

Chapter 36: Project Implementation (Phasing)

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36.1 Overview of Phased Approach

This chapter has been included in the Mountain View Corridor (MVC) Final Environmental Impact Statement (EIS) to address the issue of construction phasing for the project. This chapter identifies the year or years in which specific elements of the project would be completed, based on current funding commitments; the timing of project implementation could change depending on funding availability and other issues. This chapter also identifies certain actions that would not be immediately authorized by the Federal Highway Administration (FHWA) when this ongoing National Environmental Policy Act (NEPA) process is completed, but instead would be authorized only as part of a separate FHWA approval at some point in the future.

36.1.1 Background

The issue of construction phasing was addressed briefly in the Draft EIS for this project. After the end of the comment period on the Draft EIS, the Utah Department of Transportation (UDOT) began collaborative discussions with a range of stakeholders to resolve specific concerns that had been raised by various stakeholders in comments on the Draft EIS. As a result of those discussions, UDOT decided to adopt a phased approach to implementing the project in Salt Lake County and Utah County. Based on those discussions, UDOT and FHWA decided to include a chapter in this Final EIS on construction phasing.

36.1.2 NEPA and Construction Phasing

In general, the alternatives analysis in a NEPA study focuses on the impacts and benefits of the alternatives in a single future year—often called the *design year*—which is usually 25 to 30 years in the future. The impacts of the project are defined as the total impacts of the action alternatives in the design year assuming



full construction of all elements that are included in those alternatives. Similarly, the benefits of the project are defined as the benefits that would result from full construction of the project in the design year. The benefits and impacts from partial completion of the project—for example, an “interim build” scenario—generally are not required to be quantified or described in any detail in an EIS.

At the end of the NEPA process for a project, the lead agency issues its Record of Decision (ROD) for the project. The ROD authorizes implementation of the project, generally including final design, right-of-way acquisition, and construction. Once the ROD has been issued, the project sponsor—for example, the state Department of Transportation—often implements the project through a series of separate contracts for individual sections of the project. Unless otherwise specified in the ROD, the project sponsor has the flexibility to determine the appropriate construction phasing.

36.1.3 Discussion of Phasing in the Draft EIS

For the MVC project, the issue of construction phasing has been a matter of considerable interest to stakeholders, primarily for two reasons. First, during the Growth Choices study (see Chapter 3, Growth Choices), several stakeholder groups expressed an interest in the relative timing of the roadway and transit elements of the project. To address this issue, this EIS includes a chapter that evaluates a range of scenarios for “sequencing” the highway and transit elements of the project (see Chapter 29, Sequencing). The stakeholder groups have continued to advocate for early implementation of some transit improvements in parallel with the initial roadway improvements in order to affect travel behavior and land use patterns. Secondly, construction phasing has been an issue of concern because full funding is not yet available for the entire project. Various stakeholders want to understand when and how the project would be constructed.

The Draft EIS noted that the Utah Transit Authority (UTA) had not identified funding for the 5600 West Transit Alternative. The Draft EIS did not discuss in detail the potential for phased implementation of the transit alternative.

36.1.4 Stakeholder Discussions after Publication of the Draft EIS

After the Draft EIS was published, several stakeholders expressed an interest in defining more specifically the sequence of construction. These discussions focused on two distinct topics: (1) the relative timing of roadway and transit improvements in Salt Lake County and (2) the distinction between initial construction and ultimate build-out in Salt Lake County as well as for the 2100 North Freeway Alternative in Utah County.



Through collaborative discussions with stakeholders, UDOT developed a phased approach to project implementation for both Salt Lake County and Utah County. In each county, project implementation would proceed in three phases. These project implementation phases are described in Section 36.2, Implementation Phases.

It is important to note that this EIS has studied the full build-out of the Preferred Alternatives. The phased approach involves a gradual implementation of the Preferred Alternatives.

36.2 Implementation Phases

This section describes the phased implementation approach for the Preferred Alternatives in Salt Lake County (the 5600 West Transit Alternative with Dedicated Right-of-Way Option and the 5800 West Freeway Alternative) and Utah County (the 2100 North Freeway Alternative). This section provides a general description of each phase and how the impacts to the natural and human environments in each phase would differ compared to the impacts expected from full build-out of the alternative in 2030. *Full build-out* as discussed in this chapter means the completed MVC project in 2030 as analyzed in each resource chapter in this EIS and as described in Chapter 2, Alternatives.

The MVC would likely be constructed in sections based on logical connection points with other roads. Termini for the individual construction sections have not yet been determined.

General Mitigation Requirements. As part of Phase 1 in a section, UDOT would acquire the right-of-way necessary to build all three phases in that section. UDOT would implement the total mitigation required for impacts to farmland, community impacts, relocations, economic impacts, pedestrian and bicyclist impacts, impacts to archeological and paleontological resources, and impacts to hazardous waste sites during Phase 1 for a construction section.

