

Chapter 9: Response to Comments on the Draft EIS

This chapter contains the responses to comments, both oral and written, that were received on the Interstate 15 (I-15): Farmington to Salt Lake City Draft Environmental Impact Statement (EIS) from members of the public, government agencies, and nongovernmental organizations during the 45-day public comment period from September 29, 2023, to November 13, 2023. Individuals and agencies who commented on the Draft EIS are listed alphabetically with their associated comment number in Appendix 9A, *Reproductions of Comments on the Draft EIS and Response Matrix*. To find the response to your comment, first find your name in Appendix 9A (if you provided your name), then find your comment, which shows the associated response codes. These response codes indicate the sections of this chapter that address your comment.

How do I find the responses to my comment?

First find your name in Appendix 9A (if you provided your name), then find your comment, which shows the associated response codes. These response codes indicate the sections of this chapter that address your comment.

Appendix 9A, *Reproductions of Comments on the Draft EIS and Response Matrix*, presents reproductions of written comments and transcriptions of comments that were submitted orally. Emailed attachments to comments and a copy of the public hearing transcripts are compiled in Appendix 9B, *Attachments to Emailed Comments on the Draft EIS and Public Hearing Transcripts*. Each comment or statement is identified in Appendix 9A by commenter name (if provided by the commenter) and the method by which the comment was collected. Each statement or question regarding a separate environmental issue within the comment is labeled with a response code that corresponds to a section in this chapter.

Summary of Comments. A total of 914 comments were received on the Draft EIS from individuals, organizations, and government agencies. The comments were submitted by letter, email, map and website submission, and public hearing testimony.



9.1 Common and General Comments

The Utah Department of Transportation (UDOT) received a large number of comments on the Draft EIS that either expressed similar concerns or offered general opinions about transportation issues that were not focused specifically on information or analyses in the Draft EIS. These common themes and general comments are addressed in this section.

9.1.1 Category 1: Comments Related to the Project Purpose and Need and Action Alternative Efficacy

UDOT received numerous comments questioning the purpose of and need for the I-15 project or stating that the project would not have benefits—for example, due to the potential for induced traffic demand or other reasons. The general sentiments expressed in this category included comments stating that the project's benefits would not occur, that the benefits are overstated, or that the benefits of constructing the project are not worth the impacts or cost. Specifically:

- Commenters stated that additional capacity on I-15 is not needed. Commenters stated support for the No-action Alternative or that UDOT should do nothing. Commenters asked UDOT to maintain but not widen I-15.
- Commenters stated that the benefits of the Action Alternative or additional capacity on I-15 were not worth the costs and impacts of the project. Commenters stated that the No-action Alternative conditions would be the same as the current conditions, that the No-action Alternative conditions would be the same as the Action Alternative conditions in 2050, or that additional capacity on I-15 would only make congestion worse.
- Commenters stated that additional capacity on I-15 would not work or would have short-lived benefits to travel time and congestion because of induced travel demand. Commenters questioned UDOT's research or due diligence regarding induced demand or suggested that UDOT did not account for induced demand in the study's traffic modeling.
- Commenters stated that the travel demand model is not a good tool to use or that it does not
 account for future shifts in employment (such as more people working from home). Commenters
 stated concerns about the travel demand model data and that the model's predictions might not be
 accurate.
- Commenters stated that adding capacity to I-15 would result in induced development and sprawl beyond the study area in Davis and Weber Counties.

Responses

Why is additional capacity on I-15 needed? UDOT should choose the No-action Alternative. As described in Chapter 1, *Purpose and Need*, and Appendix 1A, *Purpose and Need Chapter Supplemental Information*, the populations of the Wasatch Front, Utah, and the Intermountain West (Idaho, Montana, Colorado, and Nevada) are growing and are projected to continue to grow between now and 2050. In 1960, when this segment of I-15 was initially constructed, Utah's population was less than 900,000. In 2022, Utah's population was approximately 3.3 million. In 2050, Utah's population is projected to be 5.0 million, and around 3.6 million people are projected to live just in the four Wasatch Front counties (Salt Lake, Davis,

Weber, and Utah Counties). Also note that I-15 is a regional facility that serves national, regional, and local traffic. The interstate system fills an important role in the western United States, not just in Utah. Estimates show that, in addition to moving people, the nation's roadway system carries 71% of the freight we use as a society (USDOT 2022).

Utah must accommodate its fast-growing population (which recently has been the fastest growing in the nation based on a percentage basis) while keeping the transportation system running smoothly and supporting the long-term plans of Cities, Counties, and metropolitan areas. Preparing for the future requires many transportation options, so UDOT works closely with partners—such as the Utah Transit Authority (UTA), local governments, and regional planning agencies—to create more choices so people can get where they want to go in the way they want to get there. To accommodate the population growth expected and projected by 2050, additional capacity is needed for all travel modes including roads, transit, and active transportation (such as walking and bicycling).

UDOT considers both current and future travel demand in the transportation planning process. To forecast future travel demand, UDOT uses the regional travel demand model that is maintained by the Wasatch Front Regional Council (WFRC) and the Mountainland Association of Governments (MAG). This model has been reviewed by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), and it is the best available model for transportation planning.

The travel demand model uses existing travel data and then predicts future travel demand based on projections for land use (from city, county, and regional master plans); socioeconomic patterns, such as population and employment growth; and the planned transportation networks (for all modes). The multimodal needs and plans for investment in multimodal facilities are documented in WFRC's 2019–2050 regional transportation plan (RTP; WFRC 2019a). The I-15: Farmington to Salt Lake City Project

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. This prediction is based on the expected population, employment, household, and land use conditions in the area. The travel demand model used for the I-15 project is maintained by WFRC and MAG.

is one of many planned transportation projects in WFRC's 2019–2050 RTP. Other projects in the RTP that were considered in the travel demand model include double-tracking FrontRunner, constructing the West Davis Corridor, adding lanes on Legacy Parkway, and adding lanes on Interstate 215 (I-215).

After all other improvements were assumed, the travel demand model showed that additional freeway capacity was still needed. UDOT assessed how many lanes it would take to improve conditions not only today but also in 2050. UDOT looked at several options for additional capacity alongside what would happen if no capacity were added to I-15. The additional capacity options included the following:

- Three or four general-purpose lanes and three high-occupancy/toll (HOT) lanes in each direction
- Five general-purpose lanes and two reversible lanes (also known as flex lanes) in each direction (presented during the draft alternatives public comment period)
- Five general-purpose lanes and one HOT lane in each direction (presented during the draft alternatives public comment period)
- Five general-purpose lanes and two HOT lanes in each direction
- Six general-purpose lanes and one HOT lane in each direction





Only the five general-purpose lanes and one HOT lane option and the five general-purpose lanes and two reversible lanes option were presented during the draft alternatives public comment period because these would provide benefits in 2050 with less impact than the other, wider lane configurations. During Level 2 screening, UDOT determined that the five general-purpose lanes and one HOT lane concept would provide sufficient benefits and would meet the purpose of the I-15 project while minimizing impacts.

What is Level 2 screening?

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

If no capacity is added to I-15, even with all the other transportation improvements in the RTP successfully implemented, it would take more than an hour to travel through the study area on I-15 by 2050. By comparison, implementing the five general-purpose lanes and one HOT lane option would result in a travel time of 30 minutes. Although this is still an increase in travel time over today, UDOT believes that this option best balances travel improvement with impacts to the surrounding community.

Note that doing nothing to I-15—that is, the No-action Alternative—is evaluated in the Draft EIS and will be considered by UDOT in making a final decision on the I-15: Farmington to Salt Lake City Project. As stated in Section 2.4.1, *No-action Alternative*, even under no-action conditions, I-15 pavement would be rehabilitated, and structures would be replaced. The No-action Alternative still includes construction and maintenance on I-15 without the proposed benefits of the Action Alternative. The No-action Alternative would not meet the purpose of the project and is not consistent with WFRC's 2019–2050 RTP.

Will the project reduce congestion over the existing or no-action conditions? Are there benefits from choosing the Action Alternative? Yes. As described in Section 3.1.1, *Level 1 Screening for Mainline Concepts*, of Appendix 2A, *Alternatives Development and Screening Report*, the Action Alternative provides several traffic benefits over the No-action Alternative. Compared to the no-action conditions in 2050, the Action Alternative is projected to reduce travel time by 51% for southbound travel, reduce travel time by 45% for northbound travel, improve the average speed by 95% for southbound travel, and improve the average speed by 125% for northbound travel. The Action Alternative would also decrease daily network delay by 47%, or 45,000 hours compared to no-action conditions. Compared to existing conditions (in 2019), the Action Alternative results in an increase to travel times and delay, and a decrease in average speeds.

To fully meet the expected demand for freeway travel and maintain travel times and speeds in 2050 at similar levels as the 2019 levels, seven lanes in each direction would be required. During the alternatives development and screening process, UDOT evaluated a mainline option with three express lanes and three or four general-purpose lanes. This concept was determined to best reduce travel time and increase average speeds compared to the 2050 no-action conditions and the other mainline options evaluated as part of the Draft EIS. However, the three express lanes and three or four general-purpose lanes mainline option would have substantially more resource impacts than the five general-purpose and one HOT lane concept that passed Level 2 screening and that is included as part of the Action Alternative. For more information, see Appendix 2A, *Alternatives Development and Screening Report*.

When selecting the Action Alternative, UDOT worked to balance providing benefits with minimizing impacts. As described in Section 2.4.5, *Basis for Identifying the Selected Alternative*, the Action Alternative is the preferred alternative because it would meet the purpose of the project and provide substantial benefits to safety, mobility, and the transportation network for all users. UDOT acknowledges the costs and impacts



from the Action Alternative, and these are disclosed in this EIS. The No-action Alternative would not meet the purpose of the project. UDOT will continue to consider ways to minimize impacts and costs with the Action Alternative in the final design phase and during construction.

Will "induced demand" result in more vehicles using the additional capacity on I-15 and decrease the benefit of the additional capacity? Are additional lanes less effective? Will the project increase traffic? UDOT is aware of induced demand and its potential to affect traffic operations on I-15. The term *induced demand* refers to the concept that constructing new or improved roads will encourage additional automobile travel and potential changes to land use. Closely related to induced demand is the concept of *latent demand*, which refers to trips that desire to use a particular facility but avoid it due to congestion. Latent-demand trips will shift from less desirable routes to the desired facility if additional capacity is provided. The UDOT and WFRC travel demand model accounts for induced demand, latent demand, and increased demand caused by growth in population and employment.

Although induced demand would use some of the additional capacity on I-15, UDOT anticipates it to be a small portion of the overall traffic growth for the future. As a test scenario, the travel demand model was run for traffic volumes and demand in 2021 using the No-action Alternative and Action Alternative assumptions for the number of lanes on I-15. This test scenario also assumed population and employment assumptions in 2021. The model predicted an additional 1,120 motorized trips per day in the broader Wasatch Front urban area with the increased I-15 capacity. The total number of motorized trips in the model was 8,049,700, so induced-demand trips represented an overall increase of 0.01%.

As shown in Appendix 2A, *Alternatives Development and Screening Report*, the additional I-15 capacity proposed as part of the Action Alternative would accommodate some—but not all—of the expected growth in demand for travel on I-15. The model does account for induced demand with interstate widening; however, even with the extra demand, the model projects substantial improvement in 2050 over the No-action Alternative.

UDOT is aware of the tradeoffs with functionality and operations from additional capacity on I-15. These tradeoffs are accounted for in the project's traffic modeling. As shown in Appendix 2A, *Alternatives Development and Screening Report*, the additional capacity would reduce travel time, increase speeds, and decrease daily network delay for users on I-15 compared to the No-action Alternative.

UDOT believes that the travel demand model accurately estimates vehicle-miles traveled (VMT) and induced travel demand. WFRC's travel demand model is a state-of-the-practice model that predicts traffic movement and is used by WFRC and UDOT to determine the need for transportation projects. The model is calibrated to actual, observed traffic conditions and meets an advanced practice guideline by FHWA and FTA for similarly sized areas. The model is also approved by FTA to predict transit ridership for future projects. UDOT used WFRC's modeling to predict all related traffic congestion and VMT for the I-15 No-action and Action Alternatives.

As shown by the EIS analysis, VMT in 2050 is projected to be greater with the Action Alternative than with the No-action Alternative.

A study described in the report *Wasatch Front Regional Council (WFRC) Model Sensitivity Testing and Training Study* (Cambridge report; Cambridge Systematics, Inc. 2003) was performed to test the travel demand model's ability to simulate induced travel. The report's authors performed a literature review, which found that elasticities for all project types ranged from about 0.1 to 1.1 (Cambridge Systematics, Inc. 2003,



Figures 2.1 and 2.2). The alternatives tested in the Cambridge report showed elasticities ranging from 0.08 to 1.23 based on percent changes in VMT and lane-miles in the travel demand model. The authors concluded that "the WFRC model is sensitive to changes in the highway network" and that "model elasticities fall within the expected range of acceptability based on comparisons with elasticities cited in a variety of research papers" (Cambridge Systematics, Inc. 2003, page 7-1). An elasticity analysis was performed for the I-15 Farmington to Salt Lake City EIS and found that the Action Alternative would increase VMT by 5.4% in the area around I-15 and increase lane-miles by 4.7%. This is an elasticity of 1.1, which is within the expected range mentioned in the Cambridge report.

The Cambridge report concluded, "It is hoped that the findings of this study will add credence to the findings of recent and ongoing Environmental Impact Studies [*sic*] in showing that the Wasatch Front Regional Council's travel demand model appears to provide logical results."

Travel Demand Model Uncertainty. UDOT believes that the travel demand model accurately estimates future conditions. WFRC's travel demand model is a state-of-the-practice model calibrated to actual, observed traffic conditions, and it meets an advanced practice guideline by FHWA and FTA for similarly sized areas. The model is also approved by FTA to predict transit ridership for future projects.

However, as with any simulation model, there are uncertainties associated with forecasts, and any forecast is considered a snapshot in time based on the best available information at the time of the forecast. Uncertainties in model output can result from the input data, such as the future (2050) population, employment, and household forecast, as well as from the model's structure.

WFRC states that the range of uncertainty for this model falls within the acceptable confidence intervals in FHWA's *Travel Model Validation and Reasonableness Checking Manual* (FHWA 2010). FHWA's document was developed for travel demand forecasting staff to help validate model output. WFRC documented its validation results in the report *Wasatch Front Travel Demand Model Version 8.3.2 Validation Report* (WFRC 2022).

Part of the model-validation process described in the manual includes reasonableness and sensitivity testing for each model element. Although WFRC and FHWA agree that there is uncertainty in travel demand modeling, for environmental studies or alternatives analyses, they recommend using the travel model directly so that alternatives can be compared.

FHWA states that any technical limitations of travel models should not, in and of themselves, be sufficient cause to discredit the results of travel forecasts for environmental decisions (FHWA 2010). Note that the uncertainties in travel demand forecasting could imply that the actual demand could be less than or greater than the model's predictions. By using WFRC's federally approved model, UDOT can rely on the best available estimates for travel demand and improved mobility measures for the EIS.

To address model uncertainties, UDOT took measures to ensure that model version 8.3.2 reasonably predicted future travel conditions. UDOT collected an extensive amount of data to ensure the model's accuracy. This effort included using more recent traffic volumes, modifying traffic analysis zones to better reflect land use patterns in the study area, and including recently completed projects and other roads that were not in the original WFRC model.



UDOT conducted a root-mean-squared-error (RMSE) analysis to determine how modifications to the model improved accuracy. WFRC's documentation states that the RSME for the travel demand evaluation should generally be less than 40%. The results of the evaluation showed that the I-15 calibration of version 8.3.2 of the travel demand model resulted in an overall 19% RSME compared to 20% for the unmodified model. This

shows a small improvement in the study area of the I-15-EIS modified model compared to the original unmodified model; however, both values are well below the 40% criterion. Performing the RMSE analysis on only the arterial and collector streets showed a 24% RMSE compared to 31% for the unmodified model. This difference indicates that the modifications had a larger improvement for the nonfreeway streets.

UDOT understands that any modeling process can produce variable outcomes depending on the inputs to the model. However, relying on the

What is root-mean-squarederror (RMSE) analysis?

RMSE is a standard method used to compare travel demand model results with actual traffic count data.

government entity (in this case, WFRC) that is statutorily charged with developing state transportation plans based on projected needs using a state-of-the-art travel demand model is currently the best available process to accurately reflect travel demand and to address uncertainty in future-year projections.

Induced Growth. Many commenters provided comments stating or assuming that additional capacity on I-15 with the Action Alternative would induce development or sprawl in or near the study area or in areas farther away, such as northwest Davis County or Weber County. The timing and types of development in any area are based on many variables, not just the presence, absence, or capacity of a highway. Other factors, such as projected population growth, available land, and the cost of housing compared to other areas of the region, are relevant factors for the timing and types of development that must be considered. Additionally, induced-growth effects from new or expanded roadway capacity would be most pronounced in an area that does not otherwise have any roadway access. In mostly built-out areas that already have transportation access, such as the study area, the additional roadway capacity is not anticipated to meaningfully contribute to induced growth effects.

As described in Section 3.18, *Indirect and Cumulative Effects*, because I-15 is an existing freeway, because the existing I-15 currently provides access to the surrounding cities, and because the land uses around I-15 are already developed and are part of a large urban area with a mature transportation network, UDOT does not expect the Action Alternative to cause any meaningful changes to local zoning or induce land use changes in the areas adjacent to the Action Alternative. The indirect and cumulative effects analysis and conclusions were also based on a review of past development trends, existing development, and current city zoning and master plans. A detailed discussion of assumptions related to indirect effects from the project is included in Section 3.18.3.1.2, *Potential Indirect Effects*.

9.1.2 Category 2: Comments about Transportation Planning, Funding, and UDOT/State of Utah Priorities

UDOT received numerous comments directed toward the transportation planning process and how government prioritizes funding decisions. These comments suggested that transportation planning is auto-centric and does not adequately account for other modes. Other commenters stated the State of Utah should prioritize other needs and proposed that the project funds should be used to support several unrelated or nontransportation projects. The general sentiments of this category of comments are that the commenters did not support additional capacity on I-15, did not support automobiles being the most



common mode of transportation, and requested that planning (transportation, land use, city, resource, etc.), and government funding in Utah be handled differently or have different goals.

- Commenters stated that UDOT and/or the State of Utah has focused solely or disproportionately on cars in transportation planning decisions. Commenters stated that UDOT and/or the State of Utah should have different transportation goals—for example, reducing air pollution and/or improving air quality, encouraging better use of FrontRunner, encouraging or prioritizing more transit, reducing the use of personal vehicles, reducing traffic and/or annual average daily traffic (AADT), or reducing AADT per capita. Commenters stated that the I-15 Action Alternative is not consistent with UDOT's Quality of Life Framework (to preserve infrastructure, optimize mobility, improve safety, and strengthen the economy). Commenters stated that UDOT (or some other government entity) should force people to live where they work to reduce transportation demand. Commenters stated that UTA should have been involved in developing alternatives and questioned whether UTA was involved in the study. Commenters stated that UTA should receive more funding.
- Commenters stated that or asked whether the funding could be put to numerous other programs or needs not related to the I-15 project's purpose and need.
- Commenters suggested that UDOT should change land uses to encourage more transit use and discourage vehicle use. Some commenters were concerned about encouraging auto-centric land use or greater portions of land dedicated to auto-centric land uses.

Response

UDOT/State of Utah should focus on other modes of travel. As described in the response to comments under Category 1 as well as in Chapter 1, *Purpose and Need*, and Appendix 1A, *Purpose and Need Chapter Supplemental Information*, the populations of the Wasatch Front, Utah, and the Intermountain West (Idaho, Montana, Colorado, and Nevada) are growing and are projected to continue to grow between now and 2050. To accommodate the population growth expected and projected by 2050, additional capacity is needed for all travel modes including roads, transit, and active transportation (such as walking and bicycling). UDOT's responsibilities include aspects of all modes of transportation, not just cars. In 2023, UDOT formed a new Trails and Transit Group within the Department. The goal of the Trails Division of the Trails and Transit Group is to build and maintain a network of paved trails throughout the state that connect Utahns of all ages and abilities to their destinations and communities. The goal of the Transit Division is to manage and deliver fixed-guideway transit projects for Utah. The Trails and Transit Group strives to provide choices to transportation users so they can get where they want to go, when they want, in the way they want, safely. The Action Alternative is compatible with these goals and provides more active transportation facilities, provides connections to transit facilities, and accommodates existing and planned transit projects.

How does the project's purpose and need align with UDOT's Quality of Life Framework?

The I-15: Farmington to Salt Lake City EIS was initiated to improve safety, replace aging infrastructure, provide better mobility for all travel modes, strengthen the state and local economy, and better connect communities along I-15 from Farmington to Salt Lake City. The project purpose aligns with UDOT's Quality of Life Framework categories of good health, connected communities, strong economy, and better mobility. UDOT performed an extensive evaluation as described in Chapter 1, *Purpose and Need*, to determine whether the project is needed.



Why doesn't the Action Alternative include a new transit component? The alternatives considered to meet the project purpose also include design elements that would support transit and the planned FrontRunner Double Track project. WFRC's 2019–2050 RTP identifies different modal projects (including road, transit, bicycle, and pedestrian projects) that are needed in Salt Lake and Davis Counties, and all of these planned, funded projects are assumed to be in place with both the No-action and Action Alternatives for the I-15: Farmington to Salt Lake City EIS.

Other transportation-related goals such as reducing air pollution and/or improving air quality, encouraging better use of FrontRunner, encouraging more transit use, or reducing the use of personal vehicles all have support from UDOT and the State of Utah. These goals might contribute to solving, but would not entirely solve, the identified transportation needs for I-15.

UDOT's goal should be to reduce VMT or VMT per capita. No state policies require reducing overall VMT or VMT per capita. Even if VMT per capita were to decrease, VMT would still increase with the anticipated population growth in most areas of Utah, thus supporting the need for the project. As shown by the EIS analysis, VMT in 2050 is projected to be greater with the Action Alternative than with the No-action Alternative. The increase in VMT is primarily a result of increased demand caused by growth in population and employment, but the modeled VMT also accounts for induced demand and latent demand (for more information, see Section 9.1.1, *Category 1: Comments Related to the Project Purpose and Need and Action Alternative Efficacy*).

UDOT's goal should be to reduce traffic on local roads or reduce travel demand. No state policies require reducing traffic volumes or identifying "appropriate" or "acceptable" traffic volumes on state or local roads. Traffic volumes are projected to increase with the anticipated population growth in most areas of Utah regardless of what UDOT does under the constraints of its mission and funding.

UDOT's tools to reduce demand through travel demand management (TDM) are limited. Examples of TDM strategies could include tolling, congestion pricing, and encouraging alternative work arrangements such as telework. However, UDOT does not have jurisdiction regarding whether to allow or not allow development, dictate modes of travel, or dictate work environments. Cities and private property owners make local land use and development decisions, and employers decide on work environments for their workforces.

Coordination between UTA and UDOT. UTA is a participating agency for the I-15: Farmington to Salt Lake City EIS. UDOT has been coordinating with UTA throughout the EIS process. For more information, see Chapter 6, *Coordination*.

As described in Section 3.6.4.3.5, *Transit Travel Impacts*, the Action Alternative would not affect existing or planned transit projects or access to transit overseen by UTA. The Action Alternative would provide room to construct and operate the FrontRunner Double Track project. The Action Alternative would also provide better multimodal connections to Woods Cross Station and improve access and east-to-west travel across I-15 for pedestrians and bicyclists accessing other bus and FrontRunner stations. The Action Alternative would thus benefit bus routes using I-15, the interchanges, and cross streets by improving traffic operations (reduced delay, faster travel times, reduced congestion, and shorter vehicle queue lengths).

How are transit projects planned for and funded in Utah? Each year, the State of Utah gives UDOT a budget for various capacity, maintenance, safety, and improvement projects. The Utah Transportation Commission is responsible for prioritizing transportation projects based on available funding. It is beyond the scope of the I-15: Farmington to Salt Lake City EIS to determine the spending priorities or budget for UDOT.



Similarly, it is beyond the scope of the EIS to determine the spending priorities among UDOT and other agencies or other state-funded projects. The Utah legislature makes state funding decisions.

Comments about new transit projects or refining the existing transit services or facilities, such as TRAX, should be directed to UTA so that these projects can be considered for inclusion in the RTP.

UDOT/State of Utah Funding Priorities: UDOT/State of Utah should focus on nontransportation efforts or priorities unrelated to I-15. Many commenters suggested other nontransportation projects or programs for additional funding, such as constructing more parks or recreation areas, building more community gardens, prioritizing community health or well-being, providing better healthcare, improving education, legalizing marijuana, building tiny homes, cleaning up the Jordan River, composting, addressing overpopulation and the housing market, limiting development, mandating high-density housing or transitfocused development, or encouraging different land use patterns. As discussed above, UDOT does not have the funding or mandate from the State of Utah to implement these efforts.

9.1.3 Category 3: Comments Requesting Different Transit or Roadway Alternatives Instead of the Action Alternative

These comments expressed opposition to the additional capacity on I-15 that is being proposed with the Action Alternative. These commenters requested that UDOT evaluate and select a different type of transit, active transportation, non–I-15 roadway project, or combination of transit projects instead of the Action Alternative. These comments stated or assumed that these other projects would remove the need for additional capacity on I-15. Commenters suggested that the following ideas would meet the need for the project and eliminate the need for additional capacity on I-15 that is proposed with the Action Alternative:

- Transit concepts
 - Improve FrontRunner service and frequency or connections to FrontRunner stations.
 - Expand unspecified transit services or spend money on unspecified transit projects that would remove the need for additional capacity on I-15.
 - Expand unspecified bus rapid transit and/or TRAX lines.
 - Build a new TRAX line along U.S. Highway 89 (U.S. 89).
 - Build a new TRAX line on the Denver & Rio Grande Western Railroad alignment in Davis County that is either elevated along I-15 or connects to Salt Lake City on Redwood Road or 300 West.
 - Add transit within the I-15 right-of-way by either adding a train corridor or bus-only lanes on I-15 instead of additional lanes on I-15. Make transit more attractive than driving by being made faster, more frequent, and at low or no cost.
 - o Make transit more attractive by implementing first-mile, last-mile connections to transit.
 - Implement the Rio Grande Plan.
- Roadway concepts
 - Implement travel demand management and transportation system management solutions, including expanding transit, tolling, and HOT lanes; changing the criteria, design, and/or



enforcement for HOT lanes; implementing congestion pricing; encouraging carpooling; encouraging working from home; and encouraging people to live where they work.

- Improve the I-15 interchange without adding capacity to I-15.
- Implement roadway alternatives that are outside the study area. These requests included adding a new arterial road and/or belt route on the east side of Farmington, widening I-15 north of Farmington, removing the 900 South ramp in Salt Lake City, making improvements on U.S. 89 and Lloyd Road, adding a new north-south highway west of the Salt Lake City International Airport, adding an elevated causeway across the Great Salt Lake, adding a bypass starting at State Route 30 for interstate traffic on the west side of the Great Salt Lake, reverting Legacy Highway to have truck restrictions, and adding a new north-south highway without a specified location.

Response

UDOT is focused on a holistic approach to transportation in the study area. This holistic focus includes how best to get people where they're going safely and easily, whether in a vehicle, on a bus or train, or on a bicycle or by foot. The I-15 No-action Alternative assumes that all other roadway, transit, and active transportation projects in WFRC's 2019–2050 RTP are constructed except for the I-15 project. Traffic analysis shows that, to meet the travel needs of all the people expected to live and work in the study area by 2050, all travel modes—roads, transit, and pedestrian and bicyclist paths—will need to be expanded. Expanding either transit or roads alone will not meet the need. The I-15: Farmington to Salt Lake City EIS and the No-action Alternative assume that all other planned projects—roadway, transit, pedestrian, and bicyclist—are constructed when travel in the study area is evaluated without improvements to I-15. Improving I-15 and its adjacent roads can then be assessed to help meet the transportation needs of vehicles and people using transit, pedestrian, and bicyclist facilities. Adding capacity to I-15 is part of a comprehensive approach to meeting transportation demand in WFRC's 2019–2050 RTP, which includes adding capacity to FrontRunner, adding bus service, improving local and regional roads, and adding new facilities for bicyclists and pedestrians.

