Project of Air Quality Concern Evaluation

Parley’s Interchange
Environmental Impact Statement
I-80/I-215 Eastside

Lead agency:
Utah Department of Transportation

Prepared by:
HDR Inc.

June 12, 2019
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1.0 Introduction

The Utah Department of Transportation (UDOT) is preparing an Environmental Impact Statement (EIS) to evaluate potential improvements for the Interstate 80/Interstate 215 (I-80/I-215) eastside interchange and connections to Foothill Drive and Parley’s Way in Salt Lake City, Utah (the Parley’s Interchange Project). The EIS will be prepared consistent with the National Environmental Policy Act (NEPA) and will follow the guidelines in UDOT’s environmental process manual. The environmental review, consultation, and other actions required by applicable federal environmental laws for this action are being, or have been, carried out by UDOT pursuant to 23 United States Code 327 and a Memorandum of Understanding dated January 17, 2017, and executed by the Federal Highway Administration (FHWA) and UDOT.

The Parley’s Interchange Project is intended to address existing safety issues and design deficiencies associated with the interchange as well as existing (2017) and projected (2050) travel demand. The proposed project area extends on I-80 from 1300 East to the Mt. Aire Canyon Road interchange, on I-215 from the I-80/I-215 interchange to 3900 South, on Foothill Drive from the I-80/I-215 interchange to Stringham Avenue, and on Parley’s Way from the I-80/I-215 interchange to Wilshire Drive (Figure 1).

As part of the EIS process, UDOT evaluated two alternatives: Alternative A and Alternative B. Both alternatives would make similar safety and operational improvements to the Parley’s interchange. UDOT selected Alternative B as its Preferred Alternative because Alternative B would reduce vehicle delay in the morning peak travel period by 47% compared to 40% for Alternative A, would have slightly lower costs, and fewer impacts to recreational facilities than would Alternative A. Therefore, this air quality evaluation evaluates the impacts of Alternative B.

The improvements to the Parley’s interchange associated with Alternative B would improve safety by meeting current design standards, smoothing traffic flow, and reducing current and future congestion. The improvements would include meeting design standards on curves on both I-215 and I-80 and weave movements between ramps and the freeways and adding an additional travel lane in each direction on I-80 and I-215 through the interchange. Also, the improvements would add an additional travel in each direction on the ramp that connects westbound/eastbound I-80 to southbound/northbound I-215 and on Foothill Boulevard to Stringham Avenue. Overall, Alternative B would be similar to the current interchange design.
Figure 1. Project Area Map
2.0 Purpose of the Project

The purpose of the Parley’s Interchange Project consists of the following three primary objectives:

- **Improve the Level of Service at the Parley’s Interchange in 2050.** Improve the level of service (LOS) at the Parley’s interchange in 2050 by meeting UDOT’s goal of LOS D or better on as much of the Parley’s interchange as possible (LOS D is considered light congestion).

- **Improve Regional Mobility in 2050.** Improve regional mobility through a key link in the local, state, and national transportation network for automobile, transit, and freight trips by substantially reducing travel delay through the interchange compared to the no-build conditions.

- **Improve Safety.** Improve the operational characteristics and safety of the Parley’s interchange by addressing obsolete design elements. Prevent traffic on the Parley’s interchange exit ramps from backing onto the main and auxiliary travel lanes of I-80 and I-215 as much as possible.

The project will also evaluate the following secondary objectives:

- The project should be consistent with local land use and transportation plans.

- The project will be compatible with other planned projects on Foothill Drive and I-80.

