



7200 West Needs Assessment

TECHNICAL MEMORANDUM

To: Jason Green, HW Lochner

Date: May 2018

From: Fehr & Peers

Subject: 7200 West Needs Assessment

UT17-2090

EXECUTIVE SUMMARY

This study provides a needs assessment of the proposed 7200 West corridor in Salt Lake City's fast-growing Northwest Quadrant area. The area surrounding 7200 West is poised for tremendous growth as development opportunities such as the Northwest Quadrant Community Reinvestment Area, which includes the proposed Inland Port and the former Salt Lake City Landfill site, are explored and advanced.

Connecting the existing gap in 7200 West from SR-201 to I-80 would provide additional capacity to connect these future job centers to residential areas. Additionally, the current at-grade intersection at 7200 West and SR-201 has an unusual configuration and experiences both a high number of collisions and high levels of delay and congestion in morning and afternoon peak hours. These conditions are expected to worsen in the future as high volumes (25-30%) of heavy truck traffic travels through this intersection; therefore, addressing these safety and congestion concerns is an immediate need on this corridor.

The proposed improvements for the 7200 West corridor would initially provide a three-lane roadway with right-of-way preserved for an ultimate five-lane roadway; a new grade separation at SR-201 and the UPRR crossing; improvements to the I-80 and 7200 West interchange to address anticipated increased volumes; and traditional at-grade intersections at California Avenue, 700 South, 300 South, and 700 North. Additional freeway access to the Inland Port Area (potentially at the Mountain View Corridor interchange) would provide additional capacity between the Inland Port Area and the Salt Lake City urban area. The 7200 West corridor would also include a protected multi-use trail to provide safe and direct connectivity between West Valley City, Magna, and the Northwest Quadrant employment center.

If constructed, the 7200 West corridor would provide greater connectivity to the road network in western Salt Lake City, expand access to jobs for thousands of households (especially to lower-income households in Magna and West Valley City), mitigate existing congestion and safety concerns at the 7200 West and I-80 interchange, and provide a high-quality north-south active transportation connection.

INTRODUCTION

7200 West is a proposed corridor in the Northwest Quadrant (NWQ) of Salt Lake City and an emerging growth area for the Salt Lake region. Major growth opportunities are described and analyzed in the Salt Lake City Community Reinvestment Area Plan, including the relocation of the Utah Correctional Facility, redevelopment of the Salt Lake City Landfill, and many other smaller developments currently planned or under construction, as well as the proposed Inland Port. These new developments will create new demands on our transportation infrastructure in the area. Transportation network improvements will be needed to fully leverage these opportunities. In advance of this development, Salt Lake County has completed this Needs Assessment for the 7200 West corridor, which has the potential to be a key asset in connecting these new jobs with residential areas, especially areas with lower incomes.

7200 West is currently not connected from SR-201 to I-80. This Needs Assessment evaluates the benefits of providing this missing connection, as well as a conceptual evaluation of what attributes would be needed on 7200 West so that it would function well in the future. This memorandum summarizes the corridor vision, the evaluation of existing and future conditions, and the identification of needs for various modes.

STUDY AREA

This study analyzes the traffic conditions at the following intersections:

- 7200 West / I-80
- 7200 West / SR-201
- 7200 West / California Avenue

Land use along the 7200 West corridor from SR-201 to I-80 is primarily industrial or open space. Between I-80 and 1400 South, the land is mostly zoned as M-1, Light Manufacturing. An open space zone sits between 1400 South and SR-201 on the east side of 7200 West. Nearby land uses include the landfill, a tailings pile belonging to Kennecott, Union Pacific and Salt Lake Garfield & Western rail corridors, and several smaller parcels.

NEEDS ASSESSMENT PROCESS

The needs assessment was developed based on a process of stakeholder outreach, analysis and modeling of existing and future conditions, and assessment of improvements necessary to achieve satisfactory traffic conditions under likely future (2050) conditions. **Figure 1** (below) shows the major steps of the needs assessment process and associated tasks.