UDOT should improve FrontRunner instead. Funds are currently programmed by the State of Utah for both the FrontRunner Double Track project (called FrontRunner Forward or FrontRunner 2X by UTA) and the I-15 project being evaluated in this EIS.

The FrontRunner Double Track project is planned in WFRC's 2019–2050 RTP and is part of the I-15 EIS's No-action Alternative, which assumes that all other roadway, transit, and active transportation projects in WFRC's 2019–2050 RTP are constructed except for the I-15 project. The FrontRunner Double Track project is currently in the environmental review and design process. The timing of construction has not been determined, but it is anticipated to begin construction shortly after the environmental review and design process is completed. UDOT is using UTA's current station and service assumptions for the FrontRunner Double Track as part of the No-action Alternative. UDOT will change the station and service assumptions for the FrontRunner only if UTA provides updates on these items.

UDOT is actively coordinating with UTA on the FrontRunner Double Track project. The I-15 Action Alternative's design preserves the space UTA needs to construct the double track in areas where FrontRunner and I-15 are adjacent to one another (primarily in West Bountiful, Centerville, and Farmington). UDOT, UTA, Woods Cross City, and Farmington City are coordinating ways to improve pedestrian, bicyclist, and roadway



connections to the Woods Cross and Farmington FrontRunner stations with the I-15 project. The I-15 project would not affect FrontRunner's right-of-way.

As described in Section 3.6.4.3.5, *Transit Travel Impacts*, the Action Alternative would not affect existing or planned transit projects or access to transit and would in fact improve access to buses and FrontRunner stations.

UDOT should develop a transit solution that eliminates the need for added capacity on I-15. Can UDOT implement a transit-only alternative instead of the Action Alternative? Can I-15 be a transit corridor? Can bus-only lanes or a train down the center of I-15 be added instead of more vehicle lanes? What if transit were free or incentivized? UTA is responsible for regional transit planning, the regional transit budget, and the amounts charged for fares. UDOT accounted for all transit projects in WFRC's 2019–2050 RTP while developing the I-15 project. For a transit solution to eliminate the need for more capacity on I-15, transit service and routes throughout the Wasatch Front would need to be increased to overcome the development patterns of the region (that is, low-density development adds distance and time to transit routes). Development patterns affect transit effectiveness, operations costs, fares, and ridership.

A transit-only alternative would not meet the project purpose. As stated in the project's purpose and need statement, in addition to mobility and capacity needs, the needs that support the I-15 project include addressing aging infrastructure, improving access, and providing safer pedestrian and bicyclist facilities.

UTA operates limited bus service on I-15 between Davis and Salt Lake Counties and determines the appropriate frequency of service based on its criteria for service and ridership demand. The I-15 project can accommodate more frequent bus service without dedicating a lane.

At this time, no expanded TRAX service is proposed for Davis County along the Denver & Rio Grande Western Railroad alignment or along U.S. 89. In WFRC's 2023–2050 RTP, a bus rapid transit line is proposed for U.S. 89.

A rail line cannot be added to the center of I-15 without reconstructing the interstate to accommodate the design requirements of rail service. Adding a rail line down the center of I-15 would result in a redundant and parallel rail corridor to FrontRunner and would require constructing new stations for riders to access the train. UDOT reviewed a TDM scenario that added a free-fare zone in the study area and a second FrontRunner line from Farmington to downtown Salt Lake City. The modeling conducted for this scenario shows that free fares and a second FrontRunner line would have only a minor impact on improving traffic operations. For these reasons, constructing a redundant train line and new train stations is not a fiscally prudent alternative to the I-15 project.

The transit network elements in the study area that are included in WFRC's 2019–2050 RTP include FrontRunner, one bus rapid transit (BRT) line, four express bus lines, and at least nine local bus lines. UDOT analyzed a TDM scenario that added a free-fare zone in the study area and a second FrontRunner line from Farmington to downtown Salt Lake City. The free-fare zone in Salt Lake City was bounded by I-215 on the west, 900 South on the south, and State Street on the east. These modifications increased the daily transit trips in 2050 by 5,064, which is a 3% increase. The total study area delay decreased by 352 hours per day which represented a decrease of 0.4% over the No-action Alternative. These results indicate that an additional FrontRunner line and free fares would have only a minor impact on improving traffic operations. Considering how narrow the study area is, with mountains on the east and the Great Salt Lake on the west,



the proposed transit network in the 2019–2050 RTP is already very dense. The analysis of this transit-only alternative indicates that additional capacity on I-15 would still be required.

Eliminating fares would not address aging infrastructure on I-15, improve safety on I-15, or meet the projected travel demand in 2050.

Would first-mile, last-mile (FMLM) connections increase transit use and eliminate the need for more capacity on I-15? FMLM connections are improvements within 1 mile of a transit facility that improve travel between access to transit and access to destinations. FMLM examples are improved sidewalks, trails, bike lanes, and shuttles to move people between their destinations. FMLM improvements are a focus of WFRC, UTA, and UDOT and are included in the RTP. All funded FMLM projects included in the RTP are considered in the no-action assumptions for this EIS.

Many Cities along the Wasatch Front received funding in a recent Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant award to implement FMLM projects. The RAISE grant funds will be used to construct FMLM active transportation infrastructure at about 10 light rail stops and about 13 bus stops in the Wasatch Front metropolitan area. This grant funding and supported projects are separate from the I-15 project. As with eliminated fares, UDOT expects that the FMLM projects would have only a minor impact on improving traffic operations.

UDOT should implement the Rio Grande Plan. The Rio Grande Plan involves realigning and burying the Union Pacific and UTA FrontRunner railroad tracks on 500 West between 900 South and North Temple in Salt Lake City. The Rio Grande Plan also envisions redeveloping the existing railroad properties if the railroad tracks are realigned. The Rio Grande Plan is not an adopted part of WFRC's 2019–2050 RTP or part of a locally adopted transportation plan. Further, it does not address updating the aging infrastructure on I-15, nor would it directly improve transportation options between Salt Lake City and Farmington as identified in the I-15: Farmington to Salt Lake City EIS's purpose and need. Aging infrastructure on I-15 is one element of the need for the I-15 project that needs to be satisfied by an alternative. The Rio Grande Plan would not address the maintenance, safety, economic, or mobility needs of I-15. The I-15 project is still needed whether the Rio Grande Plan is implemented or not.

UDOT should consider travel demand management (TDM) and transportation system management (TSM) solutions. TDM and TSM solutions, enforcing driving behaviors, changing HOT lane criteria (how many vehicle occupants), changing HOT lane design (barrier-separated, more limited access), or enforcing HOT lanes would eliminate the need for the I-15 project. As discussed above, TDM includes applying strategies and policies to reduce travel demand or to redistribute travel demand at different times or on other transportation facilities. UDOT does not have jurisdiction to implement these types of strategies.

TSM includes strategies or systems to optimize the operation and performance of a transportation system. Examples of TSM strategies could include but are not limited to ramp metering, optimizing signals, congestion pricing, or improving transit system connections. UDOT already optimizes traffic signals and is planning to implement the Managed Motorways project, which will enhance the effectiveness of ramp metering. Managed Motorways is already part of the No-action alternative.

No standalone transit, TDM, or TSM concepts were identified for the I-15 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.



The traffic model used to assess the needs on and around I-15 does account for expected changes in travel behavior between now and 2050. Even when accounting for changes in travel behavior and shifts to other modes of travel as other modes are improved and expanded, improvements to I-15 are still needed.

The Action Alternative includes one HOT lane in each direction. The assumptions for the HOT lanes are consistent with UDOT's current plans for the HOT lanes, which allow free use for vehicles with two or more occupants or tolled use for vehicles with one occupant. Modeling shows that the HOT lanes would carry about 10% of the total I-15 traffic. The models do not account for enforcement, but it is important that HOT lanes have better travel times than the general-purpose lanes to make them attractive. UDOT expects that enforcement would prevent unauthorized use of the HOT lanes and help maintain their capacity. Enforcing proper use of HOT lanes and general travel behaviors does affect traffic operations; however, even with increased enforcement, improvements to I-15 are still needed.

Improve interchanges but do not widen I-15. A "No Additional Mainline I-15 Capacity Concept" was evaluated in Level 1 screening. This concept was screened out during Level 1 screening because improvements to the interchanges would increase traffic on I-15 without providing any additional capacity and would not improve traffic conditions compared to the 2050 no-action conditions. For more information, see Table 3-1, *Level 1 Screening of I-15 Mainline Concepts*, in Appendix 2A, *Alternatives Development and Screening Report*.

Implement roadway projects outside the study area. New, standalone roadway facilities outside the study area would not support the purpose of the project, which includes addressing I-15's aging infrastructure, and such facilities are outside the scope of this EIS. None of the facilities identified in the comments are currently included in WFRC's 2019–2050 RTP. New roads west of Legacy Parkway would not connect to the local road network and would have substantially more impacts to the Great Salt Lake shorelands areas and wetland areas compared to the Action Alternative. New arterial roads east of Farmington are not in WFRC's 2019–2050 RTP or the Farmington City *Master Transportation Plan Addendum* or the *Comprehensive General Plan*.

9.1.4 Category 4: Comments Requesting Refinements or Additions to the Action Alternative

These comments requested refinements or additions to the Action Alternative. Table 9.1-1 includes the commentors' suggestions and responses to the suggestions.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
I-15 Mainline – General		
Lower the speed limit on I-15 to improve safety.	No	UDOT plans to keep the posted speed limit on the Action Alternative's segment of I-15 at 70 miles per hour. This speed is consistent with the speed limit on I-15 on the other urban segments of I-15 in Davis and Salt Lake Counties. Any changes to speed limits would be evaluated pursuant to UDOT Policy 06C-25, <i>Establishment of Speed Limits on State Highways</i> . This policy requires considering safety factors in such an evaluation.

Table 9.1-1. Suggested Refinements or Additions to the Action Alternative and Responses

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Implement grade-separated railroad crossing improvements at 500 South in Woods Cross, 2600 South/1100 North in North Salt Lake, Pages Lane in West Bountiful,	No (most incorporated in RTP)	During the alternatives development and screening and Draft EIS comment periods, several public and agency comments 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.
Center Street in North Salt Lake, and 1800 North in Salt Lake City.		WFRC's 2019–2050 RTP does not include a grade-separated railroad crossing at 1800 North in Salt Lake City or Pages Lane in West Bountiful. The Action Alternative would provide a new grade-separated railroad crossing at 2100 North in Salt Lake City as part of the design, and the 2100 North interchange would provide an alternative to the existing at-grade 1800 North crossing.
Widen Legacy Parkway or I-215 instead of or in addition to widening I-15.	No (incorporated in RTP)	Widening Legacy Parkway from two to three lanes and widening I-215 from four or five lanes to five or six lanes in each direction are both in WFRC's 2019–2050 RTP and are part of the No-action Alternative in the travel demand model used for the Draft EIS. Traffic modeling shows that, even with more capacity on both I-215 and Legacy Parkway, more capacity is needed on I-15.
Improve I-15 north of Farmington.	No (incorporated in RTP)	UDOT and WFRC are aware of additional needs for I-15 north of Farmington. WFRC's 2019–2050 RTP includes separate I-15 widening projects north of Farmington.
Shift the rail lines to the west to minimize impacts from the Action Alternative to the east side of I-15 in Davis County.	No	Relocating the railroad tracks to the west is not a feasible alternative. Land is not available on the west side onto which to move the railroad tracks (one existing and one planned UTA double track and two Union Pacific Railroad tracks are west of I-15). Moving the four railroad tracks would require moving the power lines west of the railroad tracks and 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 result in substantial impacts to private properties on the west side of Legacy Parkway.
Install roundabouts and not traffic signals at interchanges and intersections.	No	Roundabouts are acceptable alternatives to signalized intersections when traffic is balanced and not dominated by one direction of travel. UDOT anticipates that the signalized intersections proposed with the Action Alternative would best accommodate, with the smallest footprint, the traffic that is projected. Roundabouts, especially those that can accommodate large trucks or a lot of traffic, require a large area. Therefore, roundabouts result in greater property impacts to nearby businesses and resources and are not included in the Action Alternative.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Add more access onto and off of the I-15 mainline, such as an exit at all major routes or more interchanges. Support for additional HOT exits (like 400 South in Salt Lake City) as an example to make it easier to exit I-15 during times of high traffic congestion and encourage carpooling.	No	The Action Alternative includes all access to I-15 in the study area identified in WFRC's 2019–2050 RTP and supported by city transportation plans. The proposed accesses with the Action Alternative are anticipated to meet FHWA interchange access and spacing requirements, have been designed to safely accommodate projected traffic and vehicle storage lengths at on-ramps, and have been designed to provide safe operations when vehicles are diverging off of or merging onto I-15.
Add small-radius cloverleaf off-ramps to add more access and limit impacts.	No	The cloverleaf ramps are no longer a preferred design due to the merging and weaving issues on both the interstate and the cross streets. Additionally, the cloverleaf ramps tend to be much wider and would have additional property impacts compared to the diamond or single-point urban interchange (SPUI) ramps, which are horizontally much closer to the mainline I-15 alignment.
Implement active transportation improvements, design considerations, and maintenance requests for pedestrian and bicyclist facilities, such as bike lanes that are protected by a curb or barrier, lighting to illuminate pathways under I-15, highly visible striping, bike lanes that are adjacent to pathways and do not cross vehicle merge lanes (remove "blender zones"), leading pedestrian intervals at signals, pedestrian islands and/or refuges, and "build for bikes."	Yes	UDOT is proposing several improvements to pedestrian and bicyclist infrastructure with the Action Alternative. These improvements are listed in Section 2.4.2, <i>Action Alternative</i> , of the EIS. UDOT will continue to work with local municipalities on the final design features of the pedestrian and bicyclist improvements, which could include high-visibility striping, curbs or barrier separation, signs at business driveway crossings, underpasses and overpasses where feasible, pedestrian islands at long crossings, and additional local connections. UDOT will also continue to work with local municipalities on maintaining the pedestrian and bicyclist facilities.



Suggestion or Refinement	Incorporated into Final EIS Design	Response
Consider final design elements such as lighting underneath I-15, lighting along I-15, preference on materials (concrete or asphalt) for the I-15 surface, modifying the location of light poles, lowering concrete barrier heights, upgrading materials for noise walls, adding 25 miles-per-hour flashing signs, raising Frontage Road, and adding raised crosswalks. Other commenters requested changes to design or speed limits on local roads that are not part of the Draft EIS.	No, but will be evaluated during final design of the Action Alternative (if it is selected)	All design details, including barrier heights, noise walls, horizontal curves, vertical curves, signs, and so on, must meet UDOT's design standards. UDOT will continue to work with local municipalities on the final design considerations such as lighting, signing, and grades for crossings. Updates to the design or speed limits on local roads would be subject to city review, design, and traffic standards. Some items, such as roadway and noise wall materials, would be based on UDOT standards and lifecycle cost analysis.
Consider aesthetic treatments such as decorative noise walls, landscaping, landscape buffers, shade trees, beautification improvements on the interchanges, and pedestrian refuge areas for long crossings.	No, but will be evaluated during final design of the Action Alternative (if it is selected)	UDOT will continue to work with local municipalities on the final design of aesthetic and landscaping considerations pursuant to UDOT's Aesthetics Policy. Collaboration with local municipalities includes discussing landscape buffers and setbacks per city codes. In some locations, narrower landscape buffers were assumed by UDOT to limit impacts to adjacent residents and businesses. Usually, local governments would be responsible for any additional cost and maintenance associated with landscaping plans that require irrigation and more frequent maintenance. Also, pursuant to UDOT's Aesthetics Policy, UDOT will work with local municipalities to account for any previous aesthetic treatments that would be affected by the Action Alternative.
Implement reversible lanes.	No	The five general-purpose lanes with two reversible lane mainline concept that was considered during the alternatives development and screening process included a northbound HOT on-ramp and southbound HOT off-ramp exit at 400 South in Salt Lake City. This reversible lane alternative was screened out in Level 2 screening due to additional impacts and additional operational, maintenance, and emergency response considerations. This concept is not included as part of the Action Alternative.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
North Segment – Park Lane)	
Add bike lanes and sidewalks on Park Lane in Farmington.	No (incorporated in RTP)	WFRC's 2019–2050 RTP includes two separate projects to provide pedestrian and bicyclist accommodations over I-15 at Park Lane. One project will connect the Legacy Parkway Trail with Burke Lane, and the other will provide a new pedestrian and bicyclist facility parallel to Park Lane.
Extend the southbound I-15 exit lane for Park Lane in Farmington.	No	Park Lane is outside the study area. Additional capacity will be provided to the Park Lane southbound off-ramp with an auxiliary lane between Shepard Lane and Park Lane as part of the Shepard Lane Interchange project.
North Segment – 200 West		
Add full access to and from I-15 at 200 West in Farmington. Or shift the interchange northeast to add more access. Or convert connections to Lagoon Drive to ramps to I-15.	No	The Action Alternative's design at 200 West is a partial interchange that maintains the existing northbound off-ramp and southbound on-ramp but does not accommodate southbound off and northbound on movements. The proposed design for the Action Alternative includes a southbound on-ramp and a northbound off-ramp, similar to the existing access. Northbound I-15 access would be provided at Park Lane. A full-access interchange at 200 West was studied during the alternatives development and screening process. During the public comment period for
		screening, UDOT received numerous comments from the public and Farmington City opposing the full-access interchange at 200 West. The full-access interchange was screened out because it would require more residential relocations than the partial interchange at 200 West. Moreover, if the 200 West interchange (half or full) were shifted to the northeast, constructing the interchange would result in more residential relocations.
		The traffic modeling analysis indicates that the improved partial intersection at 200 West would be able to manage the peak-hour traffic anticipated in 2050. Although implementing a full interchange with northbound on-ramps and southbound off-ramps to I-15 would have additional potential benefits in alleviating congestion at the Park Avenue interchange and, to a lesser degree, at the Parrish Lane interchange, the design would involve loop ramps and unconventional configurations. This layout raised concerns with FHWA. The location of the new northbound on-ramp and southbound off-ramps would result in a new merge-and-weave area with the northbound off-ramp and southbound on-ramp from Park Lane and U.S. 89 to the north. A full-access interchange at 200 West would also alter traffic movements on the local road network in Farmington and might require additional traffic signals on Glovers Lane.
		Considering a full-access interchange at 200 West or Glovers Lane would be best served by conducting a separate study to analyze the impacts that a full interchange at either location would have on the local road network in Farmington, including Park Lane, State Street, 200 West, Frontage Road, Glovers Lane, and Parrish Lane.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
	No	A new interchange on Legacy Parkway would not address the purpose of the I-15: Farmington to Salt Lake City Project. A new interchange on Legacy Parkway would have independent utility from the I-15: Farmington to Salt Lake City Project; therefore, adding a new interchange on Legacy Parkway at Glovers Lane is not part of this EIS.
Add a new interchange on Legacy Parkway at Glovers Lane in Farmington.		There is currently no plan in WFRC's 2019–2050 RTP for an interchange on Legacy Parkway at Glovers Lane. Farmington City has also provided input to UDOT during the EIS process; the City believes there is enough interchange access to Legacy Parkway and I-15 in Farmington and has not formally supported adding any new interchanges to I-15 or Legacy Parkway in Farmington.
		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 West Farmington. The West Davis Corridor is being constructed to be forward-compatible with this planned future interchange at 1525 West.
Add a new interchange on I-15 at Glovers Lane in Farmington.	No	An interchange at Glovers Lane and I-15 (Farmington Option B) was considered and did not pass screening due to the substantially higher impacts to residential properties and the change in traffic patterns that would result in higher traffic on residential roads that have not been planned to accommodate traffic accessing an I-15 interchange. For more information, see Section 3.2.3, <i>Level 2 Screening for</i> <i>Interchange and Bicyclist and Pedestrian Crossing Concepts</i> , of Appendix 2A, <i>Alternatives Development and Screening Report</i> .
		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 West Farmington. The West Davis Corridor is being constructed to be forward-compatible with this planned future interchange at 1525 West.
Realign and grade- separate the Farmington Creek Trail at 400 West in Farmington.	Yes	UDOT is planning to reconnect and realign the Farmington Creek Trail through Ezra T. Clark Park as part of the Action Alternative. For more information, see Section 3.6.4, <i>Environmental Consequences and Mitigation Measures</i> , and Section 4.5.2.2, <i>Public Parks and Recreation Areas</i> . UDOT is planning on maintaining the existing at grade crossing at 400 West. A grade-separated crossing of the Farmington Creek Trail at 400 West would be a separate, local government project. Farmington City has stated to UDOT that they are looking into options to potentially get a grade-separated crossing funded. UDOT will continue to work with Farmington City to determine whether a grade-separated trail crossing at 400 West is feasible and whether this could be included as a joint development opportunity.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
UDOT should limit where turn lanes are placed along Frontage Road in Farmington and Centerville. Turn lanes might not work or be needed in some locations along Frontage Road due to a drainage channel east of Frontage Road. Removing the turn lanes would reduce property acquisition and utilize existing space by Frontage Road.	No	UDOT is assuming that Frontage Road would have a typical section that would accommodate one through lane for both northbound and southbound traffic and would have room for a center turn lane from about 1100 South in Farmington to Parrish Lane. This assumption is consistent with the Farmington City and Centerville City transportation plans for this road. UDOT will evaluate drainage pipes and channels as part of the final design of the Action Alternative (if it is selected) and anticipates that several drainage facilities in this area might need to be adjusted. None of the drainage mprovements are anticipated to limit or restrict the width or function of Frontage Road. UDOT will coordinate the drainage design with Farmington City, Centerville City, and Davis County.
North Segment – Parrish La	ane	
Connect Parrish Lane pedestrian and bicyclist facilities in Centerville with the Legacy Parkway Trail.	Yes	There is a separate project to provide a new trail connection from 1250 W. Parrish Lane to the Legacy Parkway Trail. The I-15 Action Alternative would extend pedestrian and bicyclist facilities to 1250 W. Parrish Lane and would connect to these planned trail improvements.
Add a pedestrian and bicyclist crossing of I-15 at 200 North in Centerville.	Yes	A new grade-separated crossing of I-15 and the railroad tracks at 200 North in Centerville is part of the Action Alternative.
Add a shared-use path along Frontage Road in Centerville.	No	The Action Alternative would replace any existing sidewalks on Frontage Road that are impacted by the Action Alternative. There are no plans to provide new shared-use paths on Frontage Road with the Action Alternative. These improvements would be considered Centerville City improvements.
Add dual left-turn lanes from Parrish Lane onto 400 West in Centerville.	No	The single westbound left-turn lane from Parrish Lane to 400 West currently operates well during both the AM and PM peak periods. Adding an additional left-turn lane would benefit traffic; however, there is the constraint of only one southbound lane on 400 West south of Parrish Lane to receive the left turns. Adding an additional lane on 400 West would increase the road's width and result in impacts to businesses. The additional left-turn lane was not included with the Action Alternative because the traffic analysis showed that a single left-turn lane is sufficient, and an additional left-turn lane on Parrish Lane would increase impacts to properties on 400 West.
Add dual left-turn lanes from northbound Marketplace Drive onto westbound Parrish Lane in Centerville.	No, but will be evaluated during final design of the Action Alternative (if it is selected)	At northbound Marketplace Drive, there is one left-turn lane onto westbound Parrish Lane, one through lane, and one right-turn lane onto eastbound Parrish Lane. The proposed intersection is wide enough to allow a second northbound left-turn lane from Marketplace Drive to westbound onto Parrish Lane with the Action Alternative if and when it is warranted by traffic operations.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Add dual left westbound turn lanes from the northbound I-15 off-ramp in Centerville.	No	Although a second left-turn lane on the northbound off-ramp onto Parrish Lane would improve traffic operations, the single left-turn lane movement would operate at a satisfactory level during the AM and PM peak periods with the higher-speed single-point urban interchange left-turn design. Adding an additional left-turn lane would benefit traffic; however, there is limited space on the east side of I-15, and the curvature of the ramp with an added lane would impact businesses along Frontage Road. Therefore, adding an additional left-turn lane would increase impacts to provide additional capacity that the traffic analysis has shown is unnecessary.
Add new ramp connections among I-15, Legacy Parkway, and the West Davis Corridor between Parrish Lane in Centerville and the new West Davis Corridor ramps.	No	With the Action Alternative, users in Centerville would continue to be able to access both I-15 and Legacy Parkway from Parrish Lane. Users in Centerville can also access the West Davis Corridor from both Legacy Parkway and I-15. Given these connections, there would not be a need for an additional connection between I-15 and either Legacy Parkway or the West Davis Corridor north of Parrish Lane.
Remove the underpass at Pages Lane in West Bountiful and add an overpass at Porters Lane and 1000 North over the freeway.	No	With the Action Alternative, UDOT is proposing to maintain the existing grade- separated crossing of Pages Lane and is not proposing to add new grade- separated crossings at Porter Lane or 1000 North. This proposal is consistent with the Centerville City and West Bountiful City transportation plans. Both Cities have provided input during the EIS process that they prefer to maintain the Pages Lane crossing and that they do not support additional crossings at Porter Lane.