3.0 Need for the Project

The major transportation needs in the study area are a result of growing population, high current and future travel demand, highway infrastructure that was designed to accommodate traffic conditions over 50 years ago, and numerous locations in the Parley’s interchange that have safety and operational issues:

- Decreased mobility and increased traffic congestion in the AM and PM peak-period travel periods (inadequate roadway capacity)

- Roadway elements (shoulders, ramps, horizontal and vertical curves, and merging and weaving distances) that are obsolete and do not meet current design standards for all potential users and accommodate the high traffic volumes safely

- Above-average accident rates in multiple locations

4.0 Attainment Status of the Project Area

An *attainment area* is an area that meets (or “attains”) the National Ambient Air Quality Standards (NAAQS) for a given criteria air pollutant. A *nonattainment area* is an area that does not meet the NAAQS for a given criteria air pollutant. A *maintenance area* is an area previously designated as a nonattainment area that has been redesignated to attainment status and is required to have a maintenance plan.

The improvements associated with the Parley’s Interchange Project would be made in Salt Lake County, which is a nonattainment area for particulate matter 2.5 microns in diameter or smaller (PM$_{2.5}$), particulate matter 10 microns in diameter or smaller (PM$_{10}$), ozone (O$_3$), and sulfur dioxide (SO$_2$). The north and west parts of the project area are within a maintenance area for carbon monoxide (CO) (EPA 2018). Table 1
shows the NAAQS (which are also the Utah standards) for the six criteria air pollutants as well as Salt Lake County’s attainment status for each pollutant.

Sulfur dioxide (SO₂) and lead (Pb) are not considered transportation-related criteria pollutants and are not discussed further in this evaluation. The Parley’s Interchange Project is listed in a conforming State Implementation Plan, so a project-level conformity determination for O₃ is not required.

Table 1. National and Utah Ambient Air Quality Standards for CO, O₃, PM₂.₅, PM₁₀, and SO₂ and Attainment Status for Salt Lake County

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Primary/Secondary</th>
<th>Averaging Time</th>
<th>Level</th>
<th>Form</th>
<th>Attainment Status for Salt Lake County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide (CO)</td>
<td>Primary</td>
<td>8 hours</td>
<td>9 ppm</td>
<td>Not be exceeded more than once per year</td>
<td>Maintenance area – north and west parts of the project area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 hour</td>
<td>35 ppm</td>
<td>Not be exceeded more than once per year</td>
<td></td>
</tr>
<tr>
<td>Ozone (O₃)</td>
<td>Primary and secondary</td>
<td>8 hours</td>
<td>0.070 ppm</td>
<td>Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years</td>
<td>Nonattainment area</td>
</tr>
<tr>
<td>Particulate matter (PM₂.₅)</td>
<td>Primary</td>
<td>1 year</td>
<td>12.0 μg/m³</td>
<td>Annual mean, averaged over 3 years</td>
<td>Nonattainment area</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>1 year</td>
<td>15.0 μg/m³</td>
<td>Annual mean, averaged over 3 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary and secondary</td>
<td>24 hours</td>
<td>35 μg/m³</td>
<td>98th percentile, averaged over 3 years</td>
<td></td>
</tr>
<tr>
<td>Particulate matter (PM₁₀)</td>
<td>Primary and secondary</td>
<td>24 hours</td>
<td>150 μg/m³</td>
<td>Not to be exceeded more than once per year on average over 3 years</td>
<td>Nonattainment area</td>
</tr>
<tr>
<td>Sulfur dioxide (SO₂)</td>
<td>Primary</td>
<td>1 hour</td>
<td>75 ppb</td>
<td>99th percentile of 1-hour daily maximum concentrations, averaged over 3 years</td>
<td>Nonattainment area</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>3 hours</td>
<td>0.5 ppm</td>
<td>Not to be exceeded more than once per year.</td>
<td></td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>Primary and secondary</td>
<td>Rolling 3-month average</td>
<td>0.15 μg/m³</td>
<td>Not to be exceeded</td>
<td>Attainment</td>
</tr>
</tbody>
</table>

Source: EPA, no date

μg/m³ = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; PM₂.₅ = particulate matter 2.5 microns in diameter or less; PM₁₀ = particulate matter 10 microns in diameter or less
5.0 Definitions and Examples of Projects of Air Quality Concern

Title 40, Protection of Environment, is the section of the Code of Federal Regulations (CFR) that pertains to the environmental regulations implemented by the U.S. Environmental Protection Agency (EPA). Subchapter C of Title 40 covers air quality programs such as the Clean Air Act and NAAQS. The Parleys Interchange Project is not an exempt project under either 40 CFR 93.126 or 40 CFR 93.128 because it would add travel lanes (such as auxiliary lanes) or realign existing travel lanes to improve safety and operation of the interchange, and therefore requires further review to determine whether it qualifies as a project of air quality concern.

