversible Lanes (Option B)

- Comments in support of the reversible lanes (Option B)
- Comments against the reversible lanes (Option B)
- Concerns for snow removal and traffic operations within the reversible lanes
- Use the existing width on I-15 and reconfigure the HOT lanes to serve as the reversible lanes
- Comments against the reversible option due to width and potential need for more relocations
- Utah drivers will find the reversible lane system confusing
- Concern for exit at 400 South in Option B

Salt Lake City Alternatives

General

- Concerns that expanding I-15 will harm the west-side communities of Salt Lake City through property and resource impacts.
- I-15 is already perceived as a barrier between the east and west sides of Salt Lake City; widening it will increase this barrier
- Warm Springs is a historic area, and UDOT should consult with the citizen group Warm Springs Alliance and Preservation Utah
- Concerns for disproportionate effects on low-income and minority populations

- Concerns for relocations during an affordable-housing crisis
- Concerns for noise, air quality, and overall environmental impacts
- Support for increased bicycle and pedestrian pathways
- Perception that Salt Lake City bears the burden of the expansion and increased pollution to the benefit of the northern counties
- 600 North is already wide and dangerous to cross; do not make it wider
- Request to make 600 North a 25-mph, tree-lined, narrow street with bike and bus lanes from I-215 to 300 West
- Include 400 South interchange improvements with this project
- Support for moving truck traffic off 600 North
- Request for better road maintenance for cyclists; that is, street sweeping and garbage collection
- Request to remove bike lanes and allow bicyclists to use the sidewalks instead
- Request to remove the 600 West rail yard
- Rail lines impede vehicle and bicycle access in downtown Salt Lake City
- Concern for impacts Mary W. Jackson Elementary School
- Concern for cumulative impacts to Salt Lake City residents with the Inland Port proposals
- Requests for more community meetings and involvement in alternatives development
- Support for improvements along US-89 to provide an alternate to travel on I-15
- Suggestion that the alternatives might be in conflict with Salt Lake City Redevelopment Agency plans for the west-side neighborhoods
- Requests to protect the nearby wetlands and bird habitat
- Comments that 600 West is a better route for bikes than Beck Street

Access

- 1000 North 900 West is an important on-ramp; both proposed options for Salt Lake City will negatively impact traffic movements by limiting access for the community and forcing more traffic onto 600 North
- Request to keep access at 1000 North
- Request to add northbound off-ramp at 400 South (non-HOV/HOT)
- Request to not include an off-ramp at 1000 North because of increased traffic and proximity to Rose Park Elementary School

Salt Lake Option A

- Support for Option A
- Request to reposition bike lanes outside the right lanes that motorists will use for accessing I-15
- Request for barrier protection of bike lanes on 600 North

Salt Lake Option B

- Support for Option B
- Support for Option B because of the location of the 1800 North interchange
- Opposition to Option B due to more out-of-direction travel to 1800 North for Rose Park residents
- Opposition to Option B shared-use path at 600 North due to out-of-direction travel
- Request to reposition bike lanes outside the right lanes that motorists will use for accessing I-15
- Request for barrier protection of bike lanes on 600 North

Underpasses at 400 North and 500 North

- Support for underpasses at 400 North and 500 North
- Comments against underpasses at 400 North and 500 North due to safety concerns related to the potential for increased use by people experiencing homelessness and potential for crime
- Comments against an underpass at 400 North only
- Comments against an underpass at 500 North only
- Concerns for pedestrian access over the rail tracks on the east side if underpasses are constructed
- Concerns for increased traffic with underpasses
- The underpasses will ruin the charm of the Guadalupe neighborhood and its low traffic volumes
- An underpass at 400 North would make Hodges Lane unsafe to access
- Instead of adding a new underpass at 400 or 500 North, the project should improve 300 North

North Salt Lake Alternatives

General

- Request to add a northbound on-ramp at Center Street
- Requests to retain the southbound off-ramp at Center Street
- Comments that the Center Street southbound off-ramp is critical to quality of life
- Requests to widen Center Street
- Requests for I-215 access to I-15 southbound
- Support for proposed interchange between I-15 and I-215

- Request to add an overpass over the railroad tracks at Center Street as part of the I-15 project
- Request to add an overpass over the railroad tracks at 2600 South as part of the I-15 project
- Concern for traffic operations on 800 West and Wildcat Way
- Support for the connection of 800 West and Wildcat Way
- Concerns that access to 800 West from Overland Road will be impacted
- Connect Legacy Parkway to Beck Street (U.S. 89) over the Chevron refinery as a means to use eminent domain to relocate the refinery for the benefit of air quality