Figure 1: Process and Key Tasks

PHASE	KEY TASKS
Data Collection	<ul style="list-style-type: none"> • Traffic counts • Safety & collision data • Existing reports and plans review
Stakeholder Interviews	<ul style="list-style-type: none"> • Kennecott Land • Salt Lake City Planning • Salt Lake City RDA • Surburban Land Reserve • WFRC • SITLA
Existing Conditions	<ul style="list-style-type: none"> • Volumes • Level of Service • Safety & Collisions • Freight • Active Transportation
Future Conditions	<ul style="list-style-type: none"> • TDM Modifications • TDM Build • Socio-economic updates • Build geometry • Level of Service Analysis • Travel Buffer Analysis • SelectLink Analysis
Phasing Analysis	<ul style="list-style-type: none"> • Traffic thresholds (% buildout) requiring additional capacity
Final Recommendations	<ul style="list-style-type: none"> • Intersection and Lane Configurations • Grade Separation • Right-of-Way Needs • Shared-Use Path



DATA COLLECTION AND REVIEW

Traffic counts at the study intersections were collected to establish a baseline of existing conditions and operations for the area. At the study intersections, AM peak period traffic counts were recorded from 7:00 AM to 9:00 AM and PM peak period traffic counts were recorded from 4:00 PM to 6:00 PM on Thursday, February 22, 2018. Collision record data for the 7200 West corridor, and in particular the at-grade intersection of 7200 West and SR-201, was also collected and analyzed.

Because the Wasatch Front Regional Council regional travel demand model (RTM) serves as the basis for projecting future traffic volumes likely to be experienced along the 7200 West corridor, as well as adjacent facilities, the model documentation and assumptions of the most recent iteration of this model (version 8.3

beta) were reviewed, with particular attention to the land use assumptions at the Traffic Analysis Zone (TAZ) level within the Northwest Quadrant.

Existing planning efforts relevant to the study area were also reviewed in order to understand the context of the 7200 West corridor, particularly with respect to planned future developments in the Northwest Quadrant area. These plans and studies included:

- Northwest Quadrant Community Reinvestment Area Plan
- Salt Lake County Active Transportation Implementation Plan
- Mountain View Corridor EIS

STAKEHOLDER MEETINGS

The purpose of stakeholder engagement was two-fold: ensure key stakeholders along the corridor are aware of the corridor study, and ensure our study team has the proper information from stakeholders so that we can make more accurate assessments about the corridor's technical merits. The list below summarizes the interactions with various stakeholders:

1. **Kennecott Land (KL)/Rio Tinto** (John Birkinshaw, Director of Land Planning and Divestments)

Mr. Birkinshaw discussed KL's development of the tailings expansion west of the corridor. Mr. Birkinshaw also made sure we were aware of development plans along I-80. This information and meeting prompted the project team to hold subsequent meetings with Salt Lake City. Regarding land use changes, the biggest concern Mr. Birkinshaw flagged was the roughly 10,000 employees depicted under the model's 2050 socio-economic assumptions in two TAZs where KL's tailing expansion is slated (TAZs 675 and 677). KL does not anticipate employees being located in this area, which the project team accounted for in revising land use assumptions shown in **Figure 1** below. Mr. Birkinshaw also noted that while the potential expansion of Kennecott's tailings ponds remains unknown, KL requests that any infrastructure improvements should not encroach on their property west of 7200 West.

2. **Salt Lake City Planning** (Tracy Tran, Senior Planner/Project Manager, Northwest Quadrant Master Plan; Wayne Mills, Salt Lake City Planning Director)

The project team met with Salt Lake City Planning staff to ensure they were aware of the scope and schedule for the corridor study and to better understand their development plans, especially since the City recently adopted the Northwest Quadrant Master Plan (August 2016). The meeting resulted in the realization that the Wasatch Front Regional Council (WFRC) current and future socio-economic allocations to the TAZs should be revisited, as they do not reflect projected growth in the NWQ area. This effort is important to the 7200 West project since the land use inputs need to be based on the knowledge of local planning staff. At this meeting we did not attempt to adjust these inputs at the zone level. Salt Lake City staff recommended that staff at the Salt Lake City Redevelopment Authority (RDA) would be the most appropriate people to meet with since they are

taking the lead on the redevelopment of the land north of I-80 and west of the airport. The future of this area has a direct influence on future travel demand on 7200 West.