Suggestion or Refinement	Incorporated into Final EIS Design	Response
North Central Segment – 40	0 North	
Minimize the width of 400 North in Bountiful and minimize impacts to commercial properties. Commenters questioned whether dual turn lanes are needed and where the expected growth in traffic in 2050 is coming from. Commenters stated that not much residential growth is anticipated in Bountiful between now and 2050. Commenters questioned whether both a shared-use path and a bike lane are needed on the north side of 400 North. Commenters suggested adding a narrower shared-use path and sidewalks to minimize impacts to businesses.	Yes	Based on coordination with West Bountiful City and Bountiful City, UDOT has refined the design of the Action Alternative at 400 North for the Final EIS to reduce the width of improvements on 400 North. This refinement reduces impacts to businesses while still maintaining safe pedestrian and bicyclist facilities. These updates include design revisions that reduce unnecessary median or shoulder width on 400 North, a 6-foot-wide sidewalk on the south side of 400 North, and a reduced width east of 500 West to match the existing pedestrian facilities. With these changes, the Action Alternative still meets the project's purpose for all motorists, pedestrians, and bicyclists. All the through and turn lanes proposed for 400 North are needed to provide acceptable traffic operations with the Action Alternative in 2050. Even though not much population growth is expected in Bountiful by 2050, the travel demand model assumes that future growth west of I-15 will result in higher traffic using 400 North to access commercial areas on the east side of I-15.
Close the 500 West partial interchange in Bountiful or consolidate it with the 400 North interchange.	No	The Action Alternative maintains the split interchange with the northbound on- ramp and southbound off-ramp at 500 West because this interchange would have the fewest impacts to right-of-way. During the alternatives development phase, UDOT considered removing the partial interchange at 500 West. UDOT found that closing the 500 West partial interchange would move a lot of through traffic from the I-15/500 West half interchange to the 500 West and 400 North intersection. The 500 West and 400 North intersection would need to be widened beyond what is being proposed with the Action Alternative to add additional right- and left-turn lanes onto 500 West, which would result in additional commercial property impacts around this intersection. Additional commercial and residential property impacts would also occur east of I-15 and north of 400 North due to moving the northbound on-ramp and southbound off-ramp to 400 North. These property impacts would be avoided by retaining the partial interchange at 500 West.
Add a northbound on-ramp at 400 North in Bountiful.	No	The Action Alternative maintains the split interchange with the northbound on- ramp and southbound off-ramp at 500 West because it has the fewest impacts to right-of-way. Limited space is available at 400 North. Adding a northbound on-ramp would require more impacts to commercial and residential properties east of I-15 and north of 400 North.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Add a north-south shared- use path along I-15 in Bountiful if this would not cause any additional impacts to properties.	No	There are currently no plans for a separate shared-use path along I-15 on any of the city plans or in WFRC's 2019–2050 RTP. Interstates do not typically have parallel shared-use paths. The shared-use path, sidewalk, and bike lane improvements included with the Action Alternative are intended to provide safe, comfortable crossings of I-15 and to facilitate better connections to other existing and planned regional north-south trails, such as the Legacy Parkway Trail and the Denver and Rio Grande Western Railroad (D&RGW) Trail in Davis County.
South Central Segment – 5	00 South	
Minimize the width of 500 South in Bountiful and minimize impacts to commercial properties. Commenters questioned whether dual turn lanes are needed and where the expected growth in traffic in 2050 is coming from. Commenters stated that not much residential growth is anticipated in Bountiful between now and 2050. Commenters questioned whether shared-use paths are needed on both sides of 500 South. Commenters suggested adding a narrower shared-use path and sidewalks to minimize impacts to businesses.	Yes	Based on coordination with West Bountiful City and Bountiful City, UDOT has refined the design of the Action Alternative at 500 South for the Final EIS to reduce the width of improvements on 500 South. This refinement reduces impacts to businesses while still maintaining safe pedestrian and bicyclist facilities. These updates include design revisions that reduce unnecessary median or shoulder width on 500 South, a 5-foot-wide sidewalk on the north side of 500 South, and a reduced width east of 500 West to match the existing pedestrian facilities. With these changes, the Action Alternative still meets the project's purpose and need for all motorists, pedestrians, and bicyclists. All the through and turn lanes proposed for 500 South are needed to preserve acceptable traffic operations with the Action Alternative in 2050. Even though not much population growth is expected in Bountiful by 2050, the travel demand model assumes that future growth on the west side of I-15 will result in higher traffic using 500 South to access commercial areas on the east side of I-15.
Add a traffic signal at 500 South and 700 West in Bountiful.	Yes	The Action Alternative assumes that a traffic signal will be necessary at the 500 South and 700 West intersection.
Make 500 South in Bountiful and West Bountiful a single-point urban interchange instead of a diamond interchange.	No	The Action Alternative includes a tight diamond interchange at 500 South. This type of interchange is preferable to bicyclists and pedestrians because it provides short and direct signalized crossings of the on- and off-ramps. A single-point urban interchange was designed and reviewed for 500 South in Bountiful and West Bountiful and was screened out in Level 1 screening. The traffic model showed that a tight diamond interchange is sufficient to accommodate anticipated traffic, and a single-point urban interchange was not necessary. For more information, see Appendix 2A, <i>Alternatives Development and Screening Report</i> .

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Maintain an eastbound left- turn access to the Bountiful Corner shopping center on the north side of 500 South in Bountiful or provide a new access to the shopping center from I-15.	No, but will be evaluated during final design of the Action Alternative (if it is selected)	Access management on 500 South in Bountiful, including left turns from eastbound 500 South, must follow UDOT's access management policies. UDOT is evaluating providing a new connection to the Bountiful Corner shopping center from the I-15 northbound off-ramp intersection that would connect to the west side of the shopping center and eliminate the need for an eastbound left turn between I-15 and 500 West. Any updates to this access from the I-15 off-ramp intersection would require a connection to a public right-of-way and would be subject to meeting the requirements of FHWA's Interstate Access Change Request.
South Segment – 2600 Sou	th	
Keep 800 West in North Salt Lake open as an intersection with Overland Road.	No	During the alternatives development and screening and Draft EIS comment periods, UDOT received comments 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. Based on the traffic analysis for the I-15 project, UDOT determined that the single-point urban interchange included in the Action Alternative is the best interchange option at 2600 South based on the projected travel demand in 2050 and drivers' expectations. UDOT understands that the single-point urban interchange 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, including school traffic. The traffic analysis shows that converting the interchange to a more standard single-point urban interchange, better match drivers' expectations by using a more standard interchange, better match drivers' expectations by using a more standard interchange type, and minimize the number of unconventional signals and movements at the 2600 South interchange. In addition, the 800 West intersection with 2600 South could not be retained because it would be too close to the southbound off-ramp proposed with the Action Alternative. UDOT's design standards for intersection spacing require that the current intersection at 800 West be removed. To meet the intersection spacing requirements to retain the intersection at 2600 South and 800 West, some of the businesses west of 800 West and/or east of I-15 would need to be relocated.
Use an interchange design with U-turns on 2600 South in Woods Cross and North Salt Lake (similar to the I-15/12300 South interchange in Draper).	No	There is not enough room on 2600 South to implement a "through-turn/reduced left-turn conflict intersection" similar to the I-15/12300 South interchange in Draper. Implementing this type of intersection would require UDOT to acquire and relocate more businesses along 2600 South.
Add a wider shared-use path along 2600 South in Woods Cross and North Salt Lake.	Yes	The Action Alternative includes a 14-foot-wide grade-separated shared-use path on the south side of 2600 South where it crosses I-15 between Overland Drive and 400 East. The 14-foot-wide shared-use path would be wide enough to safely accommodate two-way pedestrian and bicyclist traffic. The Action Alternative also includes an 8-foot-wide sidewalk on the north side of 2600 South and barrier- separated bike lanes on both sides of 2600 South.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Alter the placement or width and increase the directness of the shared- use path along 2600 South in Woods Cross and North Salt Lake.	No, but will be evaluated during final design of the Action Alternative (if it is selected)	A grade-separated shared-use path on the south side of 1100 North/2600 South provides the best protection for pedestrians and bicyclists. The grade challenges and constraints of the area add length to the trails and keep pedestrians and bicyclists separated from vehicles. Whether the shared-use path goes under or over the ramps, there would be the same length of travel due to the grade changes in the area. UDOT has revised the location of shared-use path to minimize impacts on the southwest corner of 2600 South west of I-15. UDOT will continue to work with the City of North Salt Lake during final design to identify options for the shared-use path that could minimize impacts to the parcel on the southwest corner and allow it to still be desirable for future development. UDOT is also providing a sidewalk on the north side of 2600 South, bike lanes on both the north and south sides of 2600 South, and a new shared-use path at the 800 West crossing for users who do not want to use the 2600 South shared-use path.
Grade-separate the 800 West shared-use path where it crosses Wildcat Way in Woods Cross.	No	The proposed shared-use path at 800 West and Wildcat Way cannot be raised because I-15 and its ramps are elevated at this location. The horizontal and vertical clearances limit an elevated shared-use path and would result in greater impacts. UDOT will continue to work with local municipalities on the final design of the active transportation and trail system.
Add a shared-use path to go under, not over I-15 in Woods Cross.	Yes	The Action Alternative includes a 14-foot-wide grade-separated shared-use-path on the south side of 2600 South where it crosses I-15 between Overland Drive and 400 East. The 2600 South shared-use path would go under I-15 and either over or under the southbound on-ramp and northbound off-ramp. The Action Alternative also includes a new shared-use path on 800 West that would go under I-15.
Install crosswalks in tunnels under 2600 South in Woods Cross.	No	Tunnels under 2600 South are not being proposed due to additional costs and impacts to commercial properties on 2600 South. The Action Alternative includes signalized crossings at the intersections that would allow safe pedestrian crossing of 2600 South.
Make direct pathway connections along 2600 South in Woods Cross and North Salt Lake.	No	The Action Alternative includes an 8-foot-wide sidewalk on the north side of 2600 South and barrier-separated bike lanes on both sides of 2600 South. Both the sidewalk and bike lanes would be direct and follow the 2600 South alignment. The grade-separated shared-use path on the south side of 2600 South has some added length to maintain grade separation from the I-15 on- and off-ramps.
Add community amenities on the existing 800 West in Woods Cross in the area closed by the Action Alternative.	No	Decisions regarding remnant land will be made during the design and construction phases of the I-15 project and will be made pursuant to UDOT's real property disposal guide (<u>https://www.udot.utah.gov/connect/business/surplus-property</u>) after implementing the Action Alternative (if it is selected). Any future allowable uses on the property would also be subject to review and approval by Woods Cross City or the City of North Salt Lake (depending on where the property is located).
Manage the traffic associated with Nielsen's Frozen Custard in Woods Cross.	No	Managing traffic at Nielsen's Frozen Custard or other businesses on 2600 South is outside the scope of this EIS. 2600 South east of U.S. 89 is a city road, not a UDOT road. Traffic concerns or suggestions for improving the traffic circulation on this segment of 2600 South should be brought to the attention of Bountiful City.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Widen Wildcat Way in Woods Cross.	No	The Action Alternative is proposing to widen Wildcat Way between 2600 South and the new 800 West intersection to have a five-lane cross-section (two northbound lanes, two southbound lanes, and one center turn lane). Traffic modeling has shown that Wildcat Way, with this five-lane cross section and the new intersection at 800 West, is still projected to have adequate capacity to accommodate projected traffic in 2050 with the Action Alternative. Sensitivity testing has shown that Wildcat Way would still operate acceptably with even higher-than-projected traffic. Additional widening of Wildcat Way north of the 800 West intersection would increase property impacts to Woods Cross High School and the commercial districts in Woods Cross. Because additional widening of Wildcat Way would cause additional impacts and is not needed, it is not being proposed with the Action Alternative.
Add the sidewalk on Overland Drive in North Salt Lake to the Action Alternative.	Yes	UDOT has updated the Action Alternative to include replacing the sidewalk along Overland Drive. Thank you for the comment.
Make the cul-de-sac proposed for 400 East in North Salt Lake large enough to allow semitrucks to turn around, or do not construct a cul-de-sac so that the hotel business would not be impacted.	Yes	The cul-de-sac for 400 East has been updated to accommodate standard semitrucks with 53-foot-long trailers and 67-foot-wheelbases (WB-67). Thank you for the comment.
		(Continued on next page)

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Suggestion or Refinement	Incorporated into Final EIS Design	Response
South Segment – Center St	reet	
		The quarter interchange at Center Street (with the southbound off-ramp) was eliminated for the following three reasons.
Retain the Center Street southbound off-ramp in No North Salt Lake.		First, there is a planned project in WFRC's 2019–2050 RTP for Center Street to cross over or under the UTA FrontRunner and Union Pacific railroad tracks at 300 West in North Salt Lake. The I-15 project would be forward-compatible with either option.
		Second, 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. Removing the Center Street southbound off-ramp would improve operations on I-15 by reducing conflicts among the southbound 2600 South on-ramp (which merges about 0.75 mile north of Center Street), 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). A longer distance between the southbound 2600 South on- ramp and the I-215 southbound off-ramp reduces the number and density of vehicles changing lanes or slowing down to exit I-15.
	Third, depending on whether Center Street is elevated or depressed to cross the railroad tracks, the tie-in of an I-15 southbound off-ramp to Center Street would be substantially 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). If the Center Street southbound off-ramp were constructed with the Action Alternative, the ramp would subsequently need to be removed and reconstructed, and this reconfiguration would likely require moving the exit point (ramp gore) where the southbound off-ramp leaves mainline I-15 when the Center Street option for crossing the railroad tracks, a new southbound off-ramp at Center Street would be best evaluated as part of the future Center Street grade-separated railroad tracks, a new southbound off-ramp at Center Street would be best evaluated as part of the future Center Street grade-separated railroad tracks, an evel southbound off-ramp at Center Street would be best evaluated as part of the future Center Street grade-separated railroad crossing project. For more information, see the section Interchange Concepts Eliminated in Level 1 Screening in Section 3.2, Level 1 and Level 2 Screening for I-15 Interchange and Bicyclist and Pedestrian Crossing Report.	

Suggestion or Refinement	Incorporated into Final EIS Design	Response
South Segment – I-215		
Add a system-to-system interchange with I-15 and U.S. 89/Beck Street in North Salt Lake. Accommodate all directions of travel with fewer traffic signals.	No (incorporated into RTP)	The Action Alternative would allow travelers to access all directions of travel between I-215 and I-15 and allow travelers coming from U.S. 89 to access all directions of travel on both I-215 and I-15; however, the access would not be "free-flow" and would require travel through a traffic signal. Traffic modeling has shown that the Action Alternative's design has enough capacity to accommodate projected traffic in 2050. Additionally, the current design proposed with the Action Alternative is forward-compatible with creating a free-flowing, system-to-system interchange between I-15 and I-215 in the future, which is a separate future project in WFRC's 2019–2050 RTP. Because of the grade changes in this area, the additional ramps for a system-to-system interchange would need to be vertically separated, which adds cost. The proposed design with the Action Alternative adequately accommodates traffic projections for 2050. Regarding free-flow access to and from U.S. 89/Beck Street, the Action Alternative provides access among U.S. 89/Beck Street, 1-15, and I-215 with two new signalized intersections (one on U.S. 89/Beck Street, 1-15, and I-215 with two new signalized intersections (one on U.S. 89/Beck Street, as it exists today, would not allow the new access to I-215 that would be provided by the Action Alternative due to the physical and geometric constraints of the location. Providing new free-flow ramps for all movements would impact commercial or planned residential properties on U.S. 89 that would not be impacted with the Action Alternative's design.
Is UDOT aware of the planned trail connecting Eagleridge Drive and U.S. 89 with Hatch Park in North Salt Lake?	Yes	UDOT is aware of the planned trail and is coordinating with the City of North Salt Lake to confirm that the Action Alternative would not encroach on the planned trail.
South Segment – 2100 North		
Install roundabouts at the 2100 North interchange in Salt Lake City.	No	Roundabouts, especially those that can accommodate large trucks or a lot of traffic, require a large area and therefore result in greater impacts to nearby businesses and resources. At 2100 North, there are large wetland complexes to the west and businesses to the east. The Action Alternative includes signalized intersections instead of roundabouts to minimize impacts to the surrounding wetlands and businesses.
Make 2100 North in Salt Lake City go over the railroad tracks.	Yes	The Action Alternative is proposed to be grade-separated over the railroad tracks at 2100 North.

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Add a shared-use path along the 2100 North overpass in Salt Lake City to connect to Beck Street with 2300 North or to	No	No shared-use path facilities are proposed on the 2100 North overpass because there is no anticipated demand for pedestrian or bicyclist use in this location. The 2100 North interchange services the industrial land uses on the east and west sides of I-15 and would not connect to any other pedestrian or bicyclist facilities. The Action Alternative would provide improved pedestrian and bicyclist crossings at 1000 North and 600 North in Salt Lake City to accommodate pedestrians and bicyclists in the residential areas adjacent to I-15 in these locations.
connect to the Jordan River shared-use path.		A new shared-use path connection to the Jordan River shared-use path would need to cross the Chevron refinery located west of the 2100 North interchange to connect to the Jordan River shared-use path. Chevron does not allow public access through its refinery. This shared-use path connection is not included with the Action Alternative due to this access restriction.
South Segment – U.S. 89		
Elevate the shared-use path along U.S. 89 in North Salt Lake to prevent it from accumulating runoff and debris.	Yes	UDOT will continue to work with local municipalities on the final design of the Action Alternative and maintenance for pedestrian and bicyclist facilities.
Grade-separate the U.S. 89 shared-use path in Salt Lake City at all driveways.	No, but might be evaluated further in final design of the Action Alternative (if it is selected)	The Action Alternative's shared-use path design does not currently include grade separation for driveway crossings because a low amount of traffic accesses U.S. 89 where the shared-use path would be located. UDOT might consider grade-separated crossings during final design after coordinating with the local municipalities and property owners if the costs of grade-separated driveways would be warranted based on traffic.
Add shared-use path access between U.S. 89 and the Orchard Drive cul- de-sac at Village Station in Salt Lake City.	Yes	The Action Alternative includes a connection between the U.S. 89 shared-use path and the cul-de-sac for Orchard Drive.
Do not widen U.S. 89 in Salt Lake City.	Yes	No widening or additional capacity is being proposed on U.S. 89 as part of the Action Alternative. U.S. 89 north of the new, proposed connections to I-215 would have the same footprint with the Action Alternative.
Add a traffic signal at U.S. 89 and Eaglegate Drive in Salt Lake City.	No	Adding a new traffic signal at this location would not meet UDOT's design standards for intersection spacing, and the traffic analysis has shown that a signalized intersection at Eaglegate Drive is unnecessary. The westbound Eaglegate Drive approach to U.S. 89 would operate at a satisfactory level of congestion or better even without a signal with projected traffic. Adding a signal at Eaglegate Drive would result in poor signal spacing with Eagle Ridge and the proposed new signal for the intersection of the I-15/I-215 interchange and U.S. 89.

Incorporated into Final EIS Design	Response
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Some yes, some no	UDOT will continue to work with local municipalities on the final design of local streets where they connect with I-15 and its interchanges. The Action Alternative would improve access to I-15 for residents on and near 1000 North compared to existing conditions (by providing a northbound off-ramp access), provide a shared-use path connection to Warm Springs Road, and maintain existing bicycle and pedestrian accommodations. To provide the I-15 access and accommodate traffic in 2050, turn lanes on 1000 North are necessary between Poinsettia Drive and 900 West in Salt Lake City. Adding turn lanes would widen the footprint of 1000 North for one block.
No	The Action Alternative is already shifted to the east to avoid direct impacts to residents on the west side of I-15. The collector-distributor (CD) system proposed with the Action Alternative would be located where the existing on-ramp is today—meaning that it would not be any closer to residents than it is today. To shift this farther east would result in more impacts to the industrial properties east of I-15.
No	A pedestrian bridge between Rosewood Park and Swede Town would need to cross over Union Pacific's rail yard, which would not be allowed per Union Pacific rules. Therefore, a shared-use path is not proposed for this location with the Action Alternative. Pedestrian and bicyclist improvements under or over I-15 are being proposed at 1000 North and 600 North in Salt Lake City.
No	The Action Alternative's shared-use path at the 1000 North interchange would be grade-separated from I-15 and go under I-15. The shared-use path would be at the same grade as the road access that connects to the 900 West and 1000 North intersection. Signalized crossings of the I-15 southbound off-ramp and northbound on-ramp at the 1000 North intersections would be provided so that users of the shared-use path can cross with signal protection. With these improvements, grade separation of the shared-use path for the off-ramps is not needed. Providing a grade-separated shared-use path over the on-ramps and off-ramps would require out-of-direction travel and grade changes and would result in less use of the shared-use path.
Yes	A standalone tight diamond interchange was screened out for 600 North; however, a tight diamond interchange with a CD connection to 1000 North passed screening and is included as part of the Action Alternative.
No	A single-point urban interchange at 600 North was screened out during Level 1 screening because it would not improve access to Rose Park or provide a more comfortable crossing for pedestrians and bicyclists. For more information, see Appendix 2A, <i>Alternatives Development and Screening Report</i> .
Yes	UDOT will continue to work with local municipalities on the final design of the active transportation and trail system.
	Final EIS Design h Some yes, some no No No No Yes No

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Retain the free right-hand turn onto southbound I-15 from 600 North in Salt Lake City.	No	With the Action Alternative, free right-hand turns for vehicles at the 600 North interchange would be eliminated. This change was made to improve safety for pedestrians and bicyclists that travel along 600 North.
Grade-separate the shared-use path along 600 North and/or over 600 North in Salt Lake City.	No	Although a grade-separated shared-use path parallel to 600 North and over both the I-15 ramps and I-15 is feasible, it would require pedestrians and bicyclists to travel out of direction and to change grade (climb up and go down) to cross over or under ramps. Out-of-direction travel or a grade change would result in less use of the shared-use path. The diamond interchange proposed for 600 North would reduce the number of crossings compared to the existing single-point urban interchange configuration and would allow efficient and direct travel across 600 North for pedestrians and bicyclists with no grade changes. The bike lanes would be curbed or barrier-separated to enhance safety. Additionally, free right-hand turns for vehicles at the 600 North interchange would be eliminated, which would also improve safety for pedestrians and bicyclists.
Add a pedestrian and bicyclist bridge over 600 North at 600 West in Salt Lake City.	No	Users on 600 West already have a grade-separated crossing under 600 North that requires going east for about a half block. A new grade-separated crossing that goes over 600 North would require a large vertical climb and would be less desirable to users than continuing to use the existing underpass.
Add a pedestrian bridge over 800 West in Salt Lake City.	No	No pedestrian crossing of I-15 is being proposed at 800 West with the Action Alternative because there are no major pedestrian destinations on the east side of I-15 in this area. Crossings of I-15 would be provided at 600 North and 1000 North with the Action Alternative.
Reduce the number of turn lanes from the I-15 off- ramps onto 600 North in Salt Lake City.	No	The number of turn lanes to and from I-15 at 600 North is based on the traffic analysis and is needed to keep traffic from backing up onto mainline I-15. The Action Alternative design includes signalized intersections at 600 North, and perpendicular intersections (compared to the existing single-point urban interchange with free-right turn lanes), which would reduce speeds for traffic entering 600 North.
Bury, tunnel, or cap I-15 through Salt Lake City.	No	Based on comments and requests received during the draft alternatives public comment period, UDOT evaluated burying I-15 in Salt Lake City between North Temple and 600 North. UDOT evaluated four different versions of a buried tunnel option for I-15 in Salt Lake City. Compared to Salt Lake Option A (the Action Alternative), any of the four tunnel options would have substantially more impacts to the adjacent residential properties, churches, commercial properties, and historic properties in just the section of I-15 between North Temple and the 600 North interchange area. As one example, the tunnel options would require relocating 180 to 1,270 more residential households, which is 13 to 90 times more than the 14 potential residential relocations identified for the Action Alternative in Salt Lake City. All of these properties that would be affected 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. All four tunnel options were screened out due to their substantially higher impacts to the community. For more information, see Section 3.2.3, <i>Level 2 Screening for Interchange and Bicyclist and Pedestrian Concepts</i> , and Attachment B, Salt Lake Tunnel Options, in Appendix 2A, <i>Alternatives Development and Screening Report</i> .

Suggestion or Refinement	Incorporated into Final EIS Design	Response
Add unspecific additional north-south routes (local roads or shared-use paths) parallel to I-15 on the east side in Salt Lake City. A commenter questioned whether the new shared- use path on U.S. 89/Beck Street would cause impacts to the Wasatch Plunge Building or provide access to the Marmalade Branch of the Salt Lake City Public Library, Warm Springs Park, and other commercial areas near 600 North.	No	The new shared-use path north of Wall Street/800 North would be located on UDOT right-of-way and would remove one of the existing northbound through lanes. No acquisition of any properties outside the UDOT right-of-way is needed for this improvement. There are already bike lanes and sidewalks on the east side of U.S. 89/300 West/Beck Street south of 800 North, so no additional improvements are proposed in this area. UDOT is proposing improvements to the 600 North bike lane and sidewalk crossings at 300 West and 400 West. Additional north-south routes (local roads and/or shared-use paths) or new or improved crossings of U.S. 89/300 West/Beck Street would be beyond the scope of this EIS. These improvements would need to be initiated and coordinated with Salt Lake City.

9.1.5 Category 5: Comments For and Against a New Crossing at 400 North in Salt Lake City

UDOT received numerous comments for and against a new crossing underneath I-15 at 400 North in Salt Lake City. Some commenters supported the crossing at 400 North and asked UDOT to include it in the Final EIS. Other commenters stated that UDOT should not include it. Some commenters criticized the decision to study 400 North separately from the Draft EIS. Some commenters expressed similar support for and opposition to a new crossing at 500 North in Salt Lake City (a new crossing at 500 North in Salt Lake City was not part of the Action Alternative and had been eliminated in the screening process).

Response

One of the project purposes is to better connect communities east and west across I-15 in the study area. During the draft alternatives development and screening process for this EIS, a new crossing under I-15 was considered at 400 North in Salt Lake City. Another potential new crossing at 500 North was considered and screened out during the alternatives development and screening process because of vertical clearance concerns. In response to mixed feedback from the community for a new 400 North crossing in Salt Lake City, UDOT removed this crossing from the Action Alternative in the Draft EIS. In an effort to better evaluate and understand the concerns around a potential new crossing in Salt Lake City, UDOT worked with Salt Lake City and local community representatives after the Draft EIS was released to evaluate a potential new crossing under I-15 between 400 North and North Temple. This additional analysis did not result in Salt Lake City or the local community recommending a new crossing in Salt Lake City because of various concerns provided by the local community about safety and maintenance.



9.1.6 Category 6: Comments Stating General Concerns about Project Impacts, and Comments Stating That UDOT Was Not Properly Accounting for Impacts from the Action Alternative

UDOT received numerous comments stating concerns for the impact of the I-15 project to air, noise, communities, water quality, ecosystems, environmental justice (EJ) communities, the west side of Salt Lake City, property, parks, and climate change. The general sentiments of this category of comments is that UDOT did not properly study impacts to resources.

- Commentors requested that UDOT generally minimize impacts to residents or businesses by using available land in the medians or on the shoulders of roads or otherwise reduce the footprint of I-15.
- Quality of life, community, and park impact comments:
 - Commenters stated or implied that the project will negatively impact their quality of life or that the project is not aligned with their vision or values. Related concerns suggested that I-15 is or would be a barrier in communities, the Action Alternative would adversely impact their communities, and the Action Alternative would impact parks and green space.
- Property and right-of-way impact comments:
 - UDOT received comments from many commenters asserting or assuming that properties that would not be impacted by the Action Alternative would be impacted. There were many comments asking for more information about property impacts or expressing concern for property impacts for themselves, the west side of Salt Lake City, EJ community residents, or specific businesses. Many commenters expressed their concerns for potential impacts to their property, and several commenters questioned how they would be compensated for property impacts. Some commenters asserted that they would not be adequately compensated by UDOT.
- EJ analysis and the west side of Salt Lake City impact comments:
 - Commenters expressed concern for residents and tenants of Salt Lake City's west-side community or low-income residents elsewhere along I-15 that might have difficulty moving due to the regional shortage of housing and the expensive cost of housing. Commenters were concerned with impacts to property, impacts during construction, and long-term impacts of the project. Some commenters stated that they did not trust UDOT to treat EJ community residents fairly through the National Environmental Policy Act (NEPA) process, the right-of-way process, or construction of the project.
 - Commenters questioned how, or whether, UDOT analyzed impacts to EJ communities and how UDOT will address impacts to the west side of Salt Lake City. Commenters stated that UDOT needs to have an unspecific, different, "community-centered" approach to the EJ analysis. Commenters stated that I-15 will still divide EJ communities in Salt Lake City.
- Air quality impact comments:
 - Numerous comments were received regarding air quality. Commenters asked whether or stated that this project will make air quality worse. Commenters stated that emissions in 2050 without the I-15 project would be lower than emissions in 2050 with the project. Commenters stated that bad air quality is an economic impact. Some commenters critiqued the air quality modeling and



the data inputs to the modeling, such as fleet ages and interim years, and requested that the analysis consider factors such as the proximity to oil refineries, tire wear, brake wear, and road dust. A commenter stated that UDOT should not rely on the National Ambient Air Quality Standards or Clean Air Act in its analysis. A commenter stated that the EIS did not consider the oil refineries. Some commenters were concerned about air quality impacts on the west side of Salt Lake City and referenced the recently completed U.S. Environmental Protection Agency (EPA) study.

- Commenters stated concerns that the project will increase greenhouse gas emissions or make climate change worse.
- Noise impact comments:
 - Numerous comments expressed general concern for the existing noise from I-15 and general concern about the future noise impacts of the Action Alternative. Commenters requested that UDOT use noise-deadening pavement materials to reduce noise along I-15. Other commenters requested that UDOT use noise-deadening materials in noise walls to reduce noise.
- Ecosystem resource impact comments:
 - Commenters stated general concerns about the Action Alternative's impacts to plants, animals, or wetland areas.
- Water quality comments:
 - Commenters stated general concerns about water quality, including the potential for the Action Alternative to impact areas with high groundwater tables and artesian wells along I-15.