If a project is of air quality concern, it requires a quantitative hot-spot analysis for those transportation-related criteria pollutants for which the area has been designated as a nonattainment or maintenance area (for this project that would mean hot-spot analyses for CO, PM$_{2.5}$, and PM$_{10}$).

**PM$_{2.5}$ and PM$_{10}$ Project-Level Analysis Requirements.** Projects defined by 40 CFR 93.123(b)(1) as projects of air quality concern can include:

(i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles

(ii) Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location

(v) Projects in or affecting locations, areas, or categories of sites that are identified in the PM$_{10}$ or PM$_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation

As stated in the list above, the primary considerations in determining whether a project is potentially one of air quality concern is the number of diesel-fueled vehicles resulting from the project or the number of diesel-fueled vehicles at poorly operating intersections.

EPA’s *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM$_{2.5}$ and PM$_{10}$ Nonattainment and Maintenance Areas* (EPA 2015a) provides guidance for reviewing transportation projects in the context of Title 40 and clarification regarding the criteria for determining whether a project is a project of air quality concern. Appendix B of EPA’s hot-spot guidance provides the following examples of projects of local air quality concern that would be covered by 40 CFR 93.123(b)(1)(i) and (ii):

- A project on a new highway or expressway that serves a significant volume of diesel vehicle traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT), and 8% or more of such AADT is diesel truck traffic
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal
- Expansion of an existing highway or other facility that affects a congested intersection (operated at LOS D, E, or F) that has a significant increase in the number of diesel trucks
- Similar highway projects that involve a significant increase in the number of diesel transit buses and/or diesel trucks

EPA’s hot-spot guidance also provides the following examples of projects that are not projects of local air quality concern under 40 CFR 93.123(b)(1)(i) and (ii):

- Any new or expanded highway project that primarily services gasoline vehicle traffic (that is, does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested intersections operating at LOS D, E, or F.
- An intersection channelization project or interchange-configuration project that involves either turn lanes or slots, or lanes or movements that are physically separated. These kinds of projects improve freeway operations by smoothing traffic flow and vehicle speeds by improving weave and merge operations, which would not be expected to create or worsen PM NAAQS violations.
- Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange-reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM emissions.

**CO Project-Level Analysis Requirements.** Section 93.123(a)(1) of the conformity rule defines a CO project-level analysis as being required:

(i) For projects in or affecting locations, areas, or categories of sites which are identified in the applicable implementation plan as sites of violation or possible violation;

(ii) For projects affecting intersections that are at LOS D, E, or F, or those that will change to level-of-service D, E, or F because of increased traffic volumes related to the project;

(iii) For any project affecting one or more of the top three intersections in the nonattainment or maintenance area with highest traffic volumes, as identified in the applicable implementation plan; and

(iv) For any project affecting one or more of the top three intersections in the nonattainment or maintenance area with the worst level of service, as identified in the applicable implementation plan.

The Parley’s Interchange Project has not been identified as a site of violation or possible violation. Within the CO maintenance area boundary, two intersections would be affected by Alternative B: Stringham Avenue and Foothill Boulevard, and Parley’s Way and Wilshire Circle. Currently, these intersections operate at a LOS C and B, respectively, and in 2050 both intersections are projected to operate at LOS B with the project. The only other intersection that would be affected by Alternative B is outside the CO maintenance area and is located at 3300 South and the I-215 ramps. That intersection currently operates, and in 2050 is projected to operate, at LOS B. Finally, Alternative B would not affect an intersection identified in the State Implementation Plan as one of the top three sites with highest traffic volumes or worst level of service. In
summary, the Parley’s Interchange Project does not meet any of the criteria under which a CO project-level analysis would be required, so the analysis is not required.