UDOT will coordinate with the U.S. Army Corps of Engineers during the Section 404 permitting process to determine if wetland mitigation will be phased to cover only the amount of wetlands affected during each phase. Mitigating the wetland impact from each phase during that phase would allow UDOT to fully consider any future design modifications that could develop once final design is completed for that phase and would also account for any future changes to wetlands in the project area. Wetlands mitigation requirements will be specified by the Corps in the Section 404 permitting process.

Noise, floodplain, visual, and water quality mitigation will be implemented for the specific design for each phase. As part of the final design process during each

phase, UDOT will conduct a noise analysis to determine the locations that will receive noise mitigation based on expected traffic volumes and the roadway design. This will allow UDOT to account for any future design modifications or changes in traffic volumes that could affect noise impacts. Floodplain and water quality mitigation will be implemented for the specifics for each design phase. Future mitigation for subsequent phases will take into account the final design for that phase and any changes in regulations or potential improvements to best management practices at the time of implementation. Visual mitigation will be implemented during each phase.

The mitigation related to construction impacts, such as those listed in Chapter 15, Ecosystem Resources, Chapter 12, Air Quality, and Chapter 21, Construction Impacts, will be implemented during each phase as part of the construction activity. Any wildlife crossings required will be coordinated with the Utah Division of Wildlife Resources and the U.S. Fish and Wildlife Service during Phase 1.

More specific mitigation is listed below under each construction phase.

36.2.1 Implementation Phases in Salt Lake County

This section summarizes the implementation of the Preferred Alternatives in Salt Lake County (the 5600 West Transit Alternative with Dedicated Right-of-Way Option and the 5800 West Freeway Alternative).

36.2.1.1 5600 West Transit Alternative

Description

The Preferred Transit Alternative (5600 West Transit Alternative with Dedicated Right-of-Way Option) would be built in phases as funding becomes available. [Figure 36-1](#), Dedicated Right-of-Way Transit Illustration, provides a graphic depiction of the transit alternative.

- In Transit Phase 1, UTA would construct bus rapid transit (BRT) in a fixed guideway (Type 3 bus rapid transit) along 5600 West from 2700 South to 6200 South (see [Figure 36-2](#), Transit Implementation Phase 1 – BRT 6200 South to 2700 South). As part of Phase 1 activities, UTA also would acquire the necessary right-of-way to construct a fixed-guideway transit system along 5600 West from 11800 South to Interstate 80 (I-80) and along I-80 from 5600 West to the Salt Lake City International Airport.
- In Transit Phase 2, UTA would extend bus rapid transit in a fixed guideway along 5600 West from 6200 South southbound to 11800 South

and from 2700 South northbound to I-80 and continuing along I-80 to the airport (see [Figure 36-3](#), Transit Implementation Phase 2 – BRT).

- In Transit Phase 3, UTA would implement a rail transit system along the entire length of 5600 West extending from the airport on the north to Herriman to the south (see [Figure 36-4](#), Transit Implementation Phase 3 – BRT).

The funding plan for the transit system may include sources such as federal grants, public/private investments and possible enterprise zones related to transit-oriented development, future tax revenue included in the current Wasatch Front Regional Council (WFRC) Regional Transportation Plan, and funds already available in the WFRC 2030 finance plan. If federal transit funds are used for the transit component (for example, under the Small Starts program), additional NEPA review by FTA would be required. If additional NEPA review by FTA is required, FTA would likely adopt the analysis in this Final EIS and then prepare (jointly with UTA) a separate Environmental Assessment that would examine the transit element of the project in more detail. If additional NEPA review by FTA is not required, then UTA could proceed based on the information contained in this Final EIS.

Impact Evaluation

Most of the impacts associated with construction and implementation of the transit alternative would result from the relocation of businesses and residential properties along the alignment. Since UTA would obtain the right-of-way required for Phase 3 during Phase 1, these impacts would occur at the start of the project. The construction of the fixed guideway for bus rapid transit in Phase 1 from 2700 South to 6200 South and construction of subsequent fixed guideway in other phases would temporarily disrupt traffic on 5600 West. The noise and vibration impacts could be less in Phases 1 and 2 than in Phase 3 because UTA would operate a bus in a fixed guideway instead of a rail transit system. Most impacts to wildlife and habitat fragmentation would occur in Phases 2 and 3 when the transit line is constructed in undeveloped areas outside 5600 West near I-80 and south of about 9000 South toward Herriman. Air quality impacts would also be less in Phases 1 and 2 until all of the park-and-ride lots and transit stations are constructed in Phase 3.

36.2.1.2 5800 West Freeway Alternative

5800 West Freeway Alternative – Phase 1

Description. In Phase 1, the 5800 West Freeway Alternative would be constructed in sections as an arterial at or near full build-out elevation between



I-80 and the Utah County line. Instead of grade-separated freeway interchanges, Phase 1 would be connected to the cross streets at grade with signalized intersections. Connections to or crossings of major facilities such as State Route (SR) 201 or I-80 would be accomplished by grade-separated interchange connections. [Figure 36-5](#), Roadway Implementation Phase 1 – Arterial with Signals, and [Figure 36-6](#), Roadway Phase 1 Illustration, show how this phase would be constructed.