Response

9.1.6.1 Minimize Impacts with the Action Alternative's Design

See Section 2.3, *Alternatives Refinement Process*, for details regarding how UDOT's design team minimized impacts while maintaining design standards. UDOT used existing space within medians and UDOT's right-of-way where feasible. Vertical and horizontal standards (such as design speeds or curve radii) require UDOT to acquire additional property outside the existing UDOT right-of-way in some locations. Based on public comments and concerns, UDOT continued to progress the design around Hodges Lane in Salt Lake City. Based on this more detailed evaluation UDOT determined that the 10 properties along Hodges Lane in Salt Lake City that were listed as "Potential Relocations" in the Draft EIS would not have permanent or temporary right-of-way impacts from the Action Alternative. The Final EIS right-of-way impacts have been updated to reflect this reduction in right-of-way impacts. Section 3.3, *Right-of-way and Relocations*, includes detailed information regarding potential property impacts. Additional information, such as online maps, is provided on the study website (<u>https://i15eis.udot.utah.gov</u>). These online maps allow users to zoom in to a specific location and see more detail.

9.1.6.2 Quality of Life, Community, and Parks

UDOT evaluated expected impacts to quality of life, community resources, and parks in Section 3.2, *Social Environment*. The following subsections provide a summary of this analysis.



Quality of Life. Improving quality of life is part of UDOT's mission, and UDOT has developed a Quality of Life Framework for directing how UDOT supports its mission while serving the public. UDOT understands that quality of life can have a personal meaning that is unique to each individual. UDOT also recognizes that the expected impacts of the I-15 project would not be experienced uniformly by all residents located near I-15.

Within UDOT's Quality of Life Framework, UDOT is working to improve I-15 in four outcome areas: good health, connected communities, strong economy, and better mobility. The I-15 project would improve health by increasing safety through incorporating newer design standards that would reduce the potential for crashes for all users, and by providing more opportunities to walk and bike. The project would better connect communities by increasing east-west connectivity across (over or under) I-15. The project would support a strong economy by improving travel times in 2050 on and along I-15, which would benefit both commuters and freight movements. The project would improve mobility by reducing daily delay, reducing travel times on I-15, and improving average speeds on I-15 compared to the 2050 No-action Alternative.

Community. UDOT recognizes that "community" can be a broad term that means different things to different people. For the EIS analysis, impacts to community cohesion and quality of life are assessed based on the definitions described in Section 3.2, *Social Environment*. Impacts to properties are described in Section 3.3, *Right-of-way and Relocations*. Generally, because I-15 is an existing freeway, most community impacts from the Action Alternative would be similar to existing conditions or better than existing conditions in certain categories.

One of the I-15 project's purposes is to better connect communities east and west across I-15 in the study area. As described in Section 3.2, the new shared-use paths and crossing improvements proposed with the Action Alternative would increase connectivity, community cohesion, and quality of life. The improvements to the crossings proposed with the Action Alternative would help reduce I-15 as a barrier. The Action Alternative would not impact any community facilities. Additionally, UDOT anticipates that reducing delays and improving safety would benefit emergency services.

Specifically in Salt Lake City, the Action Alternative would improve pedestrian and bicyclist connections on 600 North and under I-15 at 1000 North. The new interchange at 2100 North would reduce truck traffic on 600 North, a long-standing request of the residents. The project would also add a shared-use path parallel to U.S. 89 to connect Davis and Salt Lake Counties.

Parks. The expected park and green space impacts of the Action Alternative are summarized in Section 3.1, *Land Use*; Section 3.2, *Social Environment*; Chapter 4, *Section 4(f) Analysis*; and Chapter 5, *Section 6(f) Analysis*.

The Action Alternative would have minor, partial impacts to parks and recreation areas. With the Action Alternative, all parks are anticipated to remain functional for continued recreation use. The majority of the expected impacts to recreation facilities would be minor and would require only partial acquisitions or temporary construction easements.

9.1.6.3 Right-of-way Impacts

UDOT evaluated right-of-way impacts in Section 3.3, Right-of-way and Relocations, of this EIS.

Right-of-way Impacts. Many commenters stated that there would be more right-of-way impacts than what the EIS's impact assessment shows. During the alternatives development, screening, and refinement



processes, UDOT went to great lengths to try to avoid and minimize impacts to adjacent properties. In some areas (such as Salt Lake City, for example), some space in the median between the northbound and southbound lanes of I-15 is available to add capacity toward the center, which would reduce the width needed outside the current freeway footprint and UDOT-owned parcels. As of the publication of this Final EIS, no residential relocations would be required in Salt Lake City for the project, and none of the Salt Lake City commercial properties listed in the comments (a coffee shop, a community garden, a community center, the Don Daniels restaurant, a Mexican imports store, and the Boys and Girls Club building) are anticipated to be impacted by the Action Alternative. In other areas, more undeveloped properties are available on one side of the freeway or cross street. Where that is the case, UDOT plans to use the undeveloped properties to avoid impacting homes or businesses.

Based on public comments and concerns, UDOT continued to progress the design around Hodges Lane in Salt Lake City. Based on this more detailed evaluation, UDOT determined that the 10 properties along Hodges Lane in Salt Lake City that were listed as "Potential Relocations" in the Draft EIS would not have permanent or temporary right-of-way impacts from the Action Alternative. The Final EIS right-of-way impacts have been updated to reflect this reduction in right-of-way impacts.

Section 3.3, *Right-of-way and Relocations*, includes detailed information regarding potential property impacts. Additional information, such as online maps, is provided on the study website (<u>https://i15eis.udot.utah.gov</u>). These online maps allow users to zoom in to a specific location and see more detail.

In some cases, constructing the Action Alternative would impact a portion or all of a property. In those cases, UDOT must follow federal and state right-of-way procedures and processes (https://www.udot.utah.gov/connect/public/acquisition-relocation).

UDOT will reach out directly to affected property owners later in the process after an alternative is selected in the Record of Decision. If you are an owner of property immediately adjacent to I-15 and would like to learn more about the process or ask specific questions about your property, please reach out to UDOT's Right-of-Way Division, Acquisition Services group (<u>https://www.udot.utah.gov/connect/about-us/project-development/right-of-way-division</u>).

When property acquisitions are necessary, UDOT must comply with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 United States Code Section 4601 and subsequent sections, amended 1989) and the State of Utah Relocation Program (part of the Utah Relocation Assistance Act, Section 57-12 of the Utah Administrative Code). To ensure just compensation for any property acquisition, these laws provide for uniform and equitable treatment of all persons without discrimination on any basis.

Indirect Impacts to Property Values. Property values depend on many variables, and no formulas can quantify the effects of a modified transportation facility on property values. In general, an improved transportation network increases all property values in an area. However, as suggested by previous studies, residential properties adjacent to I-15 could have lower property values or have a lower rate of appreciation than similar properties located farther from I-15 if all other variables are similar. If some areas have lower property values, the local taxing entities would receive less in property taxes. However, if other areas have increased property values, local taxing entities would receive more in property taxes for these properties. Because I-15 is an existing road, any decreases in property values from the Action Alternative compared to the No-action Alternative are anticipated to be minor.



UDOT does not compensate for any decrease in property values as a result of a project if no property is acquired. Per UDOT's right-of-way process, UDOT can generally acquire only property that is needed for a project. Therefore, UDOT generally does not purchase properties that would not be directly affected by a project unless the project would cause the property to have no value or not be usable (for example, the project would eliminate access to the property).

Environmental Justice and West Side of Salt Lake City Property Impacts. As described in this Final EIS and stated above, UDOT does not anticipate any mandatory residential relocations in Salt Lake City. To ensure just compensation for any property acquisition, federal and state laws provide for uniform and equitable treatment of all persons without discrimination on any basis. These laws apply to property owners and renters regardless of income status. If relocating is necessary, the property owners and renters have rights and discretion in the right-of-way process, the mitigation provided, and where they are moved.

UDOT will work directly with the affected property owners and renters in Salt Lake City and other areas pursuant to these laws and policies to provide a fair outcome for impacted property owners or residents. The impacted property owners or residents will be responsible for determining the type of mitigation they receive. The Cities, neighbors, or others who do not have an ownership or renting interest in the property do not decide where impacted property owners move.

9.1.6.4 Environmental Justice Analysis and the West Side of Salt Lake City

UDOT prepared a detailed environmental justice (EJ) analysis that follows all current federal rules, regulations, and guidance for both public involvement and impacts assessment; this analysis is presented in Section 3.4, *Environmental Justice Populations*, of this EIS.

UDOT understands that the I-15: Farmington to Salt Lake City Project has the potential to affect (both positively and negatively) historically underserved populations. UDOT also recognizes that I-15 is one, but not the only, historical barrier between the east and west sides of Salt Lake City and other communities. With this study, UDOT has been working with the Cities to identify and provide better connections across I-15 via vehicle, bicycle, or walking and to transit facilities to reduce barriers for all users while minimizing any impacts to specific communities as much as possible.

UDOT acknowledges the impacts of past decision-making on the west side of Salt Lake City. With this study, UDOT is seeking ways to minimize further transportation impacts to these communities and provide better connections across I-15 via vehicle, bicycle, or walking. UDOT is also seeking ways to better connect to transit options and enhance mobility for all people in this part of the study area. Consistent with its Quality of Life Framework and the purpose of the project, UDOT is proposing new connections; safer, more community-friendly access points and crossings; and an upgraded Warm Springs Road interchange to try to take some truck traffic out of residential areas around 600 North, which would help reduce the east-west divide and improve community connections.

Proposed transportation improvements are meant to benefit all transportation users in the area, including those who use I-15, 600 North, and 1000 North. A functional or less congested I-15, and an I-15 and 600 North interchange that improves mobility, would also be a benefit to adjacent EJ communities who use I-15 to access their neighborhoods.

UDOT has conducted substantial outreach with various individuals, groups, and representatives for locations with EJ populations. Based on the coordination and outreach, UDOT is aware of many concerns, issues,



and opinions about what has caused impacts and what might be needed to mitigate these impacts. As stated in the EJ analysis in this EIS, many issues for EJ populations in west Salt Lake City, such as constructing the railroad line along 500 West, industrial development, and redlining, occurred long before I-15 was constructed. The issues or concerns that were caused by the railroads, industrial development, and redlining cannot be addressed by the I-15 Action Alternative. UDOT is committed to continuing to work with Salt Lake City and the neighborhoods to identify ways that the I-15 project can help benefit all communities in the study area.

The Action Alternative is not anticipated to change any land uses on the west side of Salt Lake City or have any influence on the timing or construction of the inland port. Most industrial uses in Salt Lake City, including the refineries, were constructed before I-15. Moreover, I-15 already exists, and the Action Alternative would not provide any new access to areas that do not currently have access to I-15. Because most of Salt Lake City's developable land in the communities in the study area is already built out and has existing transportation access, the I-15 project would not change planned land uses or result in any changes to planned industrial land uses such as the inland port.

9.1.6.5 Air Quality

UDOT evaluated impacts to air quality and greenhouse gases in Section 3.8, Air Quality, of this EIS.

Air Quality Impacts and Trends in the Study Area. Generally, emissions from cars and trucks that contribute to Utah's air quality challenges will continue to decrease even with an increase in population. This decrease is due primarily to improvements in vehicle technology and cleaner fuels. The I-15: Farmington to Salt Lake City EIS has assessed the anticipated emissions from the project alternatives (see Section 3.8, *Air Quality*). The regional air quality effects from this project, along with all other planned transportation projects in the region, are assessed as part of the regional transportation planning process. WFRC's 2019–2050 RTP includes a regional air quality conformity analysis, which considers anticipated emissions from all existing and planned major transportation facilities in 2050 (WFRC 2019a).

Transportation is one primary source that contributes to air quality issues in the Salt Lake Valley and Davis County. This source includes emissions from personal vehicles, FrontRunner, buses, airplanes, and motorcycles. Other primary sources include industrial and commercial point sources and area sources, such as emissions from residential and commercial development (furnaces, dry cleaners, restaurants, lawnmowers, etc.).

From a historical perspective, the current air quality in Utah is much improved from historical levels, even with a much higher population, and it continues to get better due to stricter air quality standards, better industrial and vehicle emission technologies, cleaner-burning fuels, and energy-efficiency measures. Consistent with this recent trend, transportation-related air quality pollutants are projected to continue to decrease due to even better emissions technologies and fuel efficiency (WFRC 2019b). As summarized in the Utah Division of Air Quality's (UDAQ) 2022 annual report (UDAQ 2022), air quality along the Wasatch Front during the winter shows a clear trend of continued improvement over the past two decades, even with the large population and economic growth in the region during this period. UDAQ also notes that summertime ozone is now the primary air quality concern along the Wasatch Front.

Economic Impacts of Bad Air Quality. To the extent that bad air quality has economic impacts, improvements in air quality consistent with WFRC's 2019–2050 RTP and modeling assumptions should contribute to positive economic impacts.



Interim-year Analysis. UDOT has added 2035 as an additional air quality modeling year since this is likely a conservative (early) estimate of the opening year for the complete project. Section 3.8, *Air Quality* includes this additional modeling.

Project Air Quality Impacts and Modeling Inputs. Air quality impacts from the Action Alternative have been analyzed in this EIS (see Section 3.8, *Air Quality*). The air quality analysis follows FHWA's and UDOT's policies and procedures using approved air quality models and model inputs. The model inputs include tire wear, brake wear, and road dust. Generally, vehicle emission rates per mile are lower (better) at higher speeds and during free-flowing traffic conditions than they are at low speeds and during congested conditions.

EPA EJ Study for the West Side of Salt Lake City. UDOT is also aware of a study conducted by EPA regarding EJ and air quality on the west side of Salt Lake City that was completed in August 2023 (EPA 2023). The study included a review of existing data and community input and did not include additional research or the production of new data. UDOT has reviewed the study and its findings for this Final EIS, and the EJ and air quality analyses in this EIS considered and used many of the same existing data sources as the EPA study. UDOT has also participated with EPA and the contractor conducting the study.

Climate Change. Section 3.8.4.4, *Emissions Inventory for Greenhouse Gases*, of the EIS includes a greenhouse gas emissions inventory for the No-action and Action Alternatives. This analysis shows that the Action Alternative would have slightly higher (4% to 11%) greenhouse gas (GHG) emissions than the No-action Alternative, and the Action Alternative would produce a -7% to 7% change in GHG emissions in the study area compared to the existing conditions (in 2019).

In contrast to broad-scale actions, such as those involving an entire industry sector or large geographic areas, it is difficult to isolate and understand the impacts of GHG emissions for a particular transportation project. Furthermore, there is currently no scientific methodology for attributing specific climate changes to emissions from a particular transportation project. For more information on cumulative GHG impacts, see Section 3.18, *Indirect and Cumulative Effects*.

9.1.6.6 Noise

UDOT evaluated traffic noise impacts from the Action Alternative using FHWA's and UDOT's noise model and methodologies. The Action Alternative's modeled noise levels for individual receptors and noise impacts are discussed in Section 3.9, *Noise*, and Appendix 3F, *Noise Technical Report*. Mitigation measures for noise impacts are summarized in Section 3.9.4.4, *Mitigation Measures*, and described in more detail in Appendix 3F, *Noise Technical Report*. Generally, noise conditions with the Action Alternative would be louder than existing conditions due to the additional lanes on I-15 with the Action Alternative. However, the noise analysis also identifies 3 new noise walls and 13 replacement noise walls that are recommended for noise mitigation. The new or extended noise walls would be subject to balloting according to UDOT's Noise Abatement Policy.

UDOT plans to use the standard concrete-panel noise walls that material and acoustic testing has shown to reduce noise and that meet UDOT's standard design and structure specifications. Any different type of noise walls would need to demonstrate that they could also provide acceptable noise abatement and meet UDOT's standard design and structure specifications.



UDOT plans to use concrete pavement for I-15. UDOT uses concrete pavement on interstate highways because it requires less maintenance. Therefore, there would be fewer disruptions to traffic operations on I-15 for roadway maintenance. Concrete pavement is also more durable and more cost-effective for higher-volume roads that carry a higher percentage of trucks.

9.1.6.7 Ecosystem Resources

UDOT evaluated impacts to plants, animals, wetland areas, and aquatic resources in the EIS. The impacts of the Action Alternative and proposed mitigation measures are described in Section 3.12, *Ecosystem Resources*. As described in Section 3.12, UDOT anticipates some impacts to migratory birds and to some wetlands and aquatic resources. Section 3.12.4.4, *Mitigation Measures*, includes mitigation measures for impacts to migratory birds and vegetation. These mitigation measures include standard UDOT specifications to limit the spread of noxious weeds and trees and limitations on removing shrubs to minimize impacts to migratory birds. Mitigation for impacts to wetland areas and aquatic resources would be determined as part of the Clean Water Act Section 404 permitting process with the U.S. Army Corps of Engineers.

Impacted trees and landscaping in park strips on non-UDOT-owned adjacent properties would be replaced according to UDOT's Project Aesthetics Guidelines or federal or state right-of-way policies if applicable. Replacing any trees or landscaping on park strips would require coordinating with the local municipalities to confirm whether any replaced trees or landscaping would be maintained. Trees growing wild (that is, trees that have "self-seeded") in UDOT-owned rights-of-way would not be replaced.

9.1.6.8 Water Quality

UDOT evaluated impacts to water quality and water resources in the EIS. The impacts of the Action Alternative to water quality and water resources, including groundwater and drinking water source protection zones, are discussed in Section 3.11, *Water Quality and Water Resources*. Mitigation measures for impacts to water resources are listed in Section 3.11.4.4, *Mitigation Measures*, and include measures that would help ensure that surface water and groundwater quality is maintained during and after construction. In addition to these mitigation measures, UDOT will conduct additional geotechnical analysis as part of the final design process for the Action Alternative, if it is selected, to better identify areas with bad soils or high groundwater tables that could affect construction methods.

9.1.7 Category 7: Public Outreach and Public Comment Consideration Comments

The general sentiment of this category of comments is that UDOT's public outreach was inadequate and that UDOT is not incorporating the public's feedback into its decision-making process.

- Commenters stated that UDOT did not adequately engage with the community or did only the bare minimum engagement required by NEPA.
- Commenters stated that UDOT is not listening to, addressing, or incorporating public concerns.
- Commenters stated that UDOT predetermined the preferred alternative or that UDOT prioritized one stakeholder (such as Lagoon, legislators, or commuters) over another (such as residents or those immediately adjacent to I-15).
- Commenters stated that locals should have the most say or should be able to vote.



Response

Public Outreach Process. Since the beginning of this environmental review process, UDOT's commitment has been to proactively involve the public so that the analysis would include the goals and issues of those who live, work, and travel in the study area as well as address needs determined through technical analysis and regional planning that preceded the beginning of this study. Throughout this process, UDOT has kept the public informed and has used public feedback to shape the alternatives in the study process.

As the NEPA process requires, UDOT reached out to the public and provided the public an opportunity to offer input into and collaborate on (1) defining the project's purpose and need, (2) helping to identify potential alternatives, and (3) documenting how the alternatives could affect people and the resources they value.

UDOT aimed to be thoughtful and diligent in outreach efforts beyond what is required in the NEPA process. UDOT aimed to:

- Broaden awareness about the study throughout the process,
- Gather input on the preferred alternative,
- Provide equitable outreach opportunities tailored to a broad cross section of stakeholders (that is, "meet people where they are"), and
- Be responsive to questions and requests for more information.

Several outreach tactics were used to engage the community, including the following:

- Social Media. UDOT provided project updates and posted notifications of public meetings and comment periods on Facebook, X (formerly Twitter), and Instagram to reach members of the public who do not receive email notifications.
- Frequently Asked Questions and Public Comments. At the conclusion of the two public comment
 periods for formal scoping and the alternatives development and screening process, UDOT posted
 all public comments received as appendices in the documentation. UDOT also produced responses
 to frequently asked questions during each comment period directly on the project website. Emails
 were sent notifying the public when the materials were posted on the project website.
- Scoping Summary Report Posted on the Project Website. In June 2022, UDOT posted the Scoping Summary Report and sent an email to the project email list to notify stakeholders that the report was available for review.
- **Notice of Intent.** The Notice of Intent was published in the Federal Register and posted on the project website.
- **Open-house Materials.** Materials used in the milestone public events were posted on the project website.
- **Options for Public Comment.** UDOT recognized that individuals who live, work, and travel in the study area have differing opportunities to learn about and provide input to a study such as this. Commenting opportunities were provided at in-person events and via the study website, email, postal mail, and court reporter transcription in the Draft EIS phase.



 Stakeholder Meetings. At key project milestones, UDOT held meetings with various stakeholder groups to obtain information, provide a project update, and share information about the information released at that milestone. These meetings included neighborhood meetings, Local Area Working Group (LAWG) meetings, city and community council updates, formal public meetings conducted online and in person, and one-on-one meetings, as needed.

UDOT was proactive in reducing barriers to participation in this study. UDOT acknowledged, before beginning the research for this EIS, that the study area encompasses regions historically underrepresented in projects and studies. Consequently, outreach planning extended beyond the requirements of NEPA, and UDOT aimed to use tactics and cultivate relationships that would connect with underserved communities and diminish obstacles to their involvement in the EIS process.

- Engagement with Influential Community Leaders and Groups. UDOT proactively collaborated with community leaders and groups who are deeply involved in local communities. This strategic engagement involved building relationships with influential figures and elected officials whose voices hold sway among stakeholders. Key participants included the Westside Coalition; University Neighborhood Partners; Alejandro Puy, Councilmember from Salt Lake City District 2; Victoria Petro, Councilmember from Salt Lake City District 1; Chris Wharton, Councilmember from Salt Lake City District 3; NeighborWorks America; Mestizo Coffee House; staff from the Salt Lake City mayor's office; Salt Lake City Transportation; State Senator Luz Escamilla; (then) State Senator Derek Kitchen; State Representative Sandra Hollins; State Representative Angela Romero; all community councils in the study area; the Salt Lake City mayor and chief of staff; the Utah Division of Multicultural Affairs; and more.
- **Multilingual GIS Commenting Tool.** UDOT implemented a geographic information systems (GIS) commenting tool that was available in English and Spanish.
- **Translation of Materials.** UDOT provided translated materials, including the Draft EIS, mailers, signs, posters, open-house materials, virtual open-house content, participation guides, video captioning, and in-person translation resources at public meetings and stakeholder gatherings.
 - The Spanish translations are not required by NEPA regulations. All Draft EIS chapters except Chapter 3 were available during the Draft EIS comment period. Chapter 3 of the Draft EIS was delayed but was made available as soon as it was ready.
- Spanish-speaking Outreach. UDOT deployed Spanish speakers for direct outreach to communities.
- Inclusive Services at Public Meetings. UDOT introduced services at public meetings designed to minimize participation barriers, such as:
 - Kids' activities
 - Free transportation in the form of vouchers
 - Complimentary food trucks
 - Translated materials
 - Interpreters



- Proactive and Inclusive Community Engagement. Many community groups in the study area took great interest as the study progressed. UDOT made it a priority to attend community-driven events as requested and proactively asked to be added to agendas of these meetings where possible. This proactive community engagement included:
 - Participating in paneling events held by elected officials,
 - Conducting in-person, one-on-one meetings with stakeholders identified as potentially impacted, and
 - Participating in events and meetings organized by interest groups (Transit Riders Union, Westside Coalition, NeighborWorks America).

For more information, see Chapter 6, Coordination.

Consideration of Public Comments in the EIS Process. UDOT has read all comments from past comment periods and considered them as part of the overall analysis of transportation options in arriving at its preferred alternative.

Public comment is one factor in the overall decision-making process of an EIS. This process includes assessing technical, regulatory, environmental, and social factors and expected impacts along with public comments. If one alternative receives a lot of positive comments and another receives a lot of negative comments, other considerations might still suggest moving forward with an option less preferred as indicated by the comments received.

Formal comments submitted during the Draft EIS public hearing and comment period have been received, and categorized responses are included in this Final EIS.

UDOT considered community feedback concerning many project elements, including removing the 400 North and 500 North underpasses in Salt Lake City (which generated conflicting opinions and preferences); designing the Action Alternative to minimize impacts to adjacent properties; improving and refining pedestrian and bicyclist facilities; and making design refinements on local streets such as Parrish Lane in Centerville, 400 North in West Bountiful, 500 South in West Bountiful and Bountiful, 2600 South in Woods Cross, and 600 North in Salt Lake City.

Many comments asserted opinions or suggestions that were often inconsistent with existing data that UDOT reviewed and relied on for the project, especially as the data relate to the total numbers, percentages, costs, and benefits of different transportation modes (vehicle, transit, bicyclist, pedestrian, etc.). In situations where the comments are inconsistent with the existing data, UDOT has relied on the existing data.

Basis for Identifying the Preferred Alternative and Options. For details regarding how the preferred alternative was identified, see Section 2.4.5, *Basis for Identifying the Selected Alternative*. None of the criteria for identifying the preferred alternative were based on the preference of elected officials or for the benefit of one stakeholder over another.

In the Draft EIS, the Farmington 400 West Option and the northern options for 400 North in Bountiful, 500 South in Bountiful, and 1000 North in Salt Lake City were selected as UDOT's preferred options because they would have fewer resource and property impacts compared to the Farmington State Street Option and the southern options in Bountiful and Salt Lake City. Based on comments received on the Draft EIS, UDOT has continued to refine and minimize the expected impacts of the Action Alternative.



Voting by Locals on the Project. UDOT makes the final decision in the EIS process. In making its decision, UDOT considers how well an alternative meets the purpose of the project while accounting for costs, impacts, comments, and concerns. The decision is not a vote. The public and any interested agencies or other stakeholders are given opportunities throughout the process to provide input and comments. Comments from any interested people or agencies are reviewed. UDOT considers the public and agency input and comments before making a final decision.

9.2 **Comments about the Action Alternative**

The following categories of comments include questions or comments about the operations or design of the Action Alternative and the identification or selection of the Action Alternative and its preferred options.

9.2.1 Comments Requesting Clarification on the Operations or Design of the Action Alternative

These comments requested clarification on the operations or design of the Action Alternative. Table 9.2-1 includes the commentors' questions and responses to the questions.

Table 9.2-1. Requests for Clarification on the Operations or Design of the Action Alternative and Responses

Question for Clarification	Response
I-15 Mainline – General	
Commenters questioned the reasoning behind the preference for diamond interchanges since they have the least capacity for vehicles (both through the interchange and on the off-ramps). Commenters requested more detailed traffic information such as a comparison of hours of delay for different interchange options, utilization rates of turn lanes, how traffic storage is accommodated without blocking the intersection, and confirmation that a left turn is accommodated without backing onto the I-15 mainline.	Several interchange options were considered at each location. As discussed in Appendix 2A, <i>Alternatives Development and Screening Report</i> , if the diamond interchanges could sufficiently accommodate anticipated traffic, they were preferred over single-point urban interchanges because they are preferable to pedestrians and bicyclists. For more information, see Section 3.2.2, Level 1 Screening for Interchange and Bicyclist and Pedestrian Crossing Concepts, in Appendix 2A, <i>Alternatives Development and Screening Report</i> , as well as the section Interchange Concepts Eliminated in Level 1 Screening under Section 3.2, Level 1 and Level 2 Screening for I-15 Interchange and Bicyclist and Pedestrian Crossing Concepts, of that same appendix. More information regarding the traffic performance and operations at each interchange is included in Appendix 3D, Alternatives Operations Analysis Memo.
North Segment – 200 West	
Why does Frontage Road go under the 200 West interchange in Farmington? Other commenters stated that Frontage Road should be elevated over the 200 West interchange.	To maintain the existing traffic movement, the northbound free-flow movement from I-15 to northbound Frontage Road would go under the new 200 West intersection with Frontage Road. Because the 200 West southbound on-ramp to I-15 goes over I-15, it is much easier to keep the 200 West intersection with Frontage Road above the northbound free-flow movement, and this provides better visibility for users of 200 West and Frontage Road.
What is the purpose of the connections to existing Frontage Road on 200 West in Farmington?	The Action Alternative would reconfigure Frontage Road to have an intersection with 200 West. Existing Frontage Road would be maintained between about 450 South and 200 West to provide access for Covington Senior Living of Farmington and other properties on the east side of existing Frontage Road.