North Salt Lake Option A

- Support for Option A

North Salt Lake Option B

- Support for Option B

Bountiful and Woods Cross Alternatives

General

- Concerns that traffic could increase on 1500 South based on changes at 2600 South
- Requests to retain the 500 West connection; it's critical to businesses on 500 West
- Support for right angles at ramp ends to improve pedestrian and bicyclist safety
- Support for shared-use path from 500 South to Woods Cross FrontRunner station
- Questions about final design of the 500 South shared-use path
- Add a SPUI to 500 South in Bountiful
- Add an underpass at 1000 North in Bountiful

Bountiful Option B

- Support for Option B
- Request to add a collector-distributor (CD) system to Option B
- Question about how traffic moves through the option

Bountiful Option C

- Support for Option C
- Opposition to Option C due to increased impacts east of I-15

Centerville Alternatives

Centerville General

- Concerns for impacts on the east side to residents through increased noise and traffic, and the expense of relocating utilities and stormwater facilities
- Request for improved access or an alternate route to access the northeast corner of Parrish Lane, near CenterPoint Legacy Theater on 400 West
- Support for new grade-separated pedestrian crossings at 200 North and Centerville Community Park
- Expand to the west into the rail corridor, not to the east, to limit housing impacts

Option A

- Support for Option A

Option B

- Support for Option B, the SPUI at Parrish Lane, the 200 North grade-separated pedestrian crossing, and the improved access to the Legacy Parkway Trail

Farmington Alternatives

Rebuild Existing 200 West (Farmington Option A)

- Comments in support of Option A
- The existing configuration of 200 West did not work well in a recent fire evacuation
- Comments to make adjustments with Option A to improve safety on 200 West
- Add the eastbound left-turn lane onto northbound 400 West (this comment views this as a design omission that should be added back in)

Glovers Lane Interchange (Farmington Option B)

- Comments in support of a new interchange on I-15 at Glovers Lane
- Keep the I-15 and 200 West configuration in Farmington as is, and add a partial or full interchange at Glovers Lane on West Davis Corridor
- Comments against a new interchange on I-15 at Glovers Lane
- Concerns for relocations east of I-15
- Concerns for change in community character with a new interchange at Glovers Lane
- Comments that Option B would put a lot of traffic in a residential area. Options A and C would place traffic in a commercial area. Options A or C make the most sense for Farmington
- Comments that new interchanges should not be added to residential areas without commercial development

- Comments that, if an interchange is added at Glovers Lane, UDOT should buy enough homes to properly widen Glovers Lane because there will be an increase in traffic
- Support for an interchange at Glovers Lane as a means to improve Park Lane
- Support for an interchange at Glovers Lane as a means to improve Parrish Lane
- Support for improvements at Parrish Lane and/or Park Lane to alleviate the need for an interchange at Glovers Lane
- Statements that an interchange at Glovers Lane will increase crime
- Concern for safety of high school students with increased traffic on Glovers Lane
- Concern for noise impacts from Option B
- Requests for residents to meet with UDOT to discuss Glovers Lane
- Comments that the low volume of traffic on Glovers Lane does not warrant an interchange
- Request for traffic impact study for Glovers Lane interchange on nearby local streets
- Concerns for deer population near the foothills and Glovers Lane
- If the Farmington High School boundary changed, an interchange at Glovers Lane would not be necessary

200 West Improvements (Farmington Option C)

- Comments in support of Option C
- Comments against Option C
- Comments stating concerns about unusual design and geometry of the Option C 200 West interchange

Farmington Access

- Request for an on- and off-ramp to I-15 near 1470 South near South Park
- Request to maintain the road to the Lagoon amusement park for northbound traffic while adding access from 200 West
- Requests to add an interchange on West Davis Corridor of I-15 for west Kaysville to travel to Farmington High School

Farmington General Comments

- The project should include Park Lane and access to the Farmington FrontRunner Station and Station Park shopping area
- Instead of improved or new pathways between the Farmington FrontRunner Station, Station Park, and Lagoon, UDOT should improve wayfinding for pedestrians
- The study area does not need to extend to Farmington; there are no traffic problems on I-15 in Farmington
- The study area should extend farther north to Hill Air Force Base
- Concern for noise and air pollution in Farmington
- The elevated segments of West Davis Corridor are increasing noise pollution
- Request to meet with UDOT about potential relocation
- Many cyclists use Glovers Lane to access the Farmington Bay Waterfowl Management Area, a bird refuge; increasing traffic on Glovers Lane will decrease cyclist safety
- Make repairs to damage done by overweight gravel trucks during the West Davis Corridor construction
- Request to complete the curb, gutter, and sidewalks along Glovers Lane
- Comment that improvements are necessary to handle growth in Farmington
- Request for lower speed limits and engine braking noise restrictions around Glovers Lane
- Move all options farther west of 400 West to avoid demolishing homes
- Request for a dirt berm in the Flatrock Ranch subdivision for noise mitigation
- Concern for school students walking on the frontage road
- Request to model traffic on local streets for all interchange options

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