[Table 36.2-1](#) below shows how Phase 1 would be constructed at future interchange locations. Because the exact amount of funding is unknown, the construction sections for Phase 1 have not been determined. As part of Phase 1 for a section, UDOT would acquire the right-of-way necessary to build all three phases for that section. The objectives of Phase 1 are (1) to construct the arterial so that little future modification to Phase 1 elements would be required during Phases 2 and 3, and (2) to minimize future traffic disruption during the construction of these remaining phases. In general, Phase 1 is expected to include:

- Construct a four-lane arterial street (two lanes in each direction) with the northbound and southbound lanes built to the outer edge of the right-of-way to allow for future widening in the median.
- Construct signalized intersections at the locations at future interchange locations.
- Construct interchanges at SR 201 and I-80.
- Implement the MVC trail on the portions of the road under construction.
- Construct bridges over minor cross streets. Bridges would be constructed to match the full build-out elevation and to accommodate widening for additional lanes.
- Construct the Phase 1 roadway at or near full build-out elevation. (See the discussion after [Table 36.2-1](#) below for an exception from 4700 South to 2700 South.)
- Do not allow access between intersections (build Phase 1 as a limited-access facility).
- Relocate utilities.
- Acquire right-of-way for all three phases.



Table 36.2-1. Phased Construction for Major Cross Streets

Cross Street	Road Jurisdiction	MVC Cross-Street Treatment ^a		
		Phase 1	Phase 2	Phase 3 (full build-out) ^b
I-80	Salt Lake City	Service interchange	Directional ramps	Full system interchange
California Avenue/ 1300 South	Salt Lake City	Signal	Diamond	Diamond
SR 201	Salt Lake City/West Valley City Line	Service interchange	Directional ramps	Full system interchange
Parkway Boulevard/ 2700 South	West Valley City	Signal	Partial diamond	Partial diamond
3500 South	West Valley City	Signal	SPUI	SPUI
4100 South	West Valley City	Signal	Diamond	Diamond
5400 South	West Valley City	Signal	Diamond	Diamond
6200 South	West Valley City	Signal	Diamond	Diamond
7800 South	West Jordan	Signal	Diamond	Diamond
9000 South	West Jordan	Signal	Diamond	Diamond
11000 South	South Jordan	Signal	Diamond	Diamond
11400 South	South Jordan	Signal	Diamond	Diamond
12600 South	Herriman/Riverton	Signal	Diamond	Diamond
13400 South	Riverton	Signal	Diamond	Diamond
14600 South	Herriman	Signal	Diamond	Diamond

SPUI = signal-point urban interchange (see Figure 2-5.1, Interchange Types – Diamond, Single-Point, and System Interchange).

^a Bridges would not be constructed over signalized cross streets. Bridges would be constructed to match the Phase 3 grade and to accommodate widening for additional lanes as part of Phase 3.

^b Interchange types are provided for reference but might be modified during the final design phase of the project to take specific conditions into account.

UDOT would construct Phase 1 of the section from 4700 South to 2700 South at grade as much as possible while accommodating grade-separated pedestrian, residential, and railroad crossings. Starting at 4700 South and moving north, the facility would be elevated over 4700 South, would remain elevated over two railroad crossings and three residential street crossings at the future Giovengo Drive, Cape Cod Drive, and 4300 South, and would return to an at-grade section at 4100 South. The facility would continue north at grade, would be elevated over a pedestrian crossing to Hunter Park, and would return to an at-grade section at 3500 South. Cilma Drive would remain closed until Phase 2 of the project, when a grade-separated crossing might be constructed at Cilma Drive. North of Cilma Drive, the facility would continue at grade, would be elevated over 3100 South, and would continue elevated over 2700 South.

Impact Evaluation. Phase 1 of the 5800 West Freeway Alternative would have similar impacts on each resource analyzed in this EIS as what is expected at full build-out (in 2030) except for impacts to air quality, noise, wetlands, and visual



resources. Because the full right-of-way for Phase 3 would be purchased during Phase 1, this area would be converted to a transportation use, and the impacts on current land use (such as farmland and residential use) would be the same in Phase 1 as what is expected under full build-out.

In addition, by placing the travel lanes at the outer edge on each side of the right-of-way, Phase 1 would have similar impacts as full build-out to community resources such as cohesion, quality of life, relocations, pedestrian and bicyclist facilities, and economic resources and would have similar impacts as full build-out to wildlife fragmentation and wildlife. When Phase 1 is completed, there would be lower traffic volumes on the MVC than the volumes expected in 2030, so there would be lower vehicle emissions and a lower level of noise in Phase 1 than under full build-out.

Phase 1 would include few of the proposed structures at I-80, SR 201, and at major cross streets, so it would have less of a visual impact. However, some of the visual environment would change similar to full build-out because of the relocation of utilities. Finally, because the construction footprint would be smaller during Phase 1, the amount of wetland impacts would be lower than what is expected at full build-out. It is expected that, even with the smaller amount of impervious (paved) surface in Phase 1, the water quality impacts would be similar to those in Phase 3 because appropriate measures would be implemented during each phase to reduce water quality impacts.