3. **Salt Lake City Redevelopment Authority** (Tammy Hunsaker, Project Manager, Northwest Quadrant Reinvestment Plan)

Ms. Hunsaker provided detailed information about the proposed redevelopment plans, including the *Northwest Quad Community Reinvestment Area Plan, December 2017* (CRA). The CRA was very helpful in that it further highlighted significant discrepancies between Salt Lake City's perspectives on future employment, versus what is included in the WFRC model inputs. This conversation further emphasized the importance of realistic land use inputs to understanding future infrastructure needs for the study area.

4. **Suburban Land Reserve** (Thane Smith)

Suburban Land Reserve (SLR) was the owner of the old Salt Lake City landfill, located along I-80 and directly in the path of the proposed 7200 West extension to the north of I-80. Mr. Smith indicated that due to pending legislation, SLR would likely no longer be the owners of the landfill.

5. **Wasatch Front Regional Council** (Scott Festin, Senior Planner and Demographer)

Mr. Festin is the planner at WFRC responsible for the land use data set used in the regional travel model. The project team met with him in order to discuss the TAZ-level land use data in the entire study area, including the area around the airport, the International Center, and the entire NW Quad area, which encompasses the entire 7200 West corridor. Mr. Festin reviewed our observations gleaned from the meetings outlined above. He understood the importance of refining the land use assumptions that ground the 7200 West analysis, and committed to work with our team to rectify the future land uses in the overall study area.

6. **Utah School and Institutional Lands Trust (SITLA)** (Troy Herold, Project Manager, Property Planning and Development)

Mr. Herold is the new project manager for the recently sold Salt Lake City landfill, previously owned by SLR (see #4). SITLA's plans are to slowly redevelop this area, starting at the east (cleanest) end and working to the west. Mr. Herold was not aware of the 7200 West corridor study. He reviewed draft changes to the land use data proposed by the project team, and generally agreed with Fehr & Peers' proposed reallocation of future land use (described in detail below).

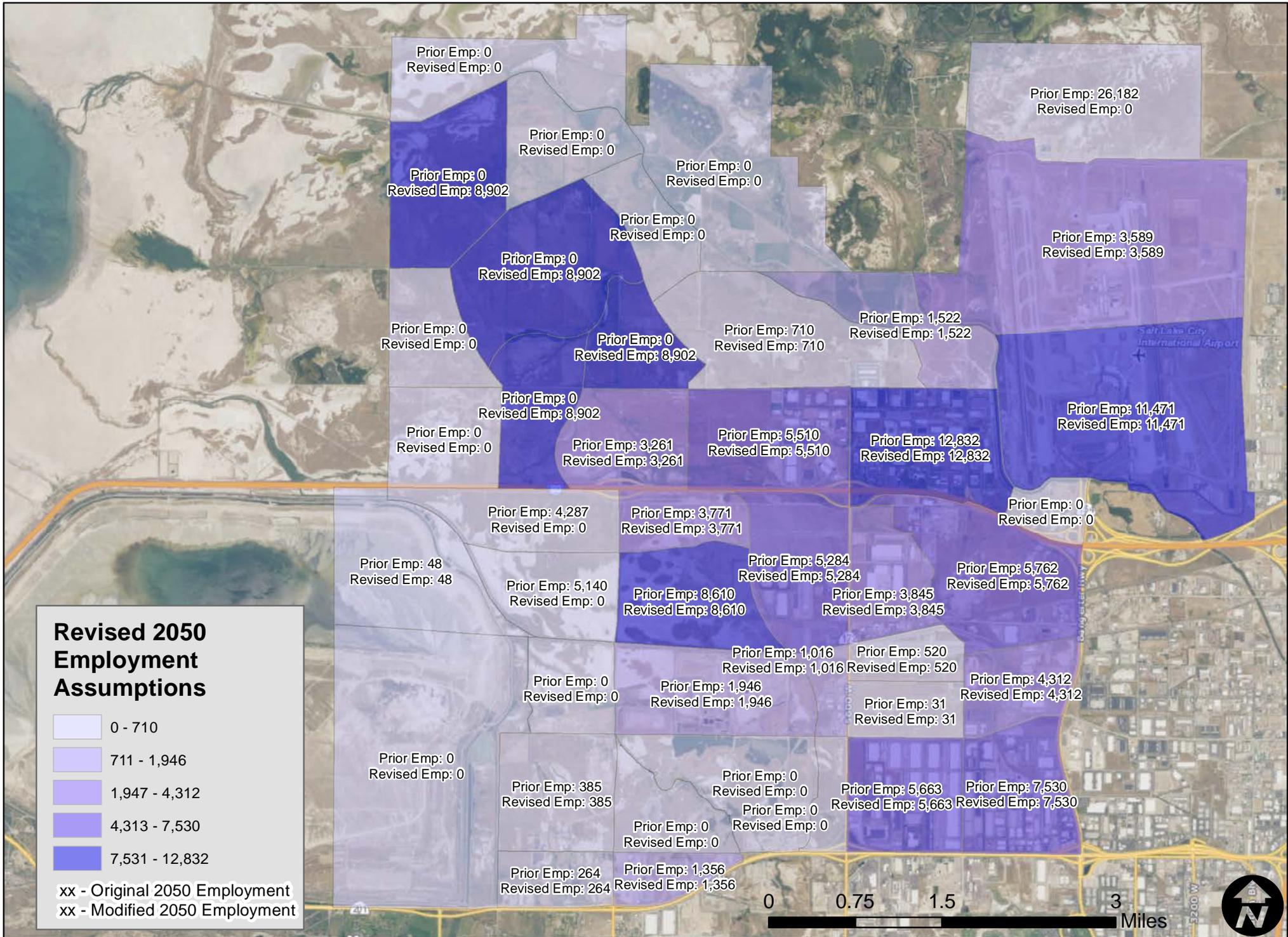
7. **Union Pacific and Salt Lake Garfield & Western Railroads** (Chris Weesner, General Manager, SLG&WRR; Lance Kippen, Manager, Industry and Public Projects, UPRR)