Table 9.2-1. Requests for Clarification on the Operations or Design of the Action Alternative
and Responses

Question for Clarification	Response
Can the design for 200 West in Farmington handle traffic going to Lagoon? Lagoon traffic does not yield.	With the Farmington 400 West Option, Lagoon traffic coming to and/or from I-15 south of State Street would be able to continue to access Lagoon under free-flow conditions with the Action Alternative. I-15 northbound-to-Lagoon traffic would have a bypass at the new 200 West signal, and Lagoon-to-I-15 southbound traffic would have a free right turn with its own receiving lane at the 200 West signal. The 200 West signal and Frontage Road/Lagoon Drive are expected to have adequate capacity in 2050 during peak periods (when travel demand is highest), allow neighborhood traffic to use Frontage Road/Lagoon Drive without having to enter southbound I-15, and remove traffic from 200 West and other north-south corridors in the area. This plan allows Frontage Road/Lagoon Drive to serve not just Lagoon traffic but local traffic as well.
What is the proposed work along Frontage Road and what are the expected impacts to the Glovers Farm near Glovers Lane in Farmington?	Along the east side of I-15 between about 1050 South in Farmington and about 650 North in Centerville, Frontage Road would be shifted east to accommodate the additional width needed for I-15. The rail corridor on the west side of I-15 is a constraint that requires any additional widening to occur on the east side of I-15. The noise wall along Frontage Road would be replaced in kind, and the West Davis Corridor on-ramps would remain. The areas east of I-15, west of South Frontage Road, and on both sides of Glovers Lane are identified as partial acquisition areas. If the Action Alternative is constructed, UDOT might need to purchase some property in these areas to manage stormwater. Managing stormwater includes detention and retention basins that require land graded as ponds to capture stormwater temporarily before releasing the water. The final design and acreage required for the stormwater features would depend on the final drainage design, and it might not require the purchase of the entire parcels.
Statement that the grade change along Frontage Road near Glovers Lane is steep. The sidewalk placement with the Action Alternative might be difficult. Can UDOT leave the grass strip along the Glovers Lane sidewalk east of Frontage Road? It is an amenity that the neighborhood would like to keep.	The Action Alternative would update the pedestrian and bicyclist facilities on Glovers Lane west of Frontage Road to match the facilities on Glovers Lane going over Legacy Parkway. No changes or impacts are anticipated to Glovers Lane or the sidewalks east of Frontage Road. During the final design of the Action Alternative (if it is selected), UDOT will determine whether additional grading work (for example, cut, fill, or walls) might be needed.

I-15 ENVIRONMENTAL IMPACT STATEMENT Farmington to Salt Lake City

Table 9.2-1. Requests for Clarification on the Operations or Design of the Action Alternative
and Responses

Question for Clarification	Response
North Segment – Parrish Lane	
What is the proposed traffic control at the Parrish Lane underpass off-ramp that connects to Frontage Road north of Parrish Lane in Centerville? This road has existing congestion and poor sight distance. Will the intersection have a left- and a right-turn lane for those exiting I-15? Some commenters stated that the purpose of this intersection is to handle traffic traveling to Farmington.	The new Parrish Lane underpass off-ramp and Frontage Road intersection would be signalized to enhance the safety of all travel movements on this curved section of Frontage Road. The current assumptions are for the northbound underpass to have one lane that allows either left or right turns at the Frontage Road intersection. UDOT will evaluate this intersection for separate right- and left-turn lanes during the final design process. The benefits of this ramp and intersection are the ability to connect people to the commercial area north of Parrish Lane (Chick-fil-A, In-N-Out Burger, and McDonald's) without having to make eastbound left turns from Parrish Lane to northbound Marketplace Drive. This intersection and traffic movement cannot be substituted by the interchange at 200 West in Farmington or by moving the proposed intersection farther north to Chase Lane. Moving the off-ramp to Chase Lane would place traffic farther away from the connection for travelers coming from the south. If travelers from the south did decide to use a new access farther north, it would require traffic to backtrack on Frontage Road and would result in more traffic in the residential neighborhoods north of Parrish Lane. As residential development increases west of I-15, the number of trips to the commercial areas east of I-15 on
Request to improve operations for the movements from southbound I-15 to southbound 500 West in Centerville to reduce the number of lanes the drivers would need to cross on Parrish Lane in Centerville. Request for UDOT to redesign the Parrish Lane interchange to limit congestion for east-west travel on Parrish Lane and reduce the number of lanes drivers would need to cross on Parrish Lane when exiting I-15 northbound and traveling eastbound. Other commenters stated concerns regarding weaving movements on Parrish Lane for travel east- and westbound.	 Parrish Lane is projected to increase. As part of this EIS, UDOT extensively studied traffic at each interchange. For more information, see Section 3.6, <i>Transportation and Mobility</i>, and the <i>Mobility Memorandum</i> (Horrocks 2022). With the Action Alternative, users coming from southbound I-15 to eastbound Parrish Lane to southbound 500 West would need to make two or three lane changes between I-15 and 500 West to get to the right-turn lane. UDOT anticipates that the lane changes for this movement with the Action Alternative would occur with less traffic because the existing I-15 northbound-to-Parrish Lane eastbound free-right-hand turn lanes would be removed with the Action Alternative. With the Action Alternative, users coming from northbound I-15 to eastbound Parrish Lane would have the option of bypassing Parrish Lane and accessing the commercial area on the north side of Parrish Lane from the bypass. This bypass would eliminate the existing condition that requires northbound I-15-to-eastbound Parrish Lane to access the commercial area north of Parrish Lane.
How will the braided ramps affect local traffic movements on parallel routes such as 800 West in West Bountiful, 500 West in Bountiful, Onion Street in West Bountiful, or 300 West in Bountiful?	Traffic analysis showed that about 5% of trips from the 400 North on-ramp in West Bountiful immediately exit at the 500 South off-ramp, and the majority of this traffic heads west on 500 South. Given that this movement would no longer be available with the Action Alternative, this traffic is projected to shift primarily to 500 West, 800 West, and the 2600 South interchange to the south. The amount of traffic is small enough and well-distributed enough that it is not expected to have a large effect on the operation of the local street network.



Table 9.2-1. Requests for Clarification on the Operations or Design of the Action Alternative
and Responses

Question for Clarification	Response
South Central Segment – 500 South	
Concerns about traffic on 1500 South in Woods Cross if 500 South in West Bountiful does not handle the projected traffic.	Traffic operations analysis shows that the proposed design of the 500 South interchange would accommodate projected traffic on 500 South, and the 500 South design is not projected to cause any large increases in traffic or congestion on 1500 South.
South Segment – 2600 South	
Concern about the vehicle capacity of the 2600 South and Wildcat Way and Wildcat Way and 800 West intersections in Woods Cross and North Salt Lake.	The left-turn lane from eastbound 2600 South to Wildcat Way has been designed to provide adequate vehicle capacity to accommodate projected traffic at this intersection. The traffic engineers reviewed the Woods Cross High School traffic and school boundaries and determined that the majority of the traffic traveling to the school is coming from the east side of I-15. The Action Alternative intersection designs at both 2600 South and Wildcat Way and Wildcat Way and 800 West are anticipated to accommodate the projected Woods Cross High School traffic and other peak-period traffic.
Concerns about out-of-direction travel at 2600 South in Woods Cross and North Salt Lake, especially for residents in Woods Cross west of I-15.	UDOT understands that this option 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. UDOT traffic modeling projects that this out-of-direction travel would not decrease traffic performance or add notable delays for users in Woods Cross, including Wood Cross High School traffic.
What are the benefits of the Action Alternative at 2600 South in Woods Cross and North Salt Lake?	The traffic analysis shows that converting the interchange to a single-point urban interchange (SPUI) does a better job of accommodating all traffic movements through the I-15 interchange at 2600 South, meets drivers' expectations by using a more standard interchange type, and minimizes the number of unconventional signals and movements at the 2600 South interchange. The Action Alternative also includes two shared-use paths for pedestrians and bicyclists to cross under I-15: one south of 2600 South and one north of the interchange at the realigned 800 West underpass. These shared-use paths would be more comfortable for pedestrians and bicyclists than traversing the center of the existing diverging diamond interchange. For more information about the Action Alternative, see Chapter 2, <i>Alternatives</i> .
When traveling westbound on 2600 South in Bountiful and Woods Cross, the existing intersection of 2600 South and U.S. 89 is difficult to navigate because of the change in the number of lanes west of U.S. 89.	The proposed intersection at 2600 South and U.S. 89 with the Action Alternative would add a third westbound lane on 2600 South west of the intersection due to the increased traffic on this segment of 2600 South. UDOT will work with Bountiful City to see about ways to improve signing for users coming from the east side of the 2600 South/U.S. 89 intersection.
South Segment – 2100 North	
Questions and concerns about access to businesses along Warm Springs Road from 2100 North in Salt Lake City.	The connection between U.S. 89/Beck Street and the new interchange at 2100 North would go over both the railroad tracks and Warm Springs Road. Access to the businesses along Warm Springs Road from the I-15 and 2100 North interchange would require travelers to go west from the interchange, go north to 2300 North, go under I-15, and then turn south on Warm Springs Road. Due to the vertical clearance needed over the railroad tracks, a direct connection from 2100 North to Warm Springs Road is not possible without purchasing and relocating several businesses on Warm Springs Road.



Table 9.2-1. Requests for Clarification on the Operations or Design of the Action Alternative and Responses

Question for Clarification	Response
Questions about whether the new 2100 North interchange connection would increase traffic on U.S. 89/Beck Street, Victory Road, or other roads near Capitol Hill in Salt Lake City.	 See the list below for road specific details analyzed by UDOT. In each case, traffic is anticipated to decrease, not increase, over the no-action conditions. For all of the roads evaluated below, the decrease in traffic is projected due to improvements to I-15 and the improved interchanges at 2100 North and I-215 proposed with the Action Alternative. With the Action Alternative improvements, the traffic model is projecting that I-15 would be a more preferred travel route compared to the state and local roads discussed below. U.S. 89/Beck/300 West between 2100 North and 600 North: The 2050 travel demand model shows an average decrease in traffic of 5,000 vehicles per day on this section of U.S. 89 with the new 2100 North interchange and 600 North C-D proposed with the Action Alternative. U.S. 89/Beck/300 West south of 600 North: The 2050 travel demand model shows an average decrease in traffic of 2,100 vehicles per day on this section of U.S. 89 with the new 2100 North interchange and 600 North c-D proposed with the Action Alternative. Victory Road: The 2050 travel demand model shows an average decrease in traffic of 900 vehicles per day on Victory Road with the new 2100 North interchange and 600 North interchange and 600 North c-D proposed with the Action Alternative. Columbus Road (near the Utah State Capitol): The 2050 travel demand model shows an average decrease in traffic of 1,000 vehicles per day on Columbus Road with the new 2100 North interchange and 600 North C-D proposed with the Action Alternative. State Street (south of the Utah State Capitol): The 2050 travel demand model shows an average decrease in traffic of 600 vehicles per day on State Street south of the Capitol with the new 2100 North interchange and 600 North C-D proposed with the Action Alternative.
South Segment – 1000 North	
How will bicyclists and pedestrians access the shared-use path along 1000 North? Where are the pedestrian and bicyclist accommodations along Warm Springs Road? Another commenter stated that a shared-use path at this location would encourage trespassing in the rail yard.	The shared-use path included in the 1000 North interchange design can be accessed by pedestrians or bicyclists through two options: bicyclists can use the turn lanes on 1000 North to turn onto the shared-use path that parallels 900 West, or they can use the crosswalks at the intersections. Pedestrians would use the crosswalks at the intersections. Pedestrians would use the crosswalks at the intersections. The proposed shared-use path connects Warm Springs Road with the 1000 North and 900 West intersection. Bicyclists can use the road shoulders on Warm Springs Road for continued travel. Any additional pedestrian and bicyclist improvements along Warm Springs Road are the responsibility of Salt Lake City. The purpose of this shared-use path is to support commuting or recreation trips by bicycle. Trespassing is illegal, and the potential for trespassing in the rail yard does not eliminate the need for the shared-use path and better connectivity for pedestrians and bicyclists to access the east side of I-15.

I-15 ENVIRONMENTAL IMPACT STATEMENT Farmington to Salt Lake City

Table 9.2-1. Requests for Clarification on the Operations or Design of the Action Alternative and Responses

Question for Clarification	Response
South Segment – 600 North	
Where will the exit for the 400 South high occupancy/toll (HOT) lane in Salt Lake City be located?	The Action Alternative ends just north of 400 South. The existing exit at 400 South in Salt Lake City for the northbound I-15 HOT lane is south of 400 South. The exit would not be affected by the Action Alternative and would remain in its current location.
How will bicyclists use 900 West in Salt Lake City?	The Action Alternative would replace or maintain the existing bike lanes on 900 West south of 1000 North and the existing bike lanes on 1000 North west of 900 West. North of 1000 North, bicyclists going to the east side of I-15 would be required to use the new shared-use path on the north side of the new 1000 North connection to I-15. UDOT will continue to work with local municipalities on the final design of the active transportation and trail system.
The 600 North and 300 West intersection in Salt Lake City is dangerous for pedestrians and bicyclists and needs fewer turn lanes and more traffic calming than what is designed as part of the Action Alternative. A commenter did not support the design of the 300 West and 400 West intersections on 600 North.	Both the 600 North/400 West and 600 North/300 West intersections have been designed to meet design and safety standards. The Action Alternative requires two eastbound right-turn lanes from 600 North onto southbound U.S. 89/300 West because of traffic projections for 2050. In 2050, during the AM peak hour, 2,300 vehicles are projected to travel eastbound on 600 North from the 600 North interchange. Of those 2,300 vehicles, 75% will turn right (south) at 400 West and 300 West (U.S. 89). More vehicles are projected to turn right at U.S. 89/300 West than at 400 West. This intersection would be signalized to accommodate alternating movements by travel modes and direction. For example, the dual right turns are not "free rights" for vehicles. Pedestrians and bicyclists would be able to cross with traffic signal protection with the eastbound through movement to avoid conflicts with the right-turn vehicle movement. UDOT will continue to work with Salt Lake City on the timing of right-turn movements at this intersection.
What is the purpose of the 800 North quarter interchange just north of 600 North in Salt Lake City?	The 800 North quarter interchange is included in the Action Alternative to provide a northbound off-ramp and a northbound on-ramp access to businesses on Warm Springs Road on the east side of I-15.
Comments included questions and criticism on the road width, number of travel lanes, number of turn lanes, and speed limits on 600 North in Salt Lake City and/or requested unspecific additional traffic-calming measures. A commenter is concerned about operations on 600 North and asserted that UDOT is taking three lanes on 600 North and pushing traffic into one lane west of I-15. A commenter requested a traffic light at 600 North and 800 West in Salt Lake City.	The comments are noted. UDOT is aware that calming traffic on 600 North is a priority for Salt Lake City residents. UDOT will continue to work with local municipalities on the final design and speed limits of local streets where they connect with I-15. City roads would be subject to city review and design and traffic standards.
	The Action Alternative has two westbound and eastbound travel lanes at 800 West. These lanes are necessary to accommodate traffic entering and exiting I-15 from 600 North. This configuration matches the existing configuration west of 800 West. Salt Lake City is responsible for travel lanes west of 800 West and is studying improvements on 600 North west of 800 West as part of its 600/700 North Study. If Salt Lake City reduces the number of through lanes west of 800 West, UDOT will coordinate with the City on a location to merge lanes. At the time this Final EIS was published, UDOT understands that Salt Lake City does not plan to reduce the number of travel lanes on 600 North or install a traffic light at 800 West.



9.2.2 Comments Pertaining to the Preferred Alternative

Commenters provided comments supporting the Action Alternative or elements of the Action Alternative, or provided comments about the selection of the preferred options in the Action Alternative. These comments included:

- Commenters stated support for a design element of the preferred alternative or stated support for the preferred alternative in general. Supported project elements include improving pedestrian and bicyclist access, adding east-west connectivity over and under I-15, adding the proposed interchange at 2100 North in Salt Lake City, improving the I-215 interchange, preferring the 500 South northern option in Bountiful, removing the Glovers Lane interchange option in Farmington, adding the bicycle access on 200 North in Centerville, improving the 1000 North interchange in Salt Lake City, general support for interchange improvements, and/or supporting the entire Action Alternative.
- The Farmington Historic Preservation Commission provided several comments supporting the Farmington State Street Option instead of the Farmington 400 West Option because it would provide a better alternative for traffic going to Station Park and would take traffic off 200 West and State Street/Clark Lane. A commenter stated that the Farmington State Street Option would also provide better access to Farmington Junior High School from Frontage Road.
- Bountiful City, West Bountiful City, and other commenters requested that UDOT select the Bountiful 500 South Southern Option instead of the Bountiful 500 South Northern Option as the preferred option if property impacts cannot be avoided with the Bountiful 500 South Northern Option. Commenters stated that the Bountiful 500 South Northern Option would have greater overall impacts to businesses due to parking and co tenancy agreements to businesses in the Bountiful Corner shopping center on the north side of 500 South.

Response

Support for Action Alternative or Element of Action Alternative. Comment noted.

Farmington Historic Preservation Commission. UDOT appreciates the review and comment about the preferred option in Farmington. As described in Section 2.4.5, *Basis for Identifying the Selected Alternative*, the Farmington 400 West Option is part of the preferred alternative because it would result in a Section 4(f) use with *de minimis* impact to Ezra T. Clark Park; minimize impacts to the Clark Lane Historic District; maintain the existing local road connections between the Frontage Road, 400 West, and State Street in Farmington; and provide direct access to Lagoon that does not require users to go through any signalized intersections. The Farmington State Street Option would have a greater–than–*de minimis* impact to Ezra T. Clark Park and would have additional impacts to the Clark Lane Historic District east of 400 West. Identifying the Farmington 400 West Option as the preferred option in Farmington is parted to the formation of the preferred option in Farmington is parted to the formation of the preferred option in Farmington is parted to the formation of the preferred option in Farmington is parted to the formation of the preferred option in Farmington is parted to the formation option as the preferred option in Farmington is parted to the preferred

What is a de minimis impact?

For historic sites, a *de minimis* impact means that the historic property would not be affected by the project or that the project would have "no adverse effect" on the historic property.

For 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 a property that is eligible for protection under Section 4(f).

consistent with the requirements of Section 4(f) of the Department of Transportation Act of 1966.



Access is not planned from Frontage Road to Farmington Junior High School with either the Farmington 400 West Option or the Farmington State Street Option.

500 South. Based on coordination with West Bountiful City and Bountiful City, UDOT has refined the design of the Action Alternative at 500 South for the Final EIS to reduce the width of improvements on 500 South. This refinement has reduced impacts to businesses while still maintaining safe pedestrian and bicyclist facilities. These updates include design revisions that reduce unnecessary median or shoulder width on 500 South, a 5-foot-wide sidewalk on the north side of 500 South, and a reduced width east of 500 West to match the existing pedestrian facilities. With these changes, the Action Alternative still meets the project's purpose for all users.

UDOT has reviewed the information provided by West Bountiful City and the commenters and provided additional detail on the business impacts in Section 3.5, *Economic Conditions*, for the No-action and Action Alternatives. As described above in Table 9.1-1, *Suggested Refinements or Additions to the Action Alternative and Responses*, UDOT has also revised the design of 500 South to minimize business impacts in this area based on other comments.

9.3 **Comments Specific to the Draft EIS Analysis**

This section addresses comments that focus specifically on the Draft EIS resource impacts or analyses.

9.3.1 Social Environment

A. Commenters stated that the project will destroy Ezra. T. Clark Park and the Farmington Creek Trail.

The expected park and green space impacts of the Action Alternative are summarized in Section 3.1, *Land Use*; Section 3.2, *Social Environment*; Chapter 4, *Section 4(f) Analysis*; and Chapter 5, *Section 6(f) Analysis*.

As described in Section 3.2.4.3.2, *Recreation Resources*, and Section 4.5, *Use of Section 4(f) Resources*, the Farmington State Street Option, which is not the preferred option, would impact most of Ezra T. Clark Park and would require realigning more of the Farmington Creek Trail. The Farmington State Street Option would require UDOT to work with Farmington City to identify a way (such as creating a new park) to mitigate for the impacts to Ezra T. Clark Park and the Farmington Creek Trail. The Farmington 400 West Option, which is the preferred option, would have minor impacts to Ezra T. Clark Park and would avoid impacts to the parking lot, pavilion, and historic monument. The Farmington 400 West Option would also have minor impacts to the Farmington Creek Trail.

9.3.2 Right-of-way and Relocations

A. Commenters stated that homes for sale near I-15 should be flagged to disclose the project to potential buyers.

After concluding the EIS process, if the Action Alternative is selected, UDOT will work with property owners to acquire the property needed for the project.



UDOT has a corridor preservation process to work with the Cities if new developments or redevelopments are planned for areas that could be impacted by the Action Alternative. This preservation process would allow UDOT to evaluate the property for potential purchase.

Before the conclusion of the EIS process, owners of properties that could be impacted by the Action Alternative, property owners who are considering selling their properties, and property owners who would like to learn more about the process or ask specific questions about their property are encouraged to reach out to UDOT's Right-of-Way Division, Acquisition Services group (https://www.udot.utah.gov/connect/about-us/project-development/right-of-way-division).

Land use plans, transportation plans, EISs, proposed public projects, and so on are all public processes that should be considered by potential home buyers as part of their due diligence when they consider purchasing a property.

UDOT cannot give legal advice to homeowners. Individuals should contact an attorney or real estate agent with any questions regarding the responsibility to disclose information about the I-15: Farmington to Salt Lake City EIS.

B. Commenters requested that UDOT tear down specific places for issues outside the project's purpose and need, such as tearing down residential properties assumed to be used for illegal activities or the Salt City Inn.

UDOT is not responsible for purchasing, demolishing, or removing undesirable properties. UDOT can acquire private property only if it is necessary for a project. UDOT must follow federal and state right-of-way procedures and processes (<u>https://www.udot.utah.gov/connect/public/acquisition-relocation</u>).

C. A commenter asked what "temporary construction easement" means. Commenters stated that the temporary easement at Centerville Park will have permanent impacts to parking and park use.

The right-of-way impact categories are defined in Section 3.3.4.1, *Methodology*. A temporary construction easement would allow UDOT to temporarily use property during construction. Land ownership would not change. Examples of work done under a temporary construction easement could include replacing noise walls on the edge of the property or reconstructing driveway access or sidewalks on the edge of the property.

The impacts to Centerville Park from the Action Alternative are not anticipated to affect parking or use of the park. Temporary impacts during construction, such as closures or detours, could affect access to Centerville Park.

9.3.3 Environmental Justice Populations

A. Commenters questioned whether UDOT was aware of the RCP and NAE grant programs and the current administration's efforts to reconnect communities affected by previous highway projects.

The federal Reconnecting Communities Pilot (RCP) and Neighborhood Access and Equity (NAE) grant programs promoted by the Biden Administration prioritize mitigation for transportation facilities that cause burdens to or that divide disadvantaged communities. The grant programs are not dedicated to removing interstates to make those connections. UDOT is aware of past actions and impacts, particularly in Salt Lake City (from I-15 and other actions unrelated to UDOT). Consistent



with its Quality of Life Framework and the purpose of and need for the I-15 project, UDOT is proposing new connections and safer, more community-friendly access points and crossings to help reduce the east-west divide and improve community connections. These actions by UDOT are aligned with the intent of the RCP and NAE grant programs. Better connecting communities and improving mobility for all modes are two of the purpose elements of the I-15: Farmington to Salt Lake City EIS.

In 2023, Salt Lake City was awarded \$1.97 million (53% of the study cost of \$3.74 million) through the RCP and NAE grant programs to analyze solutions to Salt Lake City's east-west divide as related to transportation infrastructure. Although Salt Lake City's grant application mentions the interstate system, it focuses on the railroad line that parallels I-15 and the disruptions that the at-grade rail crossings cause residents. As stated in the application, the study funded by the grant might consider "a series of multimodal bridges or a novel solution that transforms the entire urban landscape, such as a tunnel, train box, greenway deck, or a combination." UDOT is open to working with Salt Lake City if the study results in a feasible recommendation for I-15 that has not already been considered by this project.

B. EPA commented on the environmental justice (EJ) section of the Draft EIS. They noted that the Draft EIS appropriately considered interrelated factors in the EJ impacts analysis and a discussion of past historic redlining in Salt Lake City. EPA commented that the EJ analysis and discussion appears focused on differences in expected adverse effects among demographic groups in the project area but does not address the question of whether the segments identified as having EJ concerns would be disproportionately impacted in comparison to the "reference community" [as discussed in the Promising Practices report].

The 2016 report *Promising Practices for EJ Methodologies in NEPA Reviews* (EJ IWG 2016) uses the concept of a "reference community" to help agencies identify an EJ community in which a large percentage of residents is minority individuals. Therefore, the concept of a "reference community" is best associated with the initial identification of minority populations and low-income populations rather than in connection with the ultimate analysis of adverse and disproportionate impacts. For example, if the study area consists mostly of minority communities, it might be helpful to compare the study area to an external reference community in order to identify impacted EJ populations. That situation is not presented in the study area for the I-15 Draft EIS.

The *Promising Practices* report states that, when analyzing impacts on EJ communities, agencies "may wish to identify a relevant and appropriate comparison group when evaluating the impact of the proposed federal action on minority populations and low-income populations" and that a "comparison group" is distinct from a "reference group." Moreover, in its *Guidance on Environmental Justice and NEPA* (FHWA 2011), FHWA recommends that a disproportionate and adverse effects analysis "[c]ompare the impacts on the minority and/or low-income populations with respect to the impacts on the overall population within the project area." Consistent with Executive Order 12898 and FHWA's guidance, the *Promising Practices* report specifically states that a comparison group should be identified in the "affected environment" for the project. This is exactly what UDOT did in its EJ analysis, when it compared the I-15 project's impacts to EJ communities (relative to non-EJ communities) in the affected environment. EPA's comments concerning a "reference community" do not appear to question the basis for the conservative demographic analysis. The comparison communities



used in the I-15 study area provide an appropriate basis by which to conduct the disproportionate and adverse effects analysis.

UDOT also notes that the EJ analysis is consistent with other recent NEPA reviews of highway projects. See the *Supplemental Draft Environmental Impact Statement and Section 4(f) Evaluation for the I-94 East-West Corridor* (FHWA and WisDOT 2022). UDOT's discussion, like the discussion in this example, identifies EJ communities in the study area—along the proposed travel corridor—and analyzes whether those communities would experience disproportionate adverse impacts relative to non-EJ communities in the study area.

C. The EPA comment stated that, according to the Promising Practices report, a reference community is not only helpful for identifying disadvantaged communities with EJ concerns as was done by UDOT for scoping of the Draft EIS, but also key to the analysis of disproportionate adverse effects from a proposed federal action to communities with EJ concerns. A reference community's total number of minority individuals and percent minority can be compared to the population in the affected environment or geographic unit of analysis. Effects from the proposed action on the community within the affected environment may then be compared to effects on the reference community in order to identify potentially disproportionate impacts.