5800 West Freeway Alternative – Phase 2

Description. Phase 2 would consist of changing 5800 West from an arterial to a freeway by converting the signalized intersections to grade-separated freeway interchanges. The SR 201 and I-80 connections to the MVC might also need to be modified to accommodate higher traffic volumes at the connections. [Figure 36-7](#), Roadway Implementation Phase 2 – Grade-Separated Freeway, shows how this phase would be constructed. Key elements of Phase 2 include:

- Convert the four-lane arterial to a freeway by grade-separating the connections and converting the signalized intersections to interchanges (see [Table 36.2-1](#) above, Phased Construction for Major Cross Streets).
- Add auxiliary lanes to accommodate merging and weaving movements between the newly constructed freeway interchanges.
- Modify freeway interchanges at I-80 and SR 201 by adding directional ramps where necessary to accommodate traffic flow.

Phase 2 would accommodate the initial traffic volumes expected on 5800 West to provide a level of service of LOS D or E when construction is completed.



Impact Evaluation. The additional lanes in Phase 2 would be built in the median to minimize the disruption to existing traffic. Temporary traffic impacts would occur at east-west cross streets that are converted from a signalized intersection to an interchange and at I-80 and SR 201. Along 5800 West, widening could be required. Because the full right-of-way would be purchased during Phase 1, construction of Phase 2 would not cause any additional impacts to land use, farmlands, community resources, or pedestrian and bicyclist facilities.

In this phase, 5800 West would not be completely built and would have a lower traffic volume and less noise and therefore would have less overall wildlife impacts compared to full build-out. Because the interchanges would be constructed and the ramps at I-80 and SR 201 would be modified in this phase, the visual impacts would be the same as those expected at full build-out. When Phase 2 is completed, there would be lower traffic volumes on the MVC than the volumes expected in 2030, so there would be lower vehicle emissions and a lower level of noise in Phase 2 than under full build-out. Finally, because the construction footprint would be smaller during Phase 2, the amount of wetland impacts would be lower than what is expected at full build-out.

5800 West Freeway Alternative – Phase 3

Description. Phase 3 would build on Phase 2 by adding additional lanes in each direction to the median for a total of six or eight freeway lanes, depending on the location. The bridges and ramps constructed during Phase 2 would be constructed so that they can accommodate the additional lanes in Phase 3. [Figure 36-8](#), Roadway Implementation Phase 3 – Freeway (Full Build-Out), shows how this phase would be constructed.

Key elements of Phase 3 include:

- Construct additional freeway lanes in the median.
- Finish full build-out of interchanges and freeway-to-freeway connections.

Once completed, Phase 3 would represent full build-out of the MVC project for 2030 as described in Chapter 2, Alternatives, and as evaluated in this EIS in each resource chapter. Phase 3 would accommodate the initial traffic volumes expected in 2030 and would provide a level of service of LOS D or E when construction is completed.

Impact Evaluation. In Phase 3, lanes would be constructed mainly in the median and would be constructed in a way that would minimize disruptions to existing traffic. Temporary traffic impacts would mainly be limited to constructing the additional lanes next to the existing lanes and upgrading the freeway ramps at



I-80 and SR 201 if these are not added during Phase 2. The impacts from Phase 3 would be the same as those described in each resource chapter in this EIS and would represent full build-out of the MVC project.

36.2.1.3 Implementation of the Phased Approach in Salt Lake County

UDOT and UTA have coordinated extensively with one another and with WFRC (the metropolitan planning organization for Salt Lake County) regarding the timing of implementing the roadway and transit elements of the MVC project. Consistent with the spirit of the Growth Choices process, UDOT and UTA jointly seek to ensure that the roadway and transit improvements (Phases 1 through 3) are implemented together, with the goal of first establishing and then incrementally expanding each facility based on transportation needs and funding availability.

Accordingly, UDOT and UTA have committed to proceed with the transit and roadway elements as follows in Salt Lake County:

- UDOT will proceed with Phase 1 of the 5800 West Freeway Alternative immediately following issuance of the ROD for this project, to the fullest extent possible given available funding.
- UTA will take all actions necessary to (1) complete Phase 1 of the 5600 West Transit Alternative and begin revenue operation by December 31, 2015, and (2) complete Phase 2 of that alternative and begin revenue operation of that phase by December 31, 2025.
- UDOT will not initiate construction of Phase 2 of the roadway until after Phase 1 of transit is in revenue operation, except as follows: UDOT may initiate construction of interchanges on the roadway south of 10200 South if either of the following conditions is met: (1) Phase 1 of transit is in revenue operation, or (2) Phase 1 of the roadway has been completed from 10200 South to the Utah County border and the Mid-Jordan TRAX line is in revenue operation.
- UDOT will not proceed with construction of Phase 3 of the roadway until after Phase 2 of transit is in revenue operation.
- Within each phase, the timing of the roadway and transit improvements are not tied together except as stated above.