6.0 Project of Air Quality Concern Evaluation

This section reviews the characteristics of the Parley’s Interchange Project according to Appendix B, Examples of Projects of Local Air Quality Concern, of EPA’s transportation conformity guidance (EPA 2015a).

6.1 New Highway Capacity

**Definition.** Is this a new highway project that has a significant number of diesel vehicles?

**Response.** No. The Parley’s Interchange Project is a redesign of the existing I-80/I-215 system-to-system interchange. The purpose of the project is to improve safety and traffic flow and reduce congestion.

6.2 Expanded Highway Capacity

**Definition.** Is this an expanded highway project that has a significant increase in the number of diesel vehicles?

**Response.** No. The Parley’s Interchange Project would redesign the existing interchange and would add additional travel lanes to reduce congestion levels. The proposed project is intended to improve safety and accommodate expected traffic growth in the future. To accommodate future traffic growth, the project would add additional travel lanes through the interchange and on ramps entering and exiting the interchange. The current limits of the project through the interchange have about 21 miles of existing interstate travel lanes and 10.5 miles of existing ramp lanes. With the improvements, the project would add 6 miles of new interstate travel lanes and 5 miles of new ramp lanes. Appendix A provides details on the location and number of additional travel lanes proposed with Alternative B.

Table 2 shows the 2017 level of single-unit (FHWA axle class 4–7) and combo-unit (FHWA axle class 8–13) trucks. Based on factory sales, the average share of diesel trucks for classes 4–7 varied between 50% and 80% from 1995 and 2017; class 8 truck sales were 100% diesel (Davis and Bounday 2019). Although the project would make improvements to a major interstate with up to 19% single- and combo-unit trucks, the number of diesel vehicles would not increase due to the project because it is intended to improve traffic flow and safety. Additionally, 2050 truck traffic is anticipated to grow at the same rate as total vehicles because the project would not provide additional access to areas that would result in an increase in diesel truck traffic. The same percentage of trucks would access the interchange in 2017 and 2050 regardless of the design changes that are intended to improve the operation of the interchange.

In addition, improvements with Alternative B would not change the national freight traffic compared to the no-build conditions because national freight traffic on I-80 must use the Parley’s interchange as there are no alternate routes. The added lane capacity would not increase traffic volumes in 2050 because demand through the interchange is based on regional employment and households which would be the same under the no-build conditions and Alternative B independent of additional lane capacity and congestion levels.
Because the project would not provide additional access to areas that would result in an increase in diesel truck traffic, the percentage of trucks using the interchange is not expected to change between 2017 and 2050. For example, in the highway segment with the highest traffic volumes (I-80 from 1300 East to 2300 East), the total truck percentage would be 13% in both 2017 and in 2050. This would result in total truck traffic in this segment going from 11,800 in 2017 to 17,550 in 2050, or an increase of 5,746 trucks out of the approximately 45,000 increase in all vehicles that would use this highway segment in 2050. The percentage of truck traffic between 2017 and 2050 is also not expected to change in the other highway segments shown in Table 2.