Although the Promising Practices report states that a "reference community is helpful for context and for future disproportionate effects analysis," these statements are made only in the sections of the report that discuss how to identify minority and low-income communities. The report does not mention the use of reference communities in its discussion of the adverse impacts analysis, explain how this impacts analysis should be undertaken, or suggest at any point that impacts to EJ communities in the affected environment should be compared to impacts outside the affected environment. EPA's suggested approach is unnecessary in this case because, by definition, any community within the project's scope will experience impacts that those outside the scope will not. EPA's recommendation does not call into question the Draft EIS's comparison of impacts between identified EJ communities in Salt Lake and Davis Counties and nonminority and/or low-income communities. Nor do the comments question the key resources (community connectivity, air quality, property impacts, and noise) that UDOT selected for analysis based on the application of EJ Screen data in the affected communities. UDOT remains confident that the Draft EIS appropriately analyzes EJ impacts based on the recommended FHWA standards. Finally, UDOT notes that the Promising Practices report does "not establish new requirements for NEPA analysis. It is not and should not be viewed as formal agency guidance, nor is the compilation of promising practices intended to be legally binding."

D. EPA recommended that UDOT revisit and update the EJ analysis in the Final EIS to discuss disproportionate adverse effects (air quality impacts and increased flooding risk) on communities with EJ concerns in reference to what adverse and beneficial impacts would be experienced by communities county-wide. EPA also requested that UDOT revisit the conclusion that "[n]o mitigation is necessary because there would be no disproportionate impact to any particular social group."

The conclusion that no additional mitigation is necessary to address EJ concerns is based not only on the lack of disproportionate and adverse effects to EJ communities but on the basis of the fair distribution of the expected project benefits across the study area. Many of the project elements would have the effect of better connecting identified EJ communities, improving safety by adding



pedestrian and bicyclist facilities, and improving local air quality by adding facilities that would reduce truck traffic through those communities. Additional mitigation already planned by UDOT would help reduce short-term air quality impacts from project construction throughout the study area.

E. EPA recommended that UDOT reassess these conclusions—in collaboration with communities with EJ concerns—and, as appropriate, identify and consider mitigation measures in light of new information from this recommended revision to the analysis of disproportionate adverse effects.

UDOT's analysis reflects input from the extensive EJ community outreach conducted as part of the NEPA process. For the reasons identified above, we do not believe that a revised analysis of disproportionate and adverse effects is required. However, we will continue to engage with EJ communities and consider appropriate mitigation.

9.3.4 Economic Conditions

A. West Bountiful City and other commenters questioned whether the project would hurt the current economy, especially small and local businesses.

Section 3.5, *Economic Conditions*, lists the expected impacts to the local economy and businesses from the No-action and Action Alternatives. This analysis includes a discussion of impacts to local economic conditions while constructing and operating the Action Alternative (see Section 3.5.4.3.2, *Local Economic Impacts*). Section 3.5.4.3.3, *Business Impacts*, lists the expected business impacts from the Action Alternative, and Section 3.5.4.3.4, *Government Revenues and Tax Rates*, discusses the expected impacts to government revenues and taxes. UDOT would compensate any impacted businesses in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. UDOT will continue to work with the Cities and affected property owners to try to identify ways to minimize and mitigate impacts to businesses during the final design of the Action Alternative, if it is selected.

B. The Healthy Environment Alliance of Utah (HEAL Utah) and other commenters stated that the economics analysis should have also included costs related to continued vehicle dependence, maintenance, greenhouse gases (GHGs), the cost of bad air quality, and the burden of vehicle costs on environmental justice (EJ) populations.

Economic Impacts of Air Quality. To the extent that bad air quality is an economic impact, if air quality improves in the future consistent with the State Implementation Plan and modeling assumptions, this should contribute to positive economic impacts. For more information, see response 9.3.8 A.

GHG Costs. Section 3.8.4.4.3, *Comparisons of Social Costs of Greenhouse Gases by Alternative*, provides an estimate of the social costs of GHG emissions.

Costs of Vehicle Dependence and/or Ownership and Burden on EJ Populations. The costs of vehicle ownership depend on many factors (such as miles driven, type of vehicle, and so on), and these costs vary between users. Transportation costs (regardless of whether they are in the form of vehicle ownership or transit) would also have a greater burden on people with lower incomes, similar to any other expense (housing, food, clothing, and so on).



The comments received on this topic assume that (1) transit either currently is or could be a cheaper option than owning a vehicle, (2) transit currently provides a suitable alternative for the trip (can transit get the user where they want to go in a time-efficient manner?), and (3) trips on I-15 are all coming from the same location and going to the same location. Generally, none of these three assumptions would necessarily apply to the study area, especially because trips on I-15 start and end at many different locations. Factors, such as where users are traveling from and going to (does transit provide a suitable option for their trips regardless of cost?), the distance of the trip, the sources of transit funding (what percentage is user fees versus covered by sales tax or other revenue sources?), and the type of vehicle, would all affect the costs of the different options. For some people, transit options might be more affordable than traveling by vehicle. For many others, there might not be a suitable transit option for the trip they need to take, and trying to estimate a cost for comparison would not be possible. Because of these factors and assumptions, large-scale costs cannot be reasonably estimated.

9.3.5 Transportation and Mobility

A. Several comments had specific questions regarding the travel demand model. One commenter requested clarification regarding how peak periods were determined and why UDOT used 4-hour versus 2-hour peak periods. One commenter asked why UDOT is using prepandemic benchmarks and whether growth projections account for resource scarcity limiting future growth.

The Wasatch Front Regional Council (WFRC) is the local government agency responsible for traffic forecasting along the Wasatch Front. WFRC's travel demand model is a state-of-the-practice model that predicts travel demand and is used by WFRC, UDOT, UTA, and the Federal Transit Administration (FTA) to determine the need for transportation projects. The model is calibrated to actual, observed traffic conditions and meets an advanced-practice guideline by FHWA and FTA for similarly sized areas. UDOT used the WFRC modeling to predict all related traffic congestion and vehicle-miles traveled (VMT) for the I-15: Farmington to Salt Lake City EIS No-action and Action Alternatives. For general information on the use of the travel demand model and induced demand, see Section 9.1.1, Category 1: Comments Related to the Project Purpose and Need and Action Alternative Efficacy.

Process for Determining Peak Periods. Standard travel demand model practices used by UDOT and state departments of transportation across the country create solutions to provide capacity during a "peak period," or a period of the day when traffic is at its highest. Section 2.1 of the *Mobility Memorandum* (Horrocks 2022) discusses how the peak periods were determined for the EIS. The peak periods were determined using traffic count data. The 4-hour periods demonstrate how much "peak spreading" would occur in 2050 as travel demand continues to increase and congestion spreads outside the typical 1- or 2-hour peak demand periods. Thus, UDOT chose to use 4-hour peak periods because this period best represents traffic on I-15.

Remove All Congestion. The I-15: Farmington to Salt Lake City EIS was never intended to relieve all congestion in the study area. As stated in Chapter 1, *Purpose and Need*, the purpose of the project is to improve safety, replace aging infrastructure, provide better mobility for all travel modes, strengthen the state and local economy, and better connect communities along I-15 between Farmington and Salt Lake City. As shown in Appendix 2A, *Alternatives Development and Screening*



Report, the Action Alternative would reduce travel time by 49% to 55% and increase average speeds by 95% to 125% during both the AM and PM peak periods compared to the 2050 no-action conditions. It would not be practical to develop an alternative that would eliminate all congestion on every road segment in the study area. Even WFRC's 2019–2050 RTP, which includes hundreds of projects, does not eliminate all congestion.

Time Savings. The need for additional capacity on I-15 is based on population and employment projections for 2050, so the commenter is correct that some of the benefits from the Action Alternative would be to future, as well as existing, users in the study area. By designing for the expected growth in 2050, UDOT is conducting appropriate planning instead of being reactionary after the growth and congestion have increased. The land uses that are assumed for the study area in 2050 include planned growth as identified by the communities, including future roads identified in WFRC's 2019–2050 RTP.

As stated in Appendix 2A, *Alternatives Development and Screening Report*, the Action Alternative is projected to result in time savings of 27 to 36 minutes per vehicle during the AM or PM peak periods. Although these time savings were discounted by several commenters, these savings would occur for hundreds of thousands of motorists per day in 2050 and would be the equivalent of reducing delay by 45,000 hours per day. This is a substantial daily time savings and daily reduction in delay on the transportation network. This notable reduction in trip time, when multiplied by thousands of drivers for an extended period, adds up to a substantial overall time savings and would result in substantial overall benefit to the traveling public and the economy.

The Action Alternative is not intended to benefit just one driver but rather to improve overall regional mobility for all transportation system users in the study area. If every road project were based on benefiting one driver, very few projects would be built because there would not be a large enough benefit. However, when considering projects, UDOT looks at all the users of the transportation system to determine whether the overall benefit is worth the transportation investment. In the case of the Action Alternative, UDOT believes that a 47% reduction in overall network delay in the study area in 2050 from this one project is worth the transportation investment.

Prepandemic Benchmarks and Resource Scarcity. Traffic and transit ridership were disrupted by the COVID-19 pandemic in 2020–2021, and using these data would have led to inaccurate assessments of current and future traffic conditions. The year 2019 was the most recent, typical full year of data when the I-15 traffic analysis began. See Section 1.3.4.1.2, *Impact of COVID-19 on Traffic Data*, of Chapter 1, *Purpose and Need*, for the justification of using 2019 as the basis for the existing conditions.

Land use planning, and determining adequate resources for expected land uses, is not a function of UDOT. The travel demand model accounts for the expected population, employment, household, and land use conditions in the area based on the land use planning conducted by Cities and Counties.

In summary, the travel demand model is a good tool to use for an EIS process. For this Final EIS, UDOT used version 8.3.2 of the model. For more information, see Section 9.1.1, *Category 1: Comments Related to the Project Purpose and Need and Action Alternative Efficacy.*



B. Commenters stated that UDOT should complete pedestrian and bicyclist facility projects on 1600 North/Pages Lane in West Bountiful, 1500 South in Woods Cross, and Main Street in North Salt Lake as part of the Action Alternative and not just construct a longer and wider bridge over these roads.

For these three facilities, UDOT is providing the longer and wider bridges with the Action Alternative that will accommodate each City's plans for future roadway, bicyclist, and pedestrian improvements to these facilities. The timing of these improvements is currently unknown. Because these are all city streets, each City will be responsible for the design, funding, and timing of these improvements. With this approach, UDOT will not create a pinch point where these local facilities cross under I-15.

C. Commenters questioned whether sidewalks, pathways, or bike lanes were necessary on both sides of the street in some locations or whether the proposed facilities could be narrower to reduce impacts, specifically on 400 North and 500 South in Bountiful. Commenters questioned whether a crossing was necessary at all in some locations, such as at 400 North and 500 North in Salt Lake City. Other commenters stated that UDOT should consider additional east-to-west connections over or under I-15 with the Action Alternative.

As described in Section 1.3.2, Health and Safety Needs, and Section 1.3.3, Connected Community Needs, improving pedestrian and bicyclist facilities and community connectivity east and west, over or under I-15, are project needs. UDOT analyzed StreetLight data (a dataset of transportation data) to better understand the travel behavior of people walking, riding bicycles, and accessing transit in the study area. UDOT used these data to determine trip modes; origins; destinations of nonmotorized travel; demographics, such as the race or income level of users; trip directness; short vehicle trips to FrontRunner stations; and frequency of use at each I-15 crossing. Each I-15 crossing has unique pedestrian and bicyclist travel patterns and traffic characteristics. UDOT used these characteristics to support the design of the Action Alternative. In some locations, the Action Alternative includes sidewalks, shared-use paths, bike lanes, or underpasses and overpasses where they currently do not exist. UDOT is working with Cities to evaluate opportunities to meet transportation needs, including improving pedestrian and bicyclist facilities, while minimizing impacts to the surrounding properties. Detailed information about the proposed pedestrian and bicyclist facilities is provided in Table 2.4-2, Action Alternative Bicyclist and Pedestrian Improvements by Location, and Figure 2.4-27, Action Alternative Proposed Bicyclist and Pedestrian Facilities, in Chapter 2, Alternatives.

9.3.6 Air Quality

A. Commenters had concerns for air quality in Salt Lake City's west-side community. Commenters requested additional air quality quantitative analysis, or hot-spot analysis, for Salt Lake City. Commenters stated concerns about health effects from poor air quality or mobile-source air toxics (MSAT) emissions. Commenters were concerned about these impacts being disproportionate to environmental justice (EJ) communities or the west side of Salt Lake City. Commenters cited studies showing health impacts from highways or roadway-related air pollutants.

Historical impacts to the west side of Salt Lake City are discussed in Section 3.4, *Environmental Justice Populations*. More specifically, historical air quality concerns and the impacts of the Action Alternative related to air quality in areas with EJ populations are described in Section 3.4.6.3.2,



Action Alternative Impacts Related to Air Quality Issues for EJ Populations. As summarized in Section 3.4.6.3.2, since there would be no temporary or permanent adverse air quality impacts from the Action Alternative, the Action Alternative would not result in disproportionate adverse air quality effects on EJ populations, and the Action Alternative would not contribute to additionally degrading air quality in the study area, including in any areas with EJ populations.

MSAT Emissions from the Project Alternatives. Section 3.8, *Air Quality*, includes an analysis of MSATs, including nine pollutants. This analysis uses FHWA's *Updated Interim Guidance on Mobile-source Air Toxic Analysis in NEPA Documents* (FHWA 2023), which specifies how MSATs should be considered in NEPA documents.

As shown in Table 3.8-5, *Annual VMT and On-road MSAT Emissions with Each Project Alternative*, annual on-road MSAT emissions in the air quality evaluation area are expected to decline by about 28% to 100% from 2019 to 2050, regardless of whether the I-15 project is implemented. These emissions reductions are projected to occur even with an expected 28% increase in vehicle-miles traveled (VMT) in the study area during the same period. The expected decrease in emissions is due to improved fuel and emissions standards in the future.

Air Quality Impacts to EJ Populations. The expected decrease in emissions is expected to benefit all areas near I-15, including the EJ communities. As described in Section 3.8, *Air Quality*, the Action Alternative would help reduce regional traffic congestion, which would reduce idling emissions. UDOT's modeling shows that annual on-road emissions of criteria pollutants (except particulate matter [PM₁₀]) and MSAT emissions for the Action Alternative will decrease compared to existing conditions. The expected decrease in emissions is projected to occur even with expected increases in VMT in the study area due to improved fuel and emissions standards in the future. PM₁₀ emissions are expected to increase because of increased road dust emissions, which are projected to increase proportionately with VMT. However, Utah is in a maintenance area for PM₁₀, and this minor increase in PM₁₀ emissions related to road dust emissions is not anticipated to cause any issues related to the region continuing to meet the National Ambient Air Quality Standards (NAAQS) for PM₁₀. Since there would be no temporary or permanent adverse air quality impacts, the Action Alternative would not result in disproportionate adverse air quality effects on EJ populations and would not contribute to additional degradation of air quality in the study area, including any areas with EJ populations.

Project-specific Health Impacts due to MSATs. In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed action. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action (FHWA 2023). Because of the limitations in the methodologies for forecasting health impacts, any predicted difference in health impacts among alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision-makers, who would need to weigh this information against project benefits—such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response—that are better suited for quantitative analysis (FHWA 2023). For more information, see Section 3.8.4.3.3, *Incomplete or Unavailable Information for Analyzing Project-specific MSAT Health Impacts*.



Hot-spot Analysis. For the Final EIS, UDOT conducted hot-spot analyses for 24-hour PM₁₀, 24-hour PM_{2.5}, and annual PM_{2.5} for the segment of I-15 between 600 South and 600 North in Salt Lake City. UDOT also conducted hot-spot analyses for 24-hour PM_{2.5} and annual PM_{2.5} for the I-15/I-215 interchange in North Salt Lake. The results of the hot-spot analyses are included in this Final EIS; see Section 3.8, *Air Quality*. Detailed information on the hot-spot analyses is included in Appendix 3N: *Air Quality Technical Report: Hot-spot Analysis*. Results from the hot-spot analyses showed that in 2035 and 2050, the Action Alternative would have design values less than or equal to the 24-hour PM₁₀, 24-hour PM_{2.5}, and annual PM_{2.5} NAAQS. These results demonstrate that the I-15 project would not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the 24-hour PM₁₀, 24-hour PM_{2.5}, and annual PM_{2.5} NAAQS.

B. Commenters stated that UDOT did not study ozone in the air quality analysis.

Ozone is considered in the emissions inventory analysis in Section 3.8, *Air Quality*. Oxides of nitrogen and volatile organic compounds are ozone precursors that are included as part of the emissions inventory analysis. As shown in Table 3.8-4, *Annual VMT and On-road Criteria Pollutant Emissions with Each Project Alternative*, emissions with the Action Alternative in 2050 for both of these ozone precursors are projected to decrease in 2050 compared to existing conditions (in 2019).

C. Commenters stated concerns for lake dust affecting the west side in addition to other sources of air pollution. Commenter cited a study that linked lakebed exposure to increased dust.

The air quality analysis in Section 3.8, *Air Quality*, focuses on the air quality emissions related to the I-15: Farmington to Salt Lake City EIS No-action and Action Alternatives. The Action Alternative would not have any effect on lake dust or the amount of water going into the Great Salt Lake.

Regional air quality concerns are addressed in Section 3.18, Indirect and Cumulative Effects.

Historic impacts to the west side of Salt Lake City are discussed in Section 3.4, *Environmental Justice Populations*. More specifically, the Action Alternative's impacts related to air quality in areas with EJ populations are described in Section 3.4.6.3.2, *Action Alternative Impacts Related to Air Quality Issues for EJ Populations*.

As stated in Section 3.8, air quality in a given area depends on several factors, such as the area itself (size, nature of existing development, and topography), the prevailing weather patterns (meteorology and climate), and the pollutants released into the air. All state governments are required to develop a state implementation plan (SIP) for each pollutant for which an area is in nonattainment or maintenance status. The SIP explains how the State will comply with the requirements of the Clean Air Act. If lake dust is a contributing factor to air quality constituents such as particulate matter, the Utah Division of Air Quality might need to consider mitigation measures related to lake dust as part of the SIP process.

D. A commenter stated that reducing the speed limit on I-15 to 60 miles per hour (mph) for vehicles and 55 mph for trucks would reduce air pollution by 15%.

Air pollution from transportation sources depends on several variables including vehicle fleet mixes (including associated emission rates), vehicle speeds, and driver behavior (such as acceleration rates). Most vehicles' emissions rates are inversely correlated to fuel economy, meaning the highest emission rates are at the lower fuel economy conditions such as idling or very-low-speed conditions.



Vehicle emission rates are lowest at moderate speeds when fuel economy is best. Vehicle emissions start to increase at higher speeds as fuel efficiency decreases.

UDOT has modeled air quality emissions based on FHWA and EPA modeling guidance using the projected vehicle speeds and fleet mixes for future-year conditions.

E. EPA requested that UDOT evaluate criteria pollutants associated with discrete segments of I-15 near EJ populations.

Evaluating criteria pollutants for discrete segments of the Action Alternative would not provide meaningful information. UDOT has provided a quantitative evaluation of criteria pollutants for the broader air quality evaluation area (defined in Section 3.8, *Air Quality*) in order to compare the No-action and Action Alternatives. An evaluation of discrete segments would likely provide the same pattern of results.

F. EPA requested that UDOT update the nonattainment classification for the 2015 ozone national standard to "Moderate" in Table 3.8-1.

UDOT has revised the ozone nonattainment classification in Table 3.8-1, *National and Utah Ambient Air Quality Standards for Criteria Pollutants and Attainment Status for Salt Lake and Davis Counties*, to moderate.

G. EPA commented that they did not agree with the Project of Air Quality Concern (POAQC) evaluation conclusion that the I-15: Farmington to Salt Lake City Project was not a project of air quality concern. EPA requested that, as part of the Final EIS, UDOT prepare a particulate matter hot-spot analysis to satisfy transportation conformity requirements before concluding the NEPA process.

EPA did not provide a basis for why they disagreed with the conclusion of the POAQC evaluation. UDOT's opinion was that the I-15 project would not be considered a POAQC according to the regulations in 40 Code of Federal Regulations (CFR) Section 93.123(b)(1). UDOT's evaluation and rationale is discussed in detail in Appendix 3E, *Project of Air Quality Concern Evaluation*, in this EIS.

In subsequent Interagency Coordination Team (ICT) meetings the ICT determined that the project was a POAQC, and UDOT conducted hot-spot analyses for PM_{2.5} and PM₁₀ for this project following the transportation conformity procedures for the segment of I-15 between 600 South and 600 North in Salt Lake City and for the I-15/I-215 interchange in North Salt Lake. The results of the hot-spot analyses are included in this Final EIS; see Section 3.8, *Air Quality*. Detailed information on the hot-spot analyses is included in Appendix 3N: *Air Quality Technical Report: Hot-spot Analysis*. UDOT has coordinated the modeling and inputs for this hot-spot analysis with EPA and FHWA.

- H. EPA provided comments related to air quality impacts from construction. EPA commented that the analysis of air quality impacts from construction does not include basic metrics that would enable the reader to understand what is necessary to complete the upgrades, nor is a schedule for completing the project provided. To provide a reasonable analysis of the potential impacts to air quality during construction, EPA recommended:
 - Provide a discussion of the activities that will be necessary to complete the Action Alternative and its sub-area options.
 - Provide a schedule for implementing the Action Alternative and sub-options, which should include construction start and stop dates.



- Provide a roster of equipment and work crews necessary to complete the construction of the infrastructure.
- Based on the schedule for completion and the necessary activities and equipment identified, estimate emissions to construct the alternative(s). We recommend using emission factors for nonroad equipment based on the size and age of equipment that will reasonably be used based on the tier and age of available equipment.

Depending on the magnitude of the emissions, duration, and location, it might be appropriate to conduct additional quantitative air quality analysis to inform any air quality mitigation measures to protect populations adjacent to construction activities.

UDOT concurs that direct emissions from construction equipment and activities contribute to air quality emissions and impacts. UDOT provides a qualitative discussion of construction-related air quality impacts in Section 3.17.2.2.6, *Air Quality Impacts from Construction*. This discussion states that air pollutant emissions can result from excavation, mobile worker commute vehicles, on-site construction equipment, and reduced vehicle speed from construction-related congestion. UDOT also states that construction can create fugitive dust and proposes mitigation measures to address this in accordance with UDOT's Standard Specifications for Road and Bridge Construction, Section 01355, *Environmental Protection*, Part 1.11, *Fugitive Dust*. See Section 3.17.3.6, *Mitigation Measures for Air Quality Impacts from Construction*. These mitigation measures include submitting a fugitive dust control plan to the Utah Division of Air Quality (UDAQ), watering and chemical stabilization, opacity observations and checks, and dust-minimization techniques approved by UDAQ. See UDOT's Standard Specifications for Road and Bridge Construction 01355, *Environmental Protection*, Part 1.11, *Fugitive Dust*.

The qualitative discussion of direct emissions from construction in the Draft EIS provides sufficient information on construction-related air quality impacts. UDOT has concluded that air quality impacts from construction "would be limited to short-term increases in fugitive dust, particulates, and local air pollutant emissions from construction equipment" (see Section 3.17.2.2.6, *Air Quality Impacts from Construction*).

To more fully explain potential air quality impacts from construction, UDOT has included additional discussion in Section 3.17, *Construction Impacts*, including information concerning fugitive dust. UDOT has also listed mitigation measures it will consider during construction, including reducing diesel emissions from older engines by reducing idling, properly maintaining equipment, using cleaner fuel, and retrofitting equipment where appropriate and feasible.

Currently, UDOT has only partial funding for constructing the Action Alternative. After the completion of this EIS, UDOT would construct portions of the project based on the amount of available funding while considering safety and operational benefits. The nature and timing of these impacts would be related to the project's construction methods.

More-detailed information about activities necessary to complete the Action Alternative, construction phasing start and stop dates, equipment lists, and detailed information about work crews is not known. More-detailed information about air quality impacts from construction activities, equipment used, and work crew–related emissions would vary greatly depending on the selected contractor for each phase of the project, and UDOT has no reasonable way of estimating or quantifying this during



the EIS process. Attempts to try to quantify this information for the purpose of estimating air quality emissions would be speculative and would not result in meaningful analysis.

- I. EPA commented on the MSAT analysis. EPA noted that they appreciated UDOT recognizing that the I-15: Farmington to Salt Lake City Project qualifies as a project with higher potential for MSAT effects. EPA recommended that UDOT consider the following updates:
 - a. EPA noted that Table 3.8-5, "Annual VMT and On-road MSAT Emissions with Each Alternative," illustrates modeled MSAT emissions in the air quality evaluation area associated with the No-action Alternative and the Action Alternative in 2050. The table also includes 2019 base-year MSAT existing conditions for a quantitative comparison. The table also associates these MSAT emissions with modeled VMT in the same evaluation area. EPA questioned whether the VMT values are supposed to represent "million miles/year" as noted in this table. This unit notation is also present in other mobile-source emissions inventory tables in Chapter 3, and EPA recommended this notation throughout the chapter be reviewed for accuracy.

The notation of "million miles/year" is an error and has been corrected to "vehicle-miles traveled."

b. EPA also noted that a large portion of the discussion of MSAT emissions is focused on explicating the idea that differentiation of MSAT emissions attributable to the different project sub-options is hampered, if not made impossible, by incomplete or unavailable information concerning MSAT health impacts. Much of the development of this idea is based directly on FHWA's 2023 memorandum "Updated Interim Guidance on Mobile-Source Air Toxic Analysis in NEPA Documents" (hereafter, the "2023 FHWA guidance memo"). EPA did not jointly issue this guidance memo with FHWA and might not agree with the concepts or language present in this memo. Selecting between the Action Alternative and sub-area options based on comparing a scenario associated with MSAT emissions and health impacts might be complicated by uncertainties. However, EPA does not agree that the difficulties of comparative evaluation rule out the evaluation of ambient air MSAT impacts on public health in near-roadway communities. EPA recommended that the Final EIS include additional information on near-road MSAT concentrations and potential health impact assent in context to the project.

UDOT has provided a quantitative evaluation of MSAT pollutants for the broader air quality evaluation area (defined in Section 3.8, *Air Quality*) in order to compare the No-action and Action Alternatives. The results of this analysis show that MSAT emissions are projected to decrease in the future with both the No-action and Action Alternatives. These reductions in MSAT emissions would be considered a positive direct and cumulative impact. The modeling options for MSAT emissions are limited to MOVES outputs, which give only the total emissions given the anticipated VMT. Currently there is no available model that is approved for local MSAT dispersion modeling that could provide more relevant, meaningful information for MSAT emissions or impacts between alternatives or sub-options.

The analysis provided in the EIS, which is for the broader air quality evaluation area (defined in Section 3.8), provides the same level of information (the reduction in future MSAT emissions for different MSATs) that would be expected if this analysis were undertaken for



smaller segments of the project. Given the anticipated improvements in future MSAT emissions, additional analysis for smaller segments does not seem warranted or would not provide meaningful information.

c. The 2023 FHWA guidance memo recommends project sponsors for projects with "higher potential MSAT effects" consult the FHWA headquarters Office of Natural Environment and Office of Project Development and Environmental Review to develop a specific approach to assess MSAT impacts. The memo states that such specific approaches might address the potential for cumulative impacts based on local conditions and the potential need for MSAT mitigation strategies. However, the Draft EIS does not include a discussion of potential cumulative MSAT impacts or discussion of MSAT mitigation strategies in Section 3.8, Air Quality. EPA recommended that the Final EIS discuss any consultation undertaken to investigate potential localized, cumulative MSAT impacts and the potential need for MSAT emissions mitigation strategies.