To implement this approach, UDOT and UTA intend to take the following actions in Salt Lake County.



Amendments to Regional Transportation Plan. UDOT and UTA will seek an amendment to the WFRC metropolitan long-range transportation plan for Salt Lake County to reflect the phased implementation of the 5800 West Freeway Alternative and the 5600 West Transit Alternative.

Project Permitting. This project will require environmental permits, including Section 404 permits under the Clean Water Act. UDOT may seek a single Section 404 permit for the entire roadway project or could apply for permits for individual project phases or sections. Similarly, if Section 404 permits are needed for the transit project, UTA could seek a single Section 404 permit or could seek permits for phases or sections of the transit project. UDOT and UTA will determine the appropriate permitting strategies in consultation with the U.S. Army Corps of Engineers and other agencies.

FHWA is advising the public that, if a ROD is issued approving this project, FHWA intends to include the following conditions in that ROD requiring implementation of the phased approach in Salt Lake County as developed by UDOT and UTA:

- (1) This Record of Decision constitutes FHWA's approval of the general location of the roadway elements of the MVC project. This approval is conditioned upon UDOT's compliance with the phased approach to implementing the project as outlined in Chapter 36 of the Final EIS, including but not limited to the conditions listed in Section 36.2.1.
- (2) This Record of Decision authorizes UDOT to proceed with construction of Phases 1 and 2 of the roadway, as well as right-of-way acquisition and design for all three phases of the MVC project. This Record of Decision does not authorize construction of Phase 3 of the roadway. Before Phase 3 of the roadway can be constructed, FHWA shall issue an additional ROD pursuant to applicable regulations and law specifically for construction of Phase 3. FHWA will be responsible for determining the level of NEPA documentation that is required prior to issuance of the additional ROD for construction of Phase 3.

FHWA invites the public to comment on the phased approach to implementing the MVC project, including these proposed conditions for the ROD. FHWA will consider these public comments in its ROD. The specific terms of the ROD for this project will be determined by FHWA.



36.2.1.4 Summary of Salt Lake County Phased Implementation

Table 36.2-3 and Table 36.2-3 show how the project would be constructed in Salt Lake County.

Table 36.2-2. Summary of MVC Phasing for the 5600 West Transit Alternative with Dedicated Right-of-Way Option

Phase	Description
1	<ul style="list-style-type: none"> Implement bus rapid transit type 3 from 2700 South to 6200 South. Preserve right-of-way for all three phases.
2	<ul style="list-style-type: none"> Extend bus rapid transit type 3 to 11800 South to Airport Line.
3	<ul style="list-style-type: none"> Upgrade bus rapid transit type 3 to rail from Herriman to Airport Line.

Table 36.2-3. Summary of MVC Phasing for the 5800 West Freeway Alternative

Phase	Description
1	<ul style="list-style-type: none"> Construct an arterial with two lanes in each direction. Construct signalized intersections at the locations of Phase 2 and 3 interchanges. Do not allow access between intersections (build Phase 1 as a limited-access facility). Preserve right-of-way for all three phases (the full corridor width as shown in the Final EIS). Construct interchanges at SR 201 and I-80. Build the section from 2700 South to 4700 South at grade as much as possible while accommodating grade-separated railroad crossings and community crossings.
2	<ul style="list-style-type: none"> Convert the Phase 1 arterial to a freeway. Change signalized intersections to interchanges. Add auxiliary lanes.
3	<ul style="list-style-type: none"> Implement the 5800 West Freeway Alternative to full 2030 build-out as described in the Final EIS.



36.2.2 Implementation Phases in Utah County

This section summarizes the implementation of the Preferred Alternative in Utah County (the 2100 North Freeway Alternative). The alternative implementation phasing was developed in close coordination with Lehi City and was developed to minimize construction impacts after the completion of Phase 1. See Appendix 36A, Lehi Resolution, endorsing this concept. [Figure 36-9](#), 2100 North Roadway Implementation, and [Figure 36-10](#), 2100 North Phase 1 Illustration, provide a graphic depiction of the proposed phasing.

36.2.2.1 2100 North Freeway Alternative – Phase 1

Description

Phase 1 in Utah County would be similar to Phase 1 in Salt Lake County on the north-south segment of the MVC from just north of the Utah County line to SR 73. The north-south segment would extend the two lanes in each direction from the southern terminus of the 5800 West Freeway Alternative with at-grade signalized intersections at Porter Rockwell Boulevard, 2100 North, and SR 73 and a connection to SR 68. See [Figure 36-5](#), Roadway Implementation Phase 1 – Arterial with Signals, [Figure 36-6](#), Roadway Phase 1 Illustration, [Figure 36-7](#), Roadway Implementation Phase 2 – Grade-Separated Freeway, and [Figure 36-8](#), Roadway Implementation Phase 3 – Freeway (Full Build-Out) for how the north-south section of this alternative would be constructed.