Table 2. Estimated AADT and Percentage of Trucks in the Project Study Area in 2017 and 2050

<table>
<thead>
<tr>
<th>Road</th>
<th>Segment</th>
<th>AADT</th>
<th>Percentage of Trucks</th>
<th>2017a</th>
<th>2050b</th>
<th>2017a</th>
<th>% Single, a % Combob (vehicles per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2017</td>
<td>2050</td>
<td>Current</td>
<td>No-Build</td>
<td>Alternative</td>
<td></td>
</tr>
<tr>
<td>I-80</td>
<td>1300 East to 2300 East</td>
<td>90,800</td>
<td>135,000</td>
<td>135,000</td>
<td>7%, 6% (11,800)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-80</td>
<td>East of I-215 (Parley’s Canyon)</td>
<td>60,000</td>
<td>106,000</td>
<td>106,000</td>
<td>9%, 10% (11,400)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-215</td>
<td>3900 South to 3300 South</td>
<td>75,600</td>
<td>106,000</td>
<td>106,000</td>
<td>12%, 4% (12,096)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-215</td>
<td>3300 South to I-80</td>
<td>86,000</td>
<td>117,000</td>
<td>117,000</td>
<td>12%, 4% (13,760)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a 2017 AADT and truck percentages are taken from UDOT automated PeMes traffic counters in 2017. Truck percentage is based on PeMes length data and UDOT vehicle classification. A single truck is one trailer, and a combo truck is two trailers.
b 2050 AADT from WFRC regional travel demand model v8.3.

6.3 Projects with Congested Intersections

**Definition.** Does this project affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or will this project change an intersection to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project?

**Response.** No. The Parley’s Interchange Project would affect three intersections: Stringham Avenue and Foothill Boulevard, Parley’s Way and Wilshire Circle, and the 3300 South and the I-215 ramp intersections. Currently, all of these interchanges operate at LOS B or C, and in 2050 they are all projected to operate at LOS B with the project. There would be no increase in traffic, including the number of diesel vehicles in 2050, as a result of the interchange improvements compared to the no-build conditions.

6.4 New Bus and Rail Terminals

**Definition.** Does this project include new bus and rail terminals and transfer points that will have a significant number of diesel vehicles congregating at a single location?

**Response.** No. The Parley’s Interchange Project does not include constructing or connecting to new bus or rail terminals or transfer stations.
6.5 Expanded Bus and Rail Terminals

**Definition.** Does this project include expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location?

**Response.** No. The Parley’s Interchange Project does not include expanding bus or rail terminals or transfer stations.

6.6 Projects in or Affecting PM$_{10}$ or PM$_{2.5}$ Sites of Violation or Possible Violation

**Definition.** Is this project in or affecting locations, areas, or categories of sites that are identified in the PM$_{10}$ or PM$_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation?

**Response.** No. Sections IX.A and IX.A.21 of Utah’s State Implementation Plan (SIP) address PM$_{10}$ and PM$_{2.5}$ in Salt Lake County. The Parley’s Interchange Project is an interchange-configuration project as defined above in Section 5.0, Definitions and Examples of Projects of Air Quality Concern, which defines projects that generally are not considered projects of air quality concern. The project is intended to improve traffic flow and vehicle speeds, and would not involve any increases in idling. This project type is not identified in either Section IX.A or Section IX.A.21 of the SIP as a project of air quality concern or as a type of transportation project location having a potential to increase local emissions or worsen air quality and therefore requiring a hot-spot analysis (UDEQ 2015, 2018).

As a control strategy, Section IX.A.11 of the SIP (the PM$_{10}$ maintenance plan for Salt Lake County) recommends synchronizing traffic signals and maintaining continuous traffic flows on interstate highways. The State of Utah has submitted a maintenance plan to EPA demonstrating attainment of the PM$_{10}$ NAAQS through 2030 and is currently awaiting EPA’s approval of that plan. EPA’s approval of the maintenance plan would allow Salt Lake County to be redesignated as an attainment area for PM$_{10}$ (UDEQ 2015, Section IX.A.11). The Parley’s Interchange Project is intended to improve the operation of the interchange, thereby reducing congestion, increasing vehicle speeds, and improving traffic flows, which would reduce vehicle emissions.

6.7 Project of Air Quality Concern Determination

**Standard.** State whether the project is a project of air quality concern and summarize the support determination. Document the relevant agencies that require interagency consultation on any input for the determination from federal, state, and local transportation and air agencies as necessary for this project per 40 CFR 93.105. This information will be included in any subsequent air quality analysis and project-level conformity determination reports.