UDOT has provided a quantitative evaluation of MSAT pollutants for the broader air quality evaluation area (defined in Section 3.8, *Air Quality*) in order to compare the No-action and Action Alternatives. The results of this analysis show that MSAT emissions are projected to decrease in the future with both the No-action and Action Alternatives. These reductions in MSAT emissions would be considered a positive direct and cumulative impact. Given the anticipated improvements in future MSAT emissions, additional consultation, direct or cumulative impact analysis, or mitigation strategies for MSATs do not seem warranted.

d. The MSAT emissions inventory's geographic scope is the "air quality evaluation area" established by UDOT. EPA also noted that the discussion of forecasts for emissions is limited to 2050. EPA recommended that UDOT discuss why an MSAT evaluation resolution tied to the full air quality evaluation area is most appropriate. The potential for cumulative impacts in certain sections of the mainline project area is likely to be greater than for other sections. Emissions inventory comparisons could be made where the potential impacts specific to the environs of the environmental justice communities identified in Section 3.4 of the Draft EIS could be evaluated. Additionally, EPA recommended that UDOT discuss why 2050 is the best future year to evaluate MSAT emissions. EPA assumes the project will be completed before 2050, and marginal MSAT emission increases associated with each VMT increase will be greater in the near term (particularly concerning diesel particulate matter emissions). EPA recommended that the Final EIS discuss the possibility that health impacts, cumulative impacts, and the need for mitigation strategies might be greater in years closer to actual project completion.

UDOT has added 2035 as an additional modeling year since this is likely a conservative (early) estimate of the opening year for the complete project. Evaluating MSAT pollutants for discrete segments of the Action Alternative would not provide meaningful information. UDOT has provided a quantitative evaluation of MSAT pollutants for the broader air quality evaluation area (defined in Section 3.8, *Air Quality*) in order to compare the No-action and Action Alternatives. An evaluation of discrete segments would likely provide the same pattern of results between alternatives. In addition, MSATs are projected to decrease in the future.



e. Many paragraphs of Section 3.8.4.3.3 directly replicate text from the 2023 FHWA guidance memo or its appendices. These paragraphs present text from the guidance memo with endnote citations, but without quotation marks. Where passages are direct quotations from the guidance memo, EPA recommended the Final EIS represent them as such so that the reader knows which language is from the guidance memo and which are statements of the Draft EIS are based on a synthesis of the ideas in the cited memo.

UDOT has revised Section 3.8.4.3.3, *Incomplete or Unavailable Information for Analyzing Project-specific MSAT Health Impacts*, to include quotation marks where appropriate.

- J. EPA commented on the climate change section. EPA acknowledged and appreciated the climate change analysis in the Draft EIS. EPA requested additional information and analysis related to direct, indirect, and cumulative GHG emissions. EPA recommended that UDOT apply interim EPA climate change guidance for the Final EIS climate change analysis. For UDOT to ensure that it has applied the Council on Environmental Quality (CEQ) guidance to this NEPA review and to accurately assess potential climate effects associated with the proposed project more fully, EPA recommended that the Final EIS:
 - a. Estimate and analyze all anticipated upstream and downstream GHG emissions, broken out by GHG type, that are associated with constructing, operating, and maintaining the proposed project. The NEPA.gov website includes a nonexhaustive list of GHG accounting tools available to agencies. GHG emissions should be presented in CO₂ (carbon dioxide)– equivalent terms and translated into equivalencies that are more easily understood by the public (annual GHG emissions from x number of motor vehicles; see (https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator).
 - b. Identify and assess measures to reduce direct, indirect, and cumulative GHG emissions associated with the proposed project including alternative options and/or requirements to mitigate or offset emissions.
 - c. Include a detailed discussion of the project's GHG emissions in the context of national GHG emission reduction goals over the anticipated project lifetime. Discuss how reasonably foreseeable GHGs are, or are not, consistent with national GHG emissions reduction goals, and include ways to avoid or mitigate any conflict.
 - d. Include a summary of ongoing and projected regional climate change relevant to the existing environment of the project area that is based on resources such as the Fourth National Climate Assessment, EPA's Climate Change Indicators, and the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

Greenhouse Gas Emissions Inventory and Analysis: EPA recommended that the Final EIS analyze and quantitatively estimate the potential upstream and downstream GHG emissions, broken out by GHG type, associated with constructing, operating, and maintaining the proposed action. Where feasible, agencies should also present annual GHG emission increases or reductions as well as provide an account of net emissions from the proposed action. Presenting this data is particularly important where a proposed action presents both reasonably foreseeable GHG emission increases and GHG emission reductions. CEQ guidance encourages agencies to present net GHG emissions over the projected lifetime of



the action, consistent with existing best practices. CEQ maintains a GHG Accounting Tools website list of widely available quantification and assessment tools that are already in broad use by federal, state, and local agencies.

EPA noted that Table 3.8.6 of the Draft EIS presents expected annual gross changes in GHG emissions in terms of expected increases in VMT over the lifetime of the transportation system and compares expected changes from the Action Alternative to the No-action Alternative as encouraged by CEQ guidance. However, the GHG emissions inventory and analysis in the Draft EIS does not present complete information about potential GHG emissions that would be associated with an urban roadway improvement proposal, such as direct emissions from construction equipment, worker commute vehicles, and trucking or indirect emissions from concrete and asphalt production, although such information is readily available to UDOT. EPA recommended that the Final EIS incorporate readily available tools to quantify all of the proposed action's GHG emissions or reductions (both by pollutant and by total CO₂-equivalent emissions) relative to baseline conditions.

Upstream and downstream emissions are not quantified in Section 3.8.8 of the Draft EIS for all construction or operational material uses associated with the Action Alternative, as recommended by CEQ guidance. Life-cycle assessment (LCA) is a structured evaluation methodology used to analyze and quantify the environmental impacts of existing products or processes and to evaluate differences in impacts between the action alternative and its subarea options. FHWA's LCA PAVE tool can be used to assess the environmental impacts of pavement material and design decisions made by UDOT for the proposed project. Although using this tool is not required by federal statute or regulation, it gives UDOT the ability to investigate areas where improvements in the final design of roadway, pedestrian, and bicyclist pathways and other ancillary facilities could best avoid, minimize, and mitigate potential climate-related impacts from constructing the proposed Action Alternative.

Direct Emissions from Construction. UDOT concurs that direct emissions from construction equipment and activities contribute to GHG emissions. UDOT provides a qualitative discussion of construction-related air quality impacts—including from GHG emissions—in Section 3.17.2.2.6, *Air Quality Impacts from Construction.* This discussion states that air pollutant emissions can result from excavation, mobile worker commute vehicles, on-site construction equipment, and reduced vehicle speed from construction-related congestion. UDOT also states that construction can create fugitive dust and proposes mitigation measures to address this in accordance with UDOT's Standard Specifications for Road and Bridge Construction, Section 01355, *Environmental Protection*, Part 1.11, i. See Section 3.17.3.6, *Mitigation Measures for Air Quality Impacts from Construction*. These mitigation measures include submission of a fugitive dust control plan to the Utah Division of Air Quality (UDAQ), watering and chemical stabilization, opacity observations and checks, and dustminimization techniques approved by UDAQ. See UDOT's Standard Specifications for Road and Bridge Construction, Part 1.11, *Fugitive Dust*.

The qualitative discussion of direct emissions from construction in the Draft EIS provides sufficient information on construction-related GHG impacts. Notably, while CEQ guidance provides that agencies should quantify GHG emissions from a proposed action "whenever possible," CEQ also states that "[t]he rule of reason and the concept of proportionality caution against providing an indepth analysis of emissions regardless of the insignificance of GHG emissions that the proposed



action would cause" (88 Federal Register 1196). CEQ also states that, where an agency determines it cannot provide quantitative GHG emissions estimates, a qualitative analysis should be provided instead (88 Federal Register 1196). UDOT has concluded that air quality impacts from construction "would be limited to short-term increases in fugitive dust, particulates, and local air pollutant emissions from construction equipment" (see Section 3.17.2.2.6, *Air Quality Impacts from Construction*). Over the lifetime of the I-15 project (through 2050), construction-related GHG emissions impacts would be a small proportion of the project's total GHG emissions. In light of this, the qualitative description of potential GHG emissions from construction is appropriate under the rule of reason and principles of proportionality.

UDOT also notes that the qualitative discussion of construction-related GHG impacts is consistent with other recent NEPA reviews of highway projects. See the *Supplemental Draft Environmental Impact Statement and Section 4(f) Evaluation for the I-94 East-West Corridor* (FHWA and WisDOT 2022). UDOT's discussion, like the discussion in this example, identifies potential GHG emissions sources and describes in detail the mitigation measures UDOT will take to address GHG impacts.

To more fully explain potential GHG impacts from construction, UDOT has included additional discussion in Section 3.17, *Construction Impacts*, including information concerning fugitive dust. UDOT has also listed mitigation measures it will consider during construction, including reducing diesel emissions from older engines by reducing idling, properly maintaining equipment, using cleaner fuel, and retrofitting equipment where appropriate and feasible.

Direct Emissions from Worker Commute Vehicles. In Section 3.17.2.2.6, *Air Quality Impacts from Construction*, UDOT states that worker commute vehicles can contribute to GHG emissions. UDOT believes that further consideration of these impacts is too speculative and that quantifying these emissions as EPA recommends is not feasible. (UDOT cannot reasonably know where workers are commuting to and from, the number of workers that would ultimately be employed on construction, the types of vehicles workers drive, and other similar information that would be needed to estimate worker commute emissions.)

Indirect Emissions from Concrete and Asphalt Production. UDOT provides a more detailed response on quantification and consideration of indirect concrete and asphalt production emissions below. In short, UDOT believes that quantifying these upstream and downstream emissions is infeasible and would cause unnecessary confusion about the Action Alternative's true GHG impacts. UDOT has included a qualitative discussion of these sources of GHGs in Section 3.17.2.2.6, *Air Quality Impacts from Construction*.

In addition to using road surface treatments (such as asphalt pavement) that might result in GHG emissions, many road infrastructure projects use large amounts of concrete and steel. Because these materials are responsible for the largest part of embodied emissions in building materials, EPA recommended that UDOT estimate the upstream embodied emissions of concrete and steel in the Final EIS. Making these estimates would ensure that the Final EIS is using the most complete and up-to-date information to inform analyses of potential impacts from GHG emissions from the proposed Action Alternative, as well as help UDOT identify areas for minimizing or substituting these materials.



UDOT acknowledges that asphalt, concrete, and steel production and use can cause GHG emissions. As stated above, UDOT has included discussion of these upstream and downstream GHG emissions sources in Section 3.17, *Construction Impacts*.

Unlike other potential sources of GHG emissions, the quantification of project-specific GHG emissions associated with materials production and use for a proposed action would not provide reliable information regarding project alternatives. EPA suggests that life-cycle analysis using tools such as LCA PAVE would provide readily available estimates of upstream and downstream GHG emissions. But EPA also acknowledges that use of LCA PAVE is not required by FHWA. Indeed, FHWA states in the LCA PAVE user manual that LCA PAVE "does not provide complete information regarding environmental considerations because of current data limitations and the lack of consensus related to pavement use stage impacts." In addition to the "current data limitations and lack of consensus" about pavement use impacts, LCA PAVE also does not account for impacts from work-zone traffic, pavement-vehicle interactions, precipitation management, stormwater runoff, the heat island effect, and carbonation.

Ultimately, an analysis using LCA PAVE or any similar tool would "come at the expense of efficient and accessible analysis," an outcome CEQ guidance cautions against (88 Federal Register 1196). Importantly, quantifying project-specific GHG emissions in this context could create the erroneous impression that the proposed action would be responsible for GHG emissions associated with materials production and use. But, regardless of whether the I-15: Farmington to Salt Lake City Project is implemented, the asphalt, concrete, and steel that could be used for I-15 would simply be used elsewhere. Disaggregating project-specific materials production and use emissions from overall sector, industry, or even plantwide emissions associated with the production of these materials is not "obvious," as EPA claims, and would not clarify the nature and scope of the proposed action's GHG emissions.

Further, concrete production is a significant contributor to GHG emissions. Therefore, and in line with direction in Executive Order 14008 to use federal contracting and procurement to reduce climate pollution in every sector of the economy and ensure that federal infrastructure investment reduces climate pollution, EPA recommended considering if there might be local sources of construction materials that could reduce this environmental impact of concrete while spurring local economic opportunities and private sector investment into sustainable construction materials. Since cement production is a major driver of the climate impacts of concrete, an established way to reduce the carbon footprint of concrete is by replacing cement with different types of binders, including reusable waste materials, such as fly ash from coal-fired power plants, granulated slag from steel production, and post-consumer glass. Other ways to reduce the environmental impact of cement are using alternative fuels for heating kilns, replacing clinker, and producing concrete by using captured carbon. Optimizing mixing can be facilitated through performance-based (vs prescriptive) specifications. EPA also recommended requesting environmental impacts of road construction materials in product specifications to help understand the lifecycle-based environmental impacts of road construction materials considered for use in the proposed project.

UDOT will consider whether and how to locally source construction materials for the proposed action. Discussion of this is provided in Section 3.17, *Construction Impacts*.



EPA recommended the Final EIS include emissions estimates from direct and indirect impacts from constructing, maintaining, and operating the proposed project. Direct GHG emissions are primarily produced from combusting and using fossil fuel while constructing and operating transportation infrastructure. Construction emissions might also include removing vegetation, which would result in direct emissions due to the release of carbon stocks and foregone future carbon sequestration.

EPA recommended that the Final EIS discuss how the reasonably foreseeable GHG emissions associated with the project are, or are not, consistent with state and federal policies or goals to prevent the effects of climate change. EPA recommended that the Final EIS discuss how emissions help or hinder meeting GHG-reduction targets set at the federal, state, or local level as required in 40 CFR Section 1506.2(d), including the U.S. 2030 Paris GHG reduction target and 2050 net-zero pathway. For example, The Utah Roadmap: Positive Solutions on Climate and Air Quality strongly recommends the State of Utah adopt emission-reduction goals, including reducing carbon dioxide emissions statewide to 25% below 2005 levels, 50% by 2030, and 80% by 2050. Providing additional context and analysis for the GHG emissions and climate impacts associated with a proposed action would make the Final EIS more consistent with the 2023 CEQ guidance.

UDOT has included additional context for the proposed action's GHG emissions in Section 3.8.4, *Environmental Consequences and Mitigation Measures*, by discussing the proposed action's GHG emissions in the context of State of Utah and regional GHG emissions goals. UDOT also states that 40 CFR Section 1506.2(d) references only state plans and not federal or international plans related to GHG targets. Because the scope of the regulation is limited, and because of the small contribution to GHG emissions the proposed action would have nationally and globally, discussing the proposed action in the context of federal and international targets would not provide a useful discussion of GHG impacts.

To provide more clarity on the proposed action's GHG impacts and how they fit within state and regional GHG reduction targets, UDOT has included 2035 as an additional modeling year in its GHG analysis since this is likely a conservative (early) estimate of the opening year for the complete project.

Some impacts might be compounded by other UDOT-approved projects at a regional scale. Although EPA noted that Table 3.18-2 of the Draft EIS identifies a lengthy list of present and reasonably foreseeable transportation projects at the regional level, EPA recommended that UDOT go further and disclose and consider as part of the cumulative impact analysis whether and how other recently approved UDOT projects, concurrently proposed projects, or reasonably foreseeable future planned actions might contribute to potentially significant impacts. Where appropriate, EPA recommended updating the cumulative analysis in Section 3.18, Indirect and Cumulative Effects, of the Draft EIS to discuss multiple current UDOT proposals to better identify potential interconnected impacts from cumulative regional GHG emissions.

Table 3.18-2, *Present and Reasonably Foreseeable Future Actions*, accurately summarizes potential future transportation actions. The information provided in the table includes approved, proposed, and planned projects that, combined with the proposed action, have the potential to contribute to GHG emission impacts. Contrary to EPA's suggestion that the discussion of cumulative effects from planned and proposed projects is insufficient, the vast majority of the transportation projects listed in Table 3.18-2 are projects at the planning stage. Based on the preliminary nature of these planning



efforts, UDOT's cumulative impacts analysis does not "inappropriately diminish the significance of" the proposed action's GHG emissions impacts. The analysis properly offers information placing the proposed action in context and shows how the proposed action, combined with numerous other planned and underway UDOT projects, could result in cumulative impacts.

Finally, EPA noted that the Draft EIS generally discusses cumulative impacts from GHG emissions associated with the proposed Action Alternative only in the context of global GHG emissions (p. 3-310). Although climate change is the result of the increased global accumulation of GHGs, "comparing project-level emissions to global emissions does not reveal anything beyond the nature of the climate change challenge itself." Thus, the analysis and public disclosure of cumulative effects can be accomplished by quantifying GHG emissions and providing context for understanding their effects as discussed above, including by translating emissions into equivalencies, monetizing climate damages using estimates of the social cost of greenhouse gas emissions (SC-GHG) (e.g., Section 3.8.4.4.3), and placing those damages in the context of relevant climate action goals and commitments. EPA recommended that the Final EIS be updated to present cumulative impacts from the contribution of GHG emissions associated with the Action Alternative in the state or regional context to avoid inappropriately diminishing the significance of project-level GHG emissions and increasing transparency of the NEPA analysis.

As discussed above in this response, UDOT has included additional context for the proposed action's GHG impacts in Section 3.8.4, *Environmental Consequences and Mitigation Measures*, by discussing the GHG emissions in the broader air quality evaluation area relative to State of Utah and regional emissions reduction targets. UDOT has also included additional discussion of GHG impacts in the state and regional context in Section 3.8, *Air Quality*. UDOT's discussion acknowledges that increased GHG emissions could affect Utah and the region in various ways, including by increasing temperatures, exacerbating drought, increasing severe weather events, and reducing already scarce water resources.

9.3.7 Noise

A. Commenters questioned how, or whether, UDOT analyzed noise. Commenters suggested that reducing speed limits on I-15 to 60 mph for cars and 55 mph for trucks would reduce noise pollution as well.

Section 3.9, *Noise*, and Appendix 3F, *Noise Technical Report*, include information regarding expected noise impacts and recommended mitigation measures (noise walls). The assessment of noise impacts and mitigation conducted for the Draft EIS follows UDOT's Noise Abatement Policy and procedures (<u>https://www.udot.utah.gov/connect/public/noise-walls</u>).

For the same traffic and traffic fleet mixes (in other words, number of trucks and passenger cars), lower speeds would be expected to have lower noise values. However, UDOT is planning for the speed limit on I-15 to remain at 70 mph, which is consistent with the speed limit on I-15 in the rest of the Wasatch Front urban corridor. The UDOT Noise Abatement Policy procedures include assuming traffic at level of service C (or near free-flow) conditions, which are higher-speed conditions with free-flowing traffic conditions for the noise analysis because this represents the loudest conditions for noise.



Figures 3.9-2, 3.9-3, and 3.9-4 in Section 3.9 of the Draft EIS show the locations of the evaluated and recommended noise walls. Details on the impacts for individual receptors and mitigation provided by proposed noise walls are included in Appendix 3F, *Noise Technical Report*.

B. Many commenters questioned the locations of noise walls or made requests for additional noise walls. Commenters requested that UDOT install the largest or tallest noise walls and attractive or decorative noise walls to mitigate noise. Noise walls were requested for all locations along I-15, for all residential areas, and for specific locations including Lagoon Drive near Farmington High School, 200 West, Frontage Road north of Glovers Lane, Glovers Lane, and Frontage Road south of Glovers Lane in Farmington; south of the Parrish Lane interchange on the east side in Centerville; between 400 North and 500 South on the west side of I-15, near 500 South and the Wood Haven mobile home community, and 800 West in West Bountiful; Wildcat Way between 2600 South and 1950 South in Woods Cross; and 1000 North, 600 North, 600 North ramps, 600 North bridge, and on the North Temple bridge in Salt Lake City.

The noise walls evaluated in the Draft EIS are located in areas where they could potentially reduce noise to areas with modeled noise impacts. If areas did not have modeled noise impacts, noise walls were not evaluated. All areas with modeled noise impacts were evaluated for noise walls.

Noise wall locations are based on design criteria and typically are behind a barrier or at the edge of UDOT right-of-way. Mitigating noise impacts will follow UDOT's Noise Abatement Policy and procedures (<u>https://www.udot.utah.gov/connect/public/noise-walls</u>). For more information on noise-abatement mitigation measures for the I-15 project, see Section 3.9.4.4, *Mitigation Measures*, and Appendix 3F, *Noise Technical Report*.

C. Commenters asked why noise Wall 21 (on the east side of I-15 between 600 North and South Temple in Salt Lake City) is not recommended to be 17 feet high. Other commenters asked why Wall 20 on the west side of I-15 between North Temple and 600 North in Salt Lake City is not recommended to be taller.

Detailed information regarding the evaluation of both noise Walls 20 and 21 is provided in Appendix 3F, *Noise Technical Report*.

As shown in Appendix 3F, *Noise Technical Report*, Wall 21 is currently 10 to 14 feet high. UDOT evaluated a 17-foot-tall noise wall and found that the 17-foot-tall wall would not meet the noise-abatement design goal of reducing noise by 7 A-weighted decibels (dBA) for at least 35% of front-row receptors (residences and other buildings). The 17-foot-tall noise wall would provide a 7-dBA reduction for 12% of the front-row receptors. Because the 17-foot-tall noise wall would not meet the noise-abatement design goal, UDOT did not consider shorter wall heights, such as 15 feet or 16 feet, since they are not expected to produce any better noise reduction compared to the 17-foot-tall noise wall. UDOT is proposing to replace Wall 21 at a height of 14 feet, which is the tallest of the existing heights.

As shown in Appendix 3F, *Noise Technical Report*, Wall 20 is currently 10 to 14 feet high. UDOT evaluated wall heights at 14 feet, 15 feet, 16 feet, and 17 feet for Wall 20, and the analysis showed that all of these walls would be considered acoustically feasible, would meet the noise abatement design goal, and are cost-reasonable. As described in page 13 of the noise report, in situations when multiple wall heights meet the noise-abatement requirements (like the evaluation for Wall 20),



UDOT selects the shortest wall height that meets the noise-abatement requirements. Therefore, UDOT is proposing to replace Wall 20 at a height of 14 feet, which is the shortest wall height that meets the noise-abatement requirements.

D. Farmington City asked specific questions about why monitoring locations 3 and 6 did not have an increase in noise. Other commenters asked whether the traffic volumes from 2021 that were used in noise monitoring were representative or appropriate to use for determining noise impacts from existing or future-year traffic volumes. Farmington City and other commenters asked why Barriers 1 and 3 are not recommended. Farmington City noted that Barrier 4 is currently a combination of landscaped berm and wall and requested that it be replaced in a similar method.

Monitoring locations are used to calibrate the noise model for the project. The noise-monitoring data also include traffic data (how much traffic passed the location in each direction during the monitoring period) to build and calibrate the noise model. The monitored noise values are for specific points with the observed traffic volumes during the monitoring period. With these noise values and traffic volumes, the noise model inputs can be adjusted to account for changes in traffic volumes, fleet mix (cars versus trucks), the number of travel lanes, the horizontal or vertical alignments of travel lanes, the presence or absence of noise walls, and any other features (such as jersey barriers) that could affect the predicted noise levels at nearby receptors.

The noise values reported for monitoring locations 3 and 6 show that monitoring location 3 was monitored at a noise level of 66 dBA, and the noise model predicted a value of 63 dBA. For a noise model to be validated, the difference between the monitored noise value and the modeled noise value must not be more than 3 dBA. Because the difference between the monitored value and the modeled value for monitoring location 3 was 3 dBA, the noise model is valid for use in the noise modeling at monitoring location 3. For monitoring location 6, both the monitored noise value and the modeled noise value are 67 dBA, so the noise model is also valid for use in the noise modeling at monitoring location 6. When UDOT runs the noise model for the Action Alternative, it adds the additional lanes and accounts for any other changes in the roadway or terrain that could affect the noise conditions at surrounding receptors.

As shown in Appendix 3F, *Noise Technical Report*, Barriers 1 and 3 (for both the southern and northern options for these barriers) did not meet UDOT's Noise Abatement Policy criteria for feasibility and reasonableness. In both of these locations, the receptors are located farther from I-15 (compared to other locations in the study area), and existing berms and higher terrain east of I-15 limit the effectiveness of noise walls for reducing noise at receptors east of I-15. None of the barriers were able to meet the noise-abatement design goal of providing a 7-dBA reduction for at least 35% of the front-row receptors.

For Barrier 4, UDOT is recommending a 16-foot-tall noise wall for balloting by residents. Because there is limited horizontal space in the area, UDOT is currently planning to replace Barrier 4 with a panel wall instead of a combination berm-and-panel wall. Adding a berm requires additional horizontal space and would likely result in additional right-of-way impacts to residential properties on the east side of Frontage Road and South Park in Farmington. UDOT will work with Farmington City during the final design of the Action Alternative, if it is selected, to determine whether there is enough space to provide a berm-and-panel combination for the noise wall without requiring additional right-of-way impacts.



E. A commenter asked specific questions about a noise wall along Sorrento Drive in Woods Cross. The commenter asked whether the wall will be moved or whether any homes will be acquired for constructing the wall.

With the Action Alternative, the existing noise wall for the properties on Sorrento Drive would be replaced. No properties on Sorrento Drive are anticipated to be acquired with the Action Alternative. UDOT might need to obtain perpetual easements or temporary easements to replace the noise wall and maintain the noise wall. For more information, see the evaluation for noise wall 12 in Appendix 3F, *Noise Technical Report*.

F. West Bountiful City asked that UDOT reconsider a noise wall for the Wood Haven mobile home community on the northwest side of I-15 and 500 South in West Bountiful.

As shown in Appendix 3F, *Noise Technical Report*, Barrier 9 was evaluated for noise impacts in this area (for both the Bountiful 500 South Southern and Northern Options), and it did not meet the UDOT Noise Abatement Policy criteria for feasibility and reasonableness.

G. Woods Cross City requested that noise walls in Woods Cross not block business visibility.

UDOT will typically place noise walls on or near the edge of the UDOT right-of-way. The limits are determined based on noise effectiveness and balloting. UDOT will review noise wall locations with Woods Cross City during the final design of the Action Alternative, if it is selected, to address any remaining concerns with business visibility.

9.3.8 Historic and Archaeological Resources

A. Commenters stated that the property at 453 West 500 South in Bountiful is not an "eligible historic building" and should not be considered a protected historic resource.

UDOT follows the Utah State Historic Preservation Office's (SHPO) rating definitions for determining eligibility for historic structures. These rating definitions are based on the age and integrity of the structure. The property at 453 West 500 South was determined to be an "eligible/contributing" property per the Utah SHPO criteria, and the Utah SHPO has reviewed and concurred with this determination. For more information, see Section 3.10, *Historic and Archaeological Resources*.

B. Commenters questioned how many trees would be removed from the Clark Lane Historic District with the Farmington 400 West and State Street Options.

The total number of trees that would need to be removed for the Farmington 400 West and State Street Options is not known with certainty and would depend on final design items such as curb limits, park strip, and sidewalk locations. However, the Farmington 400 West Option would have fewer impacts to trees than the Farmington State Street Option because it would require fewer turn lane improvements on State Street east of 400 West.

C. The Farmington Historic Preservation Committee questioned what mitigation would be provided for impacts to 399 W. State Street and the trees in the Clark Lane Historic District in Farmington.

UDOT has coordinated with the Utah SHPO, the Farmington Historic Preservation Committee, and the property owner regarding mitigation as part of the Section 106 process. A copy of the



Memorandum of Agreement for Section 106 adverse effects is included in Appendix 3I, *Cultural Resources Correspondence*.

9.3.9 Water Quality and Water Resources

A. A commenter stated that the land drain under I-15 and along Frontage Road in Centerville is not working well and therefore their property floods. The commenter requested that this drain be improved with the I-15 project. A commenter noted existing drainage concerns along Frontage Road in Centerville and requested that UDOT study stormwater and area runoff before moving Frontage Road or removing existing stormwater detention areas.