The east-west portion of the MVC from SR 68 to Interstate 15 (I-15) would consist of two two-lane, one-way roads that would extend from Redwood Road to the existing 2100 North arterial just east of the railroad tracks. The one-way roads would carry local and regional traffic until the implementation of Phases 2 and 3, when they would function as frontage roads. The objectives of Phase 1 are (1) to construct the one-way roads so that little future modification to Phase 1 elements would be required during Phases 2 or 3, and (2) to minimize future traffic disruption during the construction of these remaining phases.

The structures would be constructed in a way that would allow them to be widened during the future phases. For Phase 1, UDOT would acquire the right-of-way necessary to build all three phases. Key elements of Phase 1 include:

- Construct a north-south four-lane arterial street with the northbound and southbound lanes built to the outer edge of the right-of-way to allow for future widening in the median during Phases 2 and 3.
- Construct signalized intersections at Porter Rockwell Boulevard, 2100 North, SR 68, SR 73, 10400 West, and 2300 West.



- Construct two-lane, one-way roads (two westbound and two eastbound lanes) from Redwood Road to I-15 (the one-way roads would merge to become a typical arterial street near I-15). The one-way roads would generally be built at grade with the some exceptions at the crossing with the railroad east of the Jordan River.
- Construct bridges at locations shown in the EIS with the exception of those locations where a signalized intersection will be built as well as a grade separated crossing at the railroad tracks.
- Property access between intersections on the east-west, one-way roads would be allowed but limited. Access would not be allowed between intersections for the north-south arterial.
- Construct a single-point urban interchange at I-15 and 2100 North.
- Preserve right-of-way for all three phases.

Impact Evaluation

Phase 1 of the 2100 North Freeway Alternative would have similar impacts on each resource analyzed in this EIS as what is expected at full build-out (in 2030) except for impacts to air quality, noise, wetlands, and visual resources. Because the full right-of-way required for Phase 3 would be purchased during Phase 1, this area would be converted to a transportation use, and the impacts on current land use (such as farmland) would be the same in Phase 1 as what is expected under full build-out.

In addition, by placing the constructed lanes at the outer edge on each side of the right-of-way, Phase 1 would have similar impacts as full build-out to community resources such as cohesion, quality of life, relocations, pedestrian and bicyclist facilities, and economic resources and would have similar impacts as full build-out to wildlife fragmentation and wildlife except for the portion from Redwood Road west to the north-south MVC. When Phase 1 is completed, there would be lower traffic volumes on the MVC than the volumes expected in 2030, so there would be lower vehicle emissions and a lower level of noise in Phase 1 than under full build-out.

Phase 1 would not include the directional ramps to I-15 or SR 73 or the east-west freeway at 2100 North, so it would have less of a visual impact. Finally, because the construction footprint would be smaller during Phase 1, the amount of wetland impacts would be lower than what is expected at full build-out. It is expected that, even with the smaller amount of impervious (paved) surface in Phase 1, the water quality impacts would be similar to those in Phase 3 because



appropriate measures would be implemented during each phase to reduce water quality impacts.

36.2.2.2 2100 North Freeway Alternative – Phase 2

Description

Phase 2 would build on Phase 1 by upgrading the signalized intersections at Porter Rockwell Boulevard, 2100 North, and SR 73 to interchanges. Phase 2 would add a freeway element starting at the MVC and 2100 North and continuing to the east with the addition of grade-separated crossings at SR 68, 10400 West, and 2300 West and ramps (as required) at I-15. The east-west expressway element would be constructed in the center of the two-lane, one-way frontage roads constructed in Phase 1. The Phase 1 portion of the frontage roads constructed east of the railroad tracks would be realigned to maintain local access. The Phase 1 one-way roads would function as frontage roads to provide local access. Key elements of Phase 2 include:

- Convert the intersections at Porter Rockwell Boulevard and 2100 North to interchanges.
- Add ramps, as needed, at SR 73, 2100 North, and I-15.
- Construct auxiliary lanes, as required, to facilitate weaving and merging movements between interchanges and ramps (east-west portion).
- Construct one-way express lanes (two westbound and two eastbound lanes) from north-south MVC to I-15 on 2100 North.
- Construct grade-separated crossings at SR 68, 10400 West, and 2300 West.

Phase 2 would accommodate the initial traffic volumes expected on the MVC and would provide a level of service of LOS D when construction is completed.

Impact Evaluation

Phase 2 would be built within the footprint acquired during Phase 1. It would be constructed in a way that would minimize disruptions to existing traffic.

Temporary traffic impacts would likely occur at Porter Rockwell Boulevard, at Redwood Road, at 2100 North, at SR 73, along the frontage roads east of the railroad tracks, and on I-15. Because the full right-of-way would be purchased during Phase 1, construction in the median of the Phase 1 roadway would not cause any additional impacts to land use, farmlands, community resources, or pedestrian and bicyclist facilities. There would be additional impacts to land surrounding the connections to SR 73, 2100 North and MVC, and I-15.