**Response.** The Parley’s Interchange Project does not qualify as a project of air quality concern since it would not increase the number diesel vehicles in the project area compared to the no-build conditions. The project is not expected to either influence the vehicle mix in the project area or attract new diesel vehicles to the area. The project is an interchange-configuration project that would improve traffic weaving and merging, which would subsequently improve freeway operations by smoothing traffic flow and increasing vehicle
speeds. EPA’s hot-spot guidance states that such projects are not projects of local air quality concern under 40 CFR 93.123(b)(1)(i) and (ii).

In summary, the Parley’s Interchange Project is not a project of air quality concern, so no project-level (hot-spot) analysis is required for conformity purposes under 40 CFR 93.123(b). However, for public disclosure purposes, UDOT will conduct a quantitative air quality analysis as part of the EIS process.

7.0 Interagency Consultation Results

On February 25, 2019, UDOT provided a copy of this questionnaire to the following consultation parties: EPA, the Federal Highway Administration, the Wasatch Front Regional Council, and the Utah Department of Environmental Quality. UDOT received comments from EPA requesting additional details on AADT and percent diesel truck traffic. UDOT responded to these comments and on June 12, 2019 EPA responded that they have no further comments. UDOT determined that the project will proceed as a project that does not require quantitative PM_{10} and PM_{2.5} hot-spot analyses under 40 CFR 93.123(b) or a CO project-level analysis under 40 CFR 93.123(a)(1).
8.0 References

Davis, Stacy, and Robert Bounday

[EPA] U.S. Environmental Protection Agency

[UDEQ] Utah Department of Environmental Quality
Appendix A – Lane Configuration No-Build and Alternative B
Table A1. Parley’s Interchange Freeway Mainline Travel Lane Comparison

<table>
<thead>
<tr>
<th>Mainline Road</th>
<th>Segment</th>
<th>Existing/No-Build</th>
<th>Alternative B</th>
<th>Approximate Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-80*</td>
<td>1300 E to west I-215 on/off ramps</td>
<td>3 lanes each direction</td>
<td>3 lanes each direction*</td>
<td>1.8 miles Existing 2.1 miles Alternative B</td>
</tr>
<tr>
<td></td>
<td>West I-215 on/off ramps to Foothill Drive ramps</td>
<td>2 lanes each direction</td>
<td>3 lanes each direction*</td>
<td>0.7 miles Existing 0.4 miles Alternative B</td>
</tr>
<tr>
<td></td>
<td>Foothill Drive ramps to east I-215 on/off ramps</td>
<td>2 lanes each direction</td>
<td>3 lanes each direction*</td>
<td>1.1 miles Existing and Alternative B</td>
</tr>
<tr>
<td></td>
<td>East I-215 ramps to east</td>
<td>3 lanes in each direction</td>
<td>3 lanes each direction</td>
<td>3.2 miles to Exit 132 in Parleys Canyon Existing and Alternative B</td>
</tr>
<tr>
<td>I-215</td>
<td>3900 South to 3300 South</td>
<td>3 lanes each direction</td>
<td>Northbound - 3 lanes plus 1 auxiliary lane between 3800 South northbound on-ramp to I-80 off-ramp Southbound – 3 lanes with 2 auxiliary lanes to 3900 South off ramp (one lane from westbound I-80 on ramp and one lane from 3300 South on ramp)</td>
<td>0.8 miles Existing and Alternative B</td>
</tr>
<tr>
<td></td>
<td>3300 South to Foothill Drive/Parleys Way ramps</td>
<td>3 lanes each direction</td>
<td>Northbound - 3 lanes each direction with auxiliary lane between 3300 South and Foothill Drive Southbound – 3 lanes each direction with auxiliary lane between Foothill Drive and 3300 South</td>
<td>0.9 miles Existing and Alternative B</td>
</tr>
<tr>
<td></td>
<td>Foothill Boulevard/Parleys Way ramps to I-80</td>
<td>2 lanes each direction</td>
<td>2 lanes each direction</td>
<td>1.0 miles Existing 0.9 miles Alternative B</td>
</tr>
<tr>
<td></td>
<td>Foothill Drive</td>
<td>Interchange to Stringham Ave.</td>
<td>2 lanes each direction</td>
<td>3 lanes each direction</td>
</tr>
<tr>
<td></td>
<td>Parleys Way</td>
<td>Interchange to Wilshire Drive.</td>
<td>2 lanes northbound, 1 lane southbound</td>
<td>2 lanes northbound, 1 lane southbound</td>
</tr>
</tbody>
</table>