SLG&W staff noted that the existing SLG&W alignment is located adjacent to I-80 and plans to expand to UPRR. Staff noted that the current I-80 structure needs to be capable of accommodating both railroads' future plans, and that the planning team's early outreach is appreciated. An issue raised by these railroads is that the timing of any realignment of their rail lines is contingent on expansion decisions made by Kennecott which have not yet been made. Due to the likely grade-separation of 7200 West and the railroad corridor, coordination between the railroads, Kennecott, and Salt Lake County will be important going forward.

Fehr & Peers hosted a meeting on February 12, 2018 that included Salt Lake County, the RDA, WFRC, and Salt Lake City. The purpose of this meeting was to arrive at a general consensus regarding future land uses in the overall study area, which would then be incorporated into the travel model for the analysis associated with 7200 West, and ultimately, be reflected in future land use datasets from WFRC. To help facilitate the discussion, F&P prepared a draft land use scenario that 1) kept the regional control totals¹ intact, and 2) reflected the development opportunities and constraints as expressed in Salt Lake City's NWQ Plan and Reinvestment Area Plan. This meeting and subsequent further refinements resulted in the changes to 2050 land use as shown on the attached Figure 2. The meeting also resulted in a commitment from WFRC to consider these recommendations in their next update to the land use inputs.

¹ The WFRC Model normalizes all TAZ-level demographic data to regional control totals, which are county-level aggregates of households and employment. These figures are based on projections developed by the Governor's Office of Policy and Budget (GOPB).

Figure 2



EXISTING CONDITIONS

PURPOSE

The purpose of evaluating existing conditions is to determine current needs within the study area and to develop a traffic model that has been calibrated and is valid to existing conditions. For this study, the following intersections were included in the existing conditions analysis:

- I-80 / 7200 West
- SR-201 / 7200 West

As the bulk of this corridor does not currently exist, no further analysis was completed for existing conditions.

ANALYSIS METHODOLOGY

Level of Service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. **Table 1** provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for unsignalized and signalized intersections. The Highway Capacity Manual Version 6 (v6) methodology was used in this study to remain consistent with "state-of-the-practice" professional standards. The micro-simulation analysis tool VISSIM was used for all traffic operations analysis for this project.