Phase 2 would construct the segment west of Redwood Road to the MVC, which would cause wildlife fragmentation and wildlife impacts similar to those expected under full build-out in 2030. Because the express lanes would be added and ramps would be built to I-15 in this phase, the visual impacts would be the same as those expected at full build-out. When Phase 2 is completed, there would be lower traffic volumes on the MVC than the volumes expected in 2030, so there would be lower vehicle emissions and a lower level of noise in Phase 2 than under full build-out. Finally, because the construction footprint would be smaller during Phase 2, the amount of wetland impacts would be lower than what is expected at full build-out.

36.2.2.3 2100 North Freeway Alternative – Phase 3

Description

Phase 3 would build on Phase 2 by adding additional lanes on both the east-west and north-south segments. The bridges and ramps constructed during Phase 2 would be constructed so that they can be widened to accommodate the additional lanes required as part of Phase 3. The Phase 1 one-way roads would continue to function as frontage roads to provide local access. Key elements of Phase 3 include:

- Construct additional lanes in each direction both north-south and east-west on the MVC.
- Complete the ramps not built as part of Phase 2.

Once completed, Phase 3 would represent full build-out of the MVC project for 2030 as described in Chapter 2, Alternatives, and as evaluated in this EIS in each resource chapter. Phase 3 would accommodate the initial traffic volumes expected in 2030 and would provide a level of service of LOS D when construction is completed.

Impact Evaluation

In Phase 3, lanes would be constructed in the median and would be constructed in a way that would minimize disruptions to existing traffic. Temporary traffic impacts would mainly be limited to constructing the additional lanes next to the existing lanes and at final freeway ramps not added as part of Phase 2. The impacts from Phase 3 would be the same as those described in each resource chapter in this EIS and would represent full build-out of the MVC project.



36.2.2.4 Implementation of the Phased Approach in Utah County

To implement this phased approach, UDOT and UTA intend to take the following actions in Utah County:

Amendments to Regional Transportation Plan. UDOT and UTA will seek an amendment to the Mountainland Association of Governments (MAG) metropolitan long-range transportation plan for Utah County to reflect the phased implementation of the 2100 North Freeway Alternative.

Project Permitting. This project will require environmental permits, including Section 404 permits under the Clean Water Act. UDOT may seek a single Section 404 permit for the entire roadway project or could apply for permits for individual project phases or sections. Similarly, if Section 404 permits are needed for the transit project, UTA could seek a single Section 404 permit or could seek permits for phases or sections of the transit project. UDOT and UTA will determine the appropriate permitting strategies in consultation with the U.S. Army Corps of Engineers and other agencies.

FHWA is advising the public that, if a ROD is issued approving this project, FHWA intends to include the following conditions in that ROD requiring implementation of the phased approach in Utah County as developed by UDOT:

- (1) This Record of Decision constitutes FHWA's approval of the general location of the roadway elements of the MVC project. This approval is conditioned upon UDOT's compliance with the phased approach to implementing the project as outlined in Chapter 36 of the Final EIS, including but not limited to the conditions listed in Section 36.2.2.
- (2) This Record of Decision authorizes UDOT to proceed with construction of Phases 1 and 2 of the roadway, as well as right-of-way acquisition and design all three phases of the MVC project. This Record of Decision does not authorize construction of Phase 3 of the roadway. Before Phase 3 of the roadway can be constructed, FHWA shall issue an additional ROD pursuant to applicable regulations and law specifically for construction of Phase 3. FHWA will be responsible for determining the level of NEPA documentation that is required prior to issuance of the additional ROD for construction of Phase 3.

FHWA invites the public to comment on the phased approach to implementing the MVC project, including these proposed conditions for the ROD. FHWA will consider these public comments in its ROD. The specific terms of the ROD for this project will be determined by FHWA.

36.2.2.5 Summary of Utah County Phased Implementation

Table 36.2-4 shows how the project would be constructed in Utah County.

**Table 36.2-4. Summary of MVC Phasing for the
2100 North Freeway Alternative**

Phase	Description
1	<ul style="list-style-type: none"> Construct a four-lane, north-south arterial street from the 5800 West Freeway Alternative to SR 73. Construct signalized intersections at Porter Rockwell Boulevard, 2100 North, SR 68, SR 73, 10400 West, and 2300 West. Construct bridges at other cross streets. Construct two-lane, one-way roads (two westbound and two eastbound lanes) from Redwood Road to I-15 (the one-way roads would merge to become a typical arterial street near I-15). Construct a single-point urban interchange at I-15 and 2100 North. Preserve right-of-way for all three phases.
2	<ul style="list-style-type: none"> Convert the Phase 1 north-south arterial to a freeway. Convert signalized intersections to interchanges (north-south portion). Add ramps, as needed, at SR 73, 2100 North, and I-15. Construct auxiliary lanes, as required, to facilitate weaving and merging movements between interchanges and ramps (east-west portion). Construct one-way express lanes (two westbound and two eastbound lanes) from north-south MVC to I-15 on 2100 North.
3	<ul style="list-style-type: none"> Construct additional lanes in each direction both north-south and east-west on the MVC. Complete the ramps not built as part of Phase 2.