* RTP identifies I-80 to be widened to 4 lanes each direction between 1300 East and Parley's Interchange and to four lanes in eastbound direction in Parley’s Canyon. Alternative B assumes that future 4 lane I-80 between 1300 East and Parley’s interchange.
### Table A2. Parley’s Interchange Ramp Lane Comparison

<table>
<thead>
<tr>
<th>Ramp Movement</th>
<th>Existing/No-Build</th>
<th>Alternative B</th>
<th>Approximate Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastbound I-80 to Northbound Foothill Drive/Parleys Way</td>
<td>1 lane (loop ramp)</td>
<td>1 lane</td>
<td>0.5 miles Existing 1.2 miles Alt. B</td>
</tr>
<tr>
<td>Westbound I-80 to Southbound I-215</td>
<td>1 lane</td>
<td>2 lanes</td>
<td>0.9 miles Existing and Alt. B</td>
</tr>
<tr>
<td>Westbound I-80 to Northbound Foothill Drive/Parleys Way</td>
<td>1 lane</td>
<td>1 lane</td>
<td>0.4 miles Existing 0.5 miles Alt. B</td>
</tr>
<tr>
<td>Southbound I-215 to 3300 South</td>
<td>1 lane</td>
<td>1 lane</td>
<td>0.2 miles Existing 0.5 miles Alt. B</td>
</tr>
<tr>
<td>Southbound I-215 to 3900 South</td>
<td>1 lane</td>
<td>2 lanes</td>
<td>0.2 miles Existing and Alt. B</td>
</tr>
<tr>
<td>Northbound I-215 to Eastbound I-80</td>
<td>1 lane</td>
<td>2 lanes</td>
<td>0.8 miles Existing 1.1 miles Alt. B</td>
</tr>
<tr>
<td>Northbound I-215 to Northbound Foothill Drive/Parleys Way</td>
<td>2 lanes</td>
<td>2 lanes</td>
<td>0.5 miles Existing 0.6 miles Alt. B</td>
</tr>
<tr>
<td>Northbound Foothill Drive to Northbound Parleys Way</td>
<td>1 lane</td>
<td>1 lane</td>
<td>0.2 miles Existing and Alt. B</td>
</tr>
<tr>
<td>Southbound Foothill Drive/Parleys Way to Eastbound I-80</td>
<td>1 lane (loop ramp)</td>
<td>1 lane (loop ramp)</td>
<td>0.4 miles Existing 0.5 miles Alt. B</td>
</tr>
<tr>
<td>Southbound Foothill Drive/Parleys Way to Westbound I-80</td>
<td>1 lane</td>
<td>1 lane</td>
<td>0.8 miles Existing and Alt. B</td>
</tr>
<tr>
<td>Southbound Foothill Drive/Parleys Way to Southbound I-215</td>
<td>2 lanes</td>
<td>2 lanes</td>
<td>0.6 miles Existing 0.7 miles Alt. B</td>
</tr>
<tr>
<td>Southbound Foothill Drive to Northbound Parleys Way</td>
<td>1 lane</td>
<td>1 lane</td>
<td>0.2 miles Existing and Alt. B</td>
</tr>
</tbody>
</table>