UDOT will evaluate drainage pipes and channels as part of the final design of the Action Alternative (if it is selected) and anticipates that several drainage facilities along Frontage Road might need to be adjusted. UDOT will coordinate the drainage design with Farmington City, Centerville City, and Davis County.

9.3.10 Ecosystem Resources

A. A commenter asked where the wildlife crossings were.

Given the urban and industrial land uses on both sides of I-15, UDOT is not aware of any substantial terrestrial migration issue that would warrant including a wildlife overpass or underpass. No wildlife underpasses or overpasses are proposed as part of the Action Alternative.

B. A commenter expressed concern for impacts to amphibians and Columbia spotted frogs and their potential habitat during construction. The commenter suggested additional monitoring during construction for amphibians.

As described in Section 3.12.4.3.2, *Special-status Wildlife Species*, the canals, ditches, and open-water ponds in the study area that are potentially suitable habitat for Columbia spotted frogs are highly degraded and are surrounded by invasive vegetation species (common reed) and by commercial, highway, and road development. Given the degradation of these resources, the habitat is low quality and is unlikely to support Columbia spotted frog populations. Therefore, impacts to Columbia spotted frogs are unlikely.

C. Commenters stated that there are protected ponds or wetlands along Frontage Road north of Parrish Lane in Centerville.

UDOT is coordinating with the U.S. Army Corps of Engineers to identify jurisdictional wetlands and waters of the United States. See Appendix 3M, *Aquatic Resources Delineation Report,* for more information about mapped aquatic resources in the study area. Anticipated impacts are discussed in Section 3.12, *Ecosystem Resources*.

9.3.11 Floodplains

A. Under the heading of "Changes in Existing Environmental and Project Resilience," EPA recommended that UDOT consider whether the proposed Action Alternative would be affected by foreseeable changes from predictable trends in the affected environment, for instance, under a scenario of continued decreasing and/or increasing precipitation days, changing frequency of



intense storms and related flood events, increased occurrence of wildfires, and enduring drought currently experienced in the proposed project area. The U.S. Climate Resilience Toolkit serves as a repository of information related to climate resilience in the United States, including steps to build resilience, case studies, expertise, and special topic areas. In addition, EPA suggested that this project consider resiliency and adaptation measures based on how future climate might impact the project and the ability of UDOT to effectively protect project infrastructure and resources from unintentional deleterious impacts due to continuing and foreseeable climate trends in the proposed project area. The Fourth National Climate Assessment, released by the U.S. Global Change Resource Program, contains scenarios for regions and sectors that might be useful to UDOT in informing integral resilience considerations for road infrastructure projects. Full consideration of influences from the existing environmental setting on the proposed project might inform necessary design modifications and changes to maintenance assumptions and for determining resource supplies, system demands, system performance requirements, and operational constraints (snow removal and/or treatment in the project area).

Importantly, EPA recommended updating Section 3.13, Floodplains, of the Draft EIS to appropriately consider the potential impacts of changing precipitation patterns on the project as part of its analysis of impacts from the Action Alternative to floodplains in the project area. As an example, EPA recommended that UDOT consider the anticipated extent and depth of overland flows through the proposed project area using the Federal Flood Risk Management Standard (FFRMS) approach to better capture potential effects due to variability in precipitation in the project corridor. On May 20, 2021, President Joe Biden signed Executive Order (E.O.) 14030, Climate-related Financial Risk, reinstating E.O. 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (January 30, 2015). This action also re-established the FFRMS for projects receiving federal funds, such as this proposed project. The FFRMS aids in increasing the resilience of infrastructure for flooding events caused by climate disasters.

The FFRMS describes three available approaches for determining the vertical flood elevation and corresponding horizontal floodplain for federally funded projects: (1) the Climate-informed Science Approach; (2) the Freeboard Value Approach; and (3) the 0.2-percent Annual-chance Flood Approach. EPA noted that the Draft EIS discusses design mitigation to address potential increased flooding in the project area by proposing that roadway elevations be constructed a minimum of 2 feet above adjacent floodplain elevations, where those elevations are defined (p. 3-335). However, the FFRMS approaches are designed to recognize and incorporate future conditions rather than rely solely on existing data and information, and the approaches would help UDOT best inform the design of the proposed project to ensure resiliency. One of these approaches must be used to determine the FFRMS floodplain for federal actions, including those receiving federal funding. Applying the FFRMS would best allow UDOT to identify necessary design considerations to accommodate future anticipated effects (increased intensity and severity of storms), such as upsizing or adapting stormwater management systems, in the engineering and final design of the Action Alternative in the Final EIS and aid to increase the proposed project's resilience to the effects of climate change. The FFRMS would also aid in UDOT's approach to avoiding and minimizing the potential effects of increased flooding from climate change on historically disadvantaged and



overburdened communities located in the project area and along I-15 (as discussed in Section 3.4 of the Draft EIS).

UDOT has revised Section 3.13, *Floodplains*, to include Executive Order 14030 as suggested by EPA. UDOT has revised the mitigation for floodplains to note that, in accordance with Executive Order 14030, UDOT will evaluate the floodplains under the FFRMS during the final design for the Action Alternative, if it is selected, for drainage and stormwater management features.

As discussed in Section 3.4, *Environmental Justice Populations*, floodplains were not identified as a topic of concern for environmental justice (EJ) populations. As shown in Section 3.13 of the Draft EIS, all of the expected floodplain impacts from the project would be in Davis County and would not be located in areas with EJ populations.

9.3.12 Construction Impacts

 A. Commenters had questions and concerns regarding the maintenance of traffic during construction, such as coordinating with the railroads to limit blocking local streets during construction.
 A commenter requested that Frontage Road in Centerville be reconstructed first and minimize disruptions along Frontage Road or other local roads.

UDOT requires its contractors to develop a maintenance of traffic plan to maintain vehicle, pedestrian, and bicyclist access during construction to the extent feasible. Some temporary road and lane closures would be necessary and would be advertised to the public for awareness.

UDOT is aware that trains frequently block streets in Salt Lake City, North Salt Lake, Woods Cross, West Bountiful, and Centerville. UDOT cannot adjust the railroad schedules of Union Pacific Railroad or UTA. UDOT will attempt to minimize road closures or delays on roads that also have railroad crossings to the extent feasible while meeting the overall construction schedule and construction requirements.

UDOT will work with its contractors to identify feasible construction methods to reduce closure times on Frontage Road in Centerville and other local roads.

B. Commenters who reside immediately adjacent to I-15 expressed concern for structural damage to their homes during construction. NeighborWorks requested that a construction damage fund be established. A commenter stated that the high water table increases the risk of structural damage to nearby homes due to vibration from road base compaction.

UDOT attempts to minimize impacts to structures from vibration during construction with standardized project controls. UDOT has a policy for unintentional property damage during construction, and property owners can submit a claim if they believe their property has been damaged during construction. This process requires filling out an online claim form and an investigation to verify the claims. See UDOT's website for more information (https://www.udot.utah.gov/connect/public/claims).

C. Commenters expressed concerns for noise during construction and asked that noise walls be replaced quickly.

To reduce temporary noise impacts associated with construction, the contractor will comply with all state and local regulations relating to construction noise, including UDOT's 2023 Standard



Specification 00555 for nighttime construction work to reduce the impacts of construction noise on the surrounding community. In many locations and circumstances on existing roads, it is not possible to build a new noise wall without first removing the existing noise wall, so there might be some time during construction when there is not a noise wall. UDOT will work with the contractors to identify feasible construction methods to reduce the time between when existing noise walls are removed and when new noise walls are built.

D. Commenters asked what precautions will be taken for bird migration during construction.

Mitigation measures for migratory birds are listed in Section 3.12.4.4, *Mitigation Measures*, and Section 3.17.3.11, *Mitigation Measures for Impacts to Migratory Birds from Construction*, of the Draft EIS. These mitigation measures include removing trees and shrubs during the non-nesting season (about August 15 to April 1). If this is not possible, UDOT or its contractor will arrange for preconstruction nesting surveys of the area that would be disturbed. These surveys would be conducted by a qualified wildlife biologist no more than 10 days before ground-disturbing activities to determine whether active bird nests are present. If active nests are found, the construction contractor will coordinate with the UDOT Natural Resources Manager or biologist to avoid impacts to migratory birds.

E. A commenter was concerned with economic impacts during construction.

Mitigation measures for economic impacts during construction are listed in Section 3.17.3.4, *Mitigation Measures for Economic Impacts from Construction*, of the Draft EIS. UDOT will maintain access to businesses during the construction and postconstruction phases of the project. For each phase of the project, UDOT would coordinate with property owners and businesses to evaluate ways to maintain access and still allow efficient construction operations. This coordination could entail sharing a temporary access or identifying acceptable timeframes when access is not needed. Adequate signs would be placed in construction areas to direct drivers to businesses. Other potential mitigation measures for construction impacts include:

- A traffic access management plan developed and implemented by the construction contractor that maintains the public's access to the business during normal business hours
- A frequent newsletter provided to all businesses in the construction area describing the progress of construction and upcoming construction events
- Business access signs that identify business access points in the construction limits
- o Meetings with business representatives to inform them of upcoming construction activities
- F. Salt Lake City requested the following mitigations during construction:
 - Written commitment that native-speaking interpretation and translation services will be used to communicate with potentially impacted residents and business owners to ensure that they understand project impacts and their options.
 - UDOT agrees this is an important communication tool for the project and will use this during right-of-way discussions when requested or applicable.
 - Compensation for the purchase and installation of triple-pane windows for residences, schools, businesses, etc., located within a ½-mile buffer of the corridor to reduce noise



- UDOT cannot commit to the installation of triple-pane windows in the corridor for the purposes of noise reduction because this is not an allowable noise mitigation measure included in UDOT's Noise Abatement Policy. UDOT is proposing to replace and extend existing noise walls in Salt Lake City to mitigate for noise impacts from the Action Alternative.
- Noise walls to help mitigate loud construction noise
 - UDOT will investigate leaving the existing noise walls in place during construction and/or minimizing the time adjacent neighborhoods would not have either the existing or new noise wall during construction.
- Hotel vouchers for affected residents during times of loud construction noise, including residents who declined to relocate before construction
 - UDOT will consider this during construction during times of high-noise activities. UDOT will continue to work with Salt Lake City to identify when vouchers would apply.
- Deployment of automated systems to monitor air quality levels during construction and issue alerts if detected air quality is at potentially concerning levels, resulting in a modification of construction activities
 - UDOT will investigate the use of air quality monitoring during construction. UDOT will also
 explore creative construction methods to reduce dust and impacts to air quality.
- Compensation for the purchase and installation of upgraded heating, ventilation, and air conditioning (HVAC) and/or filtration systems to improve the air quality in enclosed residences, schools, businesses, etc., located within a ¼-mile buffer of the corridor
 - This falls outside UDOT's right-of-way process and procedures and will not be considered.
- Installation of roadside landscaping and vegetation barriers, which may effectively remove black carbon, a component of PM_{2.5} pollution specific to diesel and other fossil fuel combustion
 - UDOT will coordinate with Salt Lake City on the aesthetics in this area during final design of the Action Alternative, if it is selected, consistent with UDOT's current Aesthetics Policy. However, increasing the footprint of the Action Alternative to install landscaping amenities to minimize impacts to adjacent residents and businesses will not be considered.
- Deployment of automated systems to monitor vibration levels during construction and issue alerts if detected vibration is at potentially concerning levels, resulting in a modification of construction activities to avoid structural damage to buildings. Inspection of historic buildings located within 600 feet of the corridor before and after construction activities to confirm no structural damage has occurred. Payment by UDOT for construction-related damage to existing properties
 - UDOT will require the contractor to follow the UDOT specification for preconstruction surveys. The contractor will be responsible for any damage due to construction. UDOT attempts to minimize impacts to structures from vibration during construction with standardized project controls. UDOT has a policy for unintentional property damage during construction, and property owners can submit a claim if they believe their property has been damaged during construction. This process requires filling out an online claim form and an



investigation to verify the claims. See the UDOT website for more information (<u>https://www.udot.utah.gov/connect/public/claims</u>).

- Third-party advocates to assist with conversations between tenants/property owners and UDOT regarding displacement, compensation, and/or relocation. Coaches to advise and provide impacted residents, particularly first-time homebuyers, with tools to navigate and suggested next steps to take regarding home ownership and property tax issues
 - UDOT is willing to explore this with Salt Lake City during right-of-way discussions where requested or applicable.
- Consideration of household incomes or business profits versus solely property appraisals, when calculating relocation compensation or buyout
 - Compensation for right-of way acquisition will be done in accordance with state and federal law, which could include additional compensation above appraised value. The right-of-way process includes methods to consider household incomes or business profits when evaluating right-of-way compensation.
- Compensation in the form of multiyear rent or a lump-sum down payment for displaced residents, including each family within a multigenerational home
 - The UDOT right-of-way process includes compensation options such as multiyear rent or lump-sum down payments. The impacted property owners or residents will be responsible for determining the type of mitigation they receive. The City or others who do not have an ownership or renting interest in the property do not decide where impacted property owners move or what type of compensation is preferred.
- Grant funding to create affordable housing in the area, which could be reserved for legacy residents
 - Grant funding is not an option currently available in UDOT's right-of-way process and will not be considered. Any impacts to residents or businesses would be compensated to directly affected property owners or renters through the UDOT right-of-way process.

9.3.13 Section 4(f) Analysis

A. The U.S. Department of the Interior (DOI) provided comments concurring with the Individual Section 4(f) Evaluation Section 4(f) prudent and feasible alternatives evaluation and de minimis impact proposals. DOI also stated that they did not object the Section 4(f) approval of the project contingent on a Memorandum of Agreement in consultation with the Utah SHPO.

UDOT appreciates DOI's review and concurrence on the draft Section 4(f) evaluation.

9.3.14 Section 6(f) Analysis

A. DOI requested that UDOT continue to coordinate with the Utah Department of Natural Resources to mitigate impacts to Section 6(f) properties (Centerville Community Park and Hatch Park in North Salt Lake).



UDOT appreciates DOI's review and recommendations related to the draft Section 6(f) evaluation. UDOT will continue to coordinate with the Utah Department of Natural Resources, Centerville City, and the City of North Salt Lake to mitigate impacts to Centerville Community Park and Hatch Park.

9.3.15 U.S. Army Corps of Engineers Comments

The U.S. Army Corps of Engineers (Corps or USACE) submitted the following comments in February 2024 after the close of the official comment period. The Corps' comments and responses are provided below.

A. The purpose and need of the project is vague and unclear. There is no clear, concise statement that the Corps can point to. This will be problematic when it comes time for UDOT to apply for a permit. Please try to distill this down to something more tangible. The Corps will not be able to use concepts such as quality of life for permitting purposes. Further, items such as trails are not inextricably linked to highway capacity and should not be included in a highway capacity improvement project.

The EIS Summary Section S.2, *What is the purpose of the project?*, and Section 1.4, *Summary of Purpose and Need*, include a concise summary of the purpose of and need for the I-15: Farmington to Salt Lake City Project. According to NEPA and Clean Water Act guidance, the lead agency, which for this project is UDOT, has broad discretion in establishing the project's purpose and need. UDOT's Quality of Life Framework is a statewide initiative to improve the quality of life through transportation. The framework was used to organize the needs for and purpose of the project. The framework itself is not the purpose and need. Trails are an important component of transportation that also connect communities and provide mode choice. UDOT determined that the needs for trails and improved community connections are relevant and an integral part of the purpose of and need for the I-15 project. Moreover, UDOT anticipates that these needs will also be part of future UDOT projects as well.

B. The Draft EIS contains no information to support the need for the construction of a full interchange at the existing 2100 North interchange, Salt Lake Segment. This area is currently surrounded primarily by open space and industrial land uses, suggesting that demand for access to I-15 at this particular location is relatively low. Additional justification/analysis would be needed to demonstrate that this component of the project would be vital to meeting the project purpose and need.

There is not a separate purpose and need specifically for the 2100 North interchange. The Action Alternative's 2100 North interchange works systemically with the improvements to I-15 proposed at the I-215 interchange to the north of 2100 North and the 600 North interchange to the south of 2100 North. The 2100 North interchange relieves congestion and travel demand at the 600 North interchange, which allows the 600 North interchange and 600 North width to be smaller. With 2100 North interchange improvements, 600 North better accommodates other modes, pedestrians, and other community connections in an area identified as an environmental justice (EJ) community where cars are not always available to all users. Additionally, the new interchange at 2100 North takes industrial truck traffic, currently using local roads in the neighborhoods east of I-15 near 600 North, out of the communities and keeps it in the industrial area. FHWA's interchange access policy also generally requires providing full access at interstate interchanges unless there are operational reasons not to. The need for and proposed improvements to the 2100 North interchange have been supported by Salt Lake City, local residents, and the industrial users east of I-15 throughout the I-15: Farmington to Salt Lake City EIS process.



C. Throughout the Draft EIS, and more particularly in part 3.12.4.4.3, little to no information is provided on the efforts to avoid and minimize aquatic resource impacts within the project area. This is particularly important for the 2100 North interchange area as the bulk of the proposed impacts would occur here. There were no alternatives documented in the Draft EIS for the 2100 North interchange area. From a Section 404 standpoint, this would be the most important portion of the project area for documenting a robust alternatives analysis in the Draft EIS due to the substantial impacts to waters of the U.S. Without this additional analysis, we have concerns that the proposed alternative may not comply with the 404(b)(1) guidelines.

The alternatives development and screening process is discussed in Appendix 2A, Alternatives Development and Screening Report. During the alternatives development and screening process, UDOT used existing infrastructure and maintained and improved existing accesses as much as possible to minimize impacts to private property and other resources such as wetlands and other aquatic features. Because I-15 is an existing high-speed, high-volume, limited-access highway, there are limited options for alternatives and limited options to tweak the alignment of the alternatives. As described in the Alternatives Development and Screening Report, UDOT also evaluated several alternatives that had more lanes on I-15 and selected the current Action Alternative because it would meet the need for the project while minimizing impacts. One of UDOT's other project purposes is to improve safety, which includes considering engineering design standards around horizontal curves and the angle of bridge crossings. There is not a lot of flexibility on the alignment of I-15 near 2100 North because of the railroad crossing near 2300 North and the need to minimize the skew of the I-15 crossing of the railroad tracks. UDOT needs to maintain both the existing rail crossing location (where I-15 crosses the railroad tracks) and maintain or improve the angle for the I-15 bridge that crosses the railroad tracks near 2300 North. However, reducing impacts to wetland areas near 2100 North more than the Action Alternative would require realigning I-15 farther east compared to its current alignment and would require substandard road geometry such as a more skewed bridge crossing. The angle of the existing I-15 railroad crossing is already skewed, and FHWA, railroad, and UDOT structural and clearance requirements would not allow this to be more skewed (in other words, with a smaller or sharper angle). The FHWA, railroad, and UDOT standards would recommend making this less skewed (more perpendicular). Any additional refinements to make this a more perpendicular crossing would require I-15 to be shifted west south of the railroad crossing by 2100 North, which would increase the acreage of impacts to the wetland areas west of I-15. UDOT has determined that the Action Alternative, which maintains the existing crossing location and bridge crossing angle, is the least impactful option to wetlands in this area. UDOT will work with the Corps during final design and permitting of the Action Alternative, if it is selected, for opportunities to minimize impacts around the interchange and local access road west of the interchange where practicable.

D. The Draft EIS contains only minimal information on indirect impacts to aquatic resources resulting from the proposed project and does not provide an estimate of aquatic resource impact acreage within the 300-foot buffer. These impacts should be identified for all alternatives, and a description of the anticipated secondary impacts should be included in the Draft EIS. The Corps would determine the amount of compensatory mitigation to be required for indirect and/or secondary impacts.

UDOT will work with the Corps to identify potential indirect impacts to jurisdictional aquatic resources during the Clean Water Act Section 404 permitting process following the current Corps guidance at



that time. An inventory of aquatic resources within a 300-foot buffer is not included in the EIS impact analysis. There is not currently any official Corps guidance that defines a methodology or buffer distance for quantifying indirect impacts to aquatic resources.

E. The project maps included in part 2.4 do not have a legend or labeling to identify what is being shown with the different colored features (white, yellow, red, brown, black, gray). Including this detail would clarify the proposed project activities and aid in review of future revisions.

The figures in Chapter 2, Alternatives, have been revised for the Final EIS to include a legend.

F. The Draft EIS did not include maps of the project alternatives overlaid on the aquatic resources delineation layer. This information is vital in understanding the type, location, distribution, orientation, and nature of the proposed impacts, and aids the Corps in evaluating where to focus avoidance and minimization efforts.

Design lines for the Action Alternative were not shown on the aquatic resource impact maps in Appendix 3K, *Aquatic Resources Impacts*, to not obscure the impacted wetland areas. UDOT will work with the Corps during the Clean Water Act Section 404 permitting process to provide a figure series that shows roadway improvements with impacted wetland areas on the same map.

G. As you are aware, we have not yet verified the aquatic resources delineation for the project area. Therefore, the impact totals and mitigation requirements are subject change as a result of any needed revisions to the delineation. We are currently reviewing the delineation and will provide a list of comments and additional information needed, including the potential need for a site visit(s) during the growing season. However, initial review of the delineation indicates more aquatic resources may be present than are currently depicted and may substantially increase the impacts of the preferred alternative.

UDOT submitted a copy of the delineation report to the Corps of Engineers in August 2023. UDOT will work with the Corps to address comments on the delineation report when these are received. As stated in the EIS analysis, UDOT anticipates that the impacts and mitigation requirements will also depend on the jurisdictional status of delineated aquatic resources. Many of the features might be determined to be constructed features (such as ditches, canals, ponds, or detention basins) or might not be considered jurisdictional by the Corps during the jurisdictional determination process.

9.4 Other Miscellaneous Comments

A. Commenters provided a general statement or opinion that is not specific to the EIS or Action Alternative and does not warrant a response. Commenters submitted a comment that was too vague to provide a response. Commenters provided comments noting concerns about topics unrelated to this EIS. Commenters requested information or stated options on other UDOT projects unrelated to this EIS.

Comment has been reviewed and is noted.

B. A commenter asked UDOT to eliminate billboards along I-15.

Removing of billboards is outside the scope of this EIS and is not relevant to any transportation needs. If UDOT were to impact billboards with the Action Alternative, UDOT would be required to



provide fair compensation to the billboard owners pursuant to federal and state right-of-way procedures and processes.

C. Commenters asked about the source of project funding. Commenters expressed concern about the timeline or duration of construction. Commenters stated that funding for the I-15 Action Alternative should occur after FrontRunner Double Track or other transit projects are completed to see whether the additional roadway capacity is still needed with the FrontRunner Double Track.

Funding for both this current EIS and the potential construction of any improvements approved as part of the environmental study have been provided by the State of Utah. \$1.7 billion of state transportation funding has been allocated for future construction, pending environmental approval. This amount could fund construction for part of the preferred alternative. High-level estimates prepared during the environmental process indicate a total project cost of \$3.7 billion.

Future construction decisions, including how and when to construct certain portions of the project, would be made after environmental approval. More details about the timeline and duration of construction will be made available once more information is known regarding funding availability and potential phasing.

UDOT is not proposing that constructing the Action Alternative described in this EIS be sequenced to be contingent on completing the FrontRunner Double Track or any other transit project. As described in this EIS, the need for the I-15: Farmington to Salt Lake City Project assumes that the FrontRunner Double Track project and all other roadway, transit, and active transportation projects in WFRC's 2019–2050 RTP are constructed except for the I-15 project. Even with all of the other projects in the 2019–2050 RTP constructed, there is still a clear need for the I-15: Farmington to Salt Lake City Project. The FrontRunner Double Track project is currently in the environmental review and design process. The timing of construction has not been determined, but it is anticipated to begin construction shortly after the environmental review and design process are completed. The I-15: Farmington to Salt Lake City and FrontRunner Double Track projects are both substantial investments of taxpayer funds and will require multiple years of planning, design, and construction to complete. Continuing to design and construct these projects concurrently will result in both projects being completed sooner (which will benefit travelers on both systems) and save taxpayers money since future costs would likely be higher with inflation.

D. One commenter requested an extension to the comment period on the last day of the comment period.

UDOT met regulatory requirements by providing a 45-day comment period on the Draft EIS from September 29 to November 13, 2023. UDOT received over 900 comments, and only one comment, which was received on the last day of the comment period, requested an extension of the comment period. Additionally, the commenter who requested an extension provided a comprehensive multipage letter, which demonstrates that they had a reasonable opportunity to review and offer suggestions. The comments received during the Draft EIS comment period are very similar to the comments received during previous comment periods. Additionally, the Action Alternative identified in the Draft EIS was very similar to the alternatives provided for public comment in November 2022 and May 2023. UDOT did not extend the comment period because it would not result in meaningfully different comments or suggestions than those that were submitted during the 45-day comment period.



E. A commenter requested that UDOT use electric vehicle road (EVR) road surfaces.

UDOT is currently assuming that concrete pavement will be used for I-15. UDOT is aware of potential new technologies related to EVR surfaces. At this point, EVR technology is still being tested by various academic, industry, and private companies, and it has not been proven as a viable option for pavement in Utah or on interstate highways. UDOT will continue to follow the research on this topic and will consider it in the future if it becomes a viable pavement option.

F. A commenter stated that the EIS should evaluate the urban heat contribution of I-15 including mapping and monitoring spatiotemporal heat patterns from I-15.

The urban heat island effect is a phenomenon in which temperatures can be elevated in urban areas because of artificial surfaces (such as roads and buildings) that absorb and retain heat that are combined or compounded with artificial heat sources such as building ventilation systems and industrial emissions. It is unknown how I-15 with the No-action or Action Alternative might contribute to an urban heat island effect in Salt Lake or Davis Counties. Good models are not available to assess the heat contribution of I-15 and differentiate these from the various other urban heat contributors. Although I-15 is the largest roadway facility in Utah, the overall pavement area is small in the context of all of the thousands of miles of local roads and hundreds of thousands of buildings in the greater Salt Lake City metropolitan area. The additional pavement that is proposed with the Action Alternative would be slightly larger than the No-action Alternative and would not be meaningful in the regional context of all artificial surfaces.

G. WFRC requested that UDOT's I-15 improvements lend themselves, whether in whole or in part, to being flexibly repurposed to accommodate or encourage using new mobility technologies such as connected and autonomous vehicles and innovations in trucking operations. This flexibility suggests lane design where one or more lanes could be repurposed over time. WFRC also requested that the potential broader regional impacts and benefits of regional system connections should be fully considered. WFRC recommended that implementation strive for regional connectivity, integration, and support to the existing and planned transit, roadway, and active transportation systems consistent with Utah's Unified Transportation Plan and the Wasatch Choice Vision for the region.

To the extent practical during final design, UDOT will try to design the Action Alternative, if it is selected, to accommodate potential future changes in use while minimizing impacts and being prudent with project costs. The I-15 project has been identified and included in WFRC's RTPs for decades. Because this section of I-15 is one of the highest-volume transportation links in Utah, it is a regionally important facility. This importance is reflected in the I-15: Farmington to Salt Lake City EIS's purpose and need statement, the EIS alternatives, and WFRC's 2019–2050 RTP. As stated in these documents, UDOT is going to great effort to make the I-15 project consistent and compatible with the other planned RTP transit, road, and active transportation projects.

H. Commenters appreciated the kids' area and food at the public hearing. A commenter provided input that they would have preferred that the public hearing be located first in the building before the room with the informational boards.

Thank you for the feedback on the public hearing kids' area, food, and layout. UDOT positioned the informational boards first to provide attendees with an opportunity to review the state of the study before entering the public hearing room and to minimize disruption to those providing verbal comments.



9.5 References

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