APPENDIX 36A

Lehi Resolution

Lehi City
Resolution Number: 04-22-08, J

WHEREAS, the Lehi City Mayor and City Council are responsible for local transportation planning within the city limits; and

WHEREAS, Lehi City has, in the course of the last 10 years, developed a master transportation plan and subsequent amendments to said plan that includes a roadway along 2100 North; and

WHEREAS, Lehi City has also developed and/or participated in the following transportation studies to identify and plan for the transportation needs of the community at full "build out," including, but not limited to the following: North Valley Connector Study, 2002; Lake Mountain Transportation Quadrant Study, 2006; Northeast Utah Valley Transportation Quadrant Study, 2006; and 7 individual area plan transportation studies associated with major commercial, retail and residential developments in Lehi City, 1997-2007; and

WHEREAS, the above noted transportation studies have all included the need for a roadway facility along 2100 North of at least an arterial configuration; and

WHEREAS, Lehi City has coordinated its planning efforts regarding such transportation improvements with the Federal Highway Administration ("FHWA"), the Utah Department of Transportation ("UDOT"), the Mountainland Association of Governments ("MAG"), Utah County, surrounding municipalities, and the development community; and

WHEREAS, Lehi City has continued to work with state and federal agencies in the development of a roadway along 2100 North by acquiring right-of-way, building infrastructure to accommodate a future roadway and entering into development agreements with adjacent property owners reflecting these improvements; and

WHEREAS, Lehi City has been meeting with UDOT, the Mountain View Corridor ("MVC") Project Team and the development community for the past three months in an effort to develop an effective and efficient connection to and from the MVC and Interstate 15 (I-15) along 2100 North that will meet both regional and local needs; and

WHEREAS, Lehi City is dedicated to developing roadways and transportation corridors that are complimentary to existing and future neighborhoods and to the Lehi City planning vision, facilitating good traffic flow, adequate public utilities infrastructure, the proper servicing of public safety needs, and the enjoyment of all services within the Lehi City for the benefit of its Citizens; and

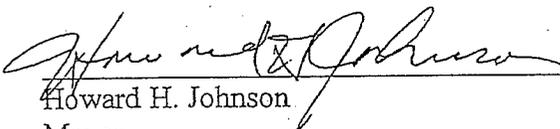
WHEREAS, the 2100 North corridor is an essential component of Lehi City's long-term economic and development planning vision, which anticipates significant commercial and retail development to be constructed along or in close proximity to the 2100 North Corridor,

NOW, THEREFORE BE IT RESOLVED by the Mayor and the Lehi City Council that Lehi City endorses, in concept, efforts by Lehi City staff, UDOT, the MVC project team, the development community and surrounding communities in their recommended approach to the construction of the 2100 North corridor as a phased transportation corridor to I-15 that may ultimately function for both local and expressway purposes. Although such a roadway is unique in design and function, Lehi City understands and anticipates that this facility will have many of the same design attributes and qualities as the State Road 92 project currently under development and design by UDOT. Moreover, Lehi City's endorsement of this approach to 2100 North and MVC is contingent upon the development and design of the 2100 North corridor in such a way that it meets the following local needs:

1. The 2100 North corridor be constructed in three (3) phases; namely,
 - A. Phase I: The complete development and construction of a 4-lane arterial from I-15 at 2100 North to Redwood Road (S.R. 68). It is expected the development of this arterial will include full intersections at the followings cross points: State Street, 2300 West, 10400 West and Redwood Road. It is also expected that appropriate right turn access both in and out of the roadway will be available along the entire length of the corridor.
 - B. Phase II: The inclusion of additional arterial lanes to accommodate increasing traffic demands or the inclusion of up to two (2) expressway lanes in each direction, with limited access to the arterial lanes from the MVC to I-15.
 - C. Phase III: The inclusion of one (1) additional expressway lane in each direction for a total of three (3) expressway travel lanes in each direction. Limited access to the arterial lanes would be maintained from the MVC to I-15.
2. Assurances to Lehi City by FHWA, UDOT and the MVC project team that only Phases I and II of the project would be cleared for construction under the MVC Final Environmental Impact Statement ("FEIS") contemplated for release in 2008. Lehi City also requests that assurances be given that construction of Phase III of this project will be subject to a new National Environmental Protection Act process, culminating in the preparation of an Environmental Impact Statement. This process will include the identification of all reasonable alternatives and a full scoping and public review process
3. It is agreed that the full project corridor shall not exceed 360 feet in width and that all needed improvements associated with this project will be limited within this corridor width.
4. The development, design and construction of Phase I of the project may begin immediately, with all participating parties actively working to construct a 4-lane arterial within this right-of-way as soon as feasible.

5. Lehi City and the MVC project team, in cooperation with the City's development partners along the 2100 North corridor, will continue to meet and work out all details associated with the corridor to help facilitate project development, design and construction.
6. Lehi City shall be entitled to comment on the upcoming FEIS and any Record of Decision issued in support thereof as it deems necessary.

Passed, this 23 day of April, 2008


Howard H. Johnson
Mayor

ATTEST:


Connie J. Ashton, City Recorder