TABLE 1 LEVEL OF SERVICE DESCRIPTIONS

LOS	Description	Signalized Intersections	Unsignalized Intersections
		Avg. Delay (sec/veh) ¹	Avg. Delay (sec/veh) ²
A	<i>Free Flow / Insignificant Delay</i> Extremely favorable progression. Individual users are virtually unaffected by others in the traffic stream.	< 10.0	< 10.0
B	<i>Stable Operations / Minimum Delays</i> Good progression. The presence of other users in the traffic stream becomes noticeable.	> 10.0 to 20.0	> 10.0 to 15.0
C	<i>Stable Operations / Acceptable Delays</i> Fair progression. The operation of individual users is affected by interactions with others in the traffic stream	> 20.0 to 35.0	> 15.0 to 25.0
D	<i>Approaching Unstable Flows / Tolerable Delays</i> Marginal progression. Operating conditions are noticeably more constrained.	> 35.0 to 55.0	> 25.0 to 35.0
E	<i>Unstable Operations / Significant Delays Can Occur</i> Poor progression. Operating conditions are at or near capacity.	> 55.0 to 80.0	> 35.0 to 50.0
F	<i>Forced, Unpredictable Flows / Excessive Delays</i> Unacceptable progression with forced or breakdown of operating conditions.	> 80.0	> 50.0

1. Overall intersection LOS and average delay (seconds/vehicle) for all approaches.
2. Worst approach LOS and delay (seconds/vehicle) only.
3. Volume to capacity (v/c) rate, average values.

Source: Fehr & Peers descriptions, based on *Highway Capacity Manual, Version 6*.

LOS ANALYSIS

Existing traffic volumes for the AM and PM peak hours are shown in **Figure 3** and **Figure 4**. The existing delay and LOS are shown below in **Table 2**, which also notes the specific turning movement that performs at the worst level of service at each intersection and time period. For example, the worst turning movement for the AM Peak Hour at the intersection of 7200 West and the I-80 westbound ramps is the westbound left turn (WBLT).

TABLE 2 EXISTING AVERAGE VEHICLE DELAY (S) / LOS

Intersection	Control	AM Peak Hour (Worst Turning Movement)	PM Peak Hour (Worst Turning Movement)
7200 West / I-80 WB Ramps	Side-Street Stop ¹	14s / B (WBLT)	16s / C (WBT)
7200 West / I-80 EB Ramps	Side-Street Stop ¹	9s / A (EBLT)	9s / A (EBT)
7200 West / SR-201	Signal	58s / E	126s / F

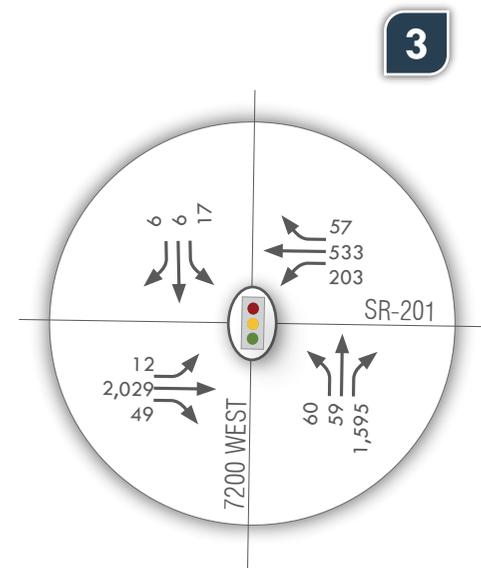
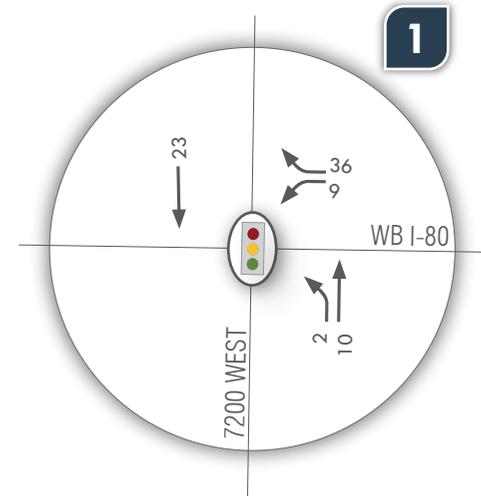
1. Delay & LOS reported for worst movement at Side-Street Stop intersections

As shown in **Table 2**, the I-80 ramps are currently operating well below capacity. The majority of traffic observed during the counts and replicated in the analysis was due to construction hauling operations for the new correctional facility site, resulting in higher delays than typical considering these volumes, but still well below capacity. By contrast, the intersection at 7200 West / SR-201 is currently failing, with high delays for both the AM and PM peak hours.



7200W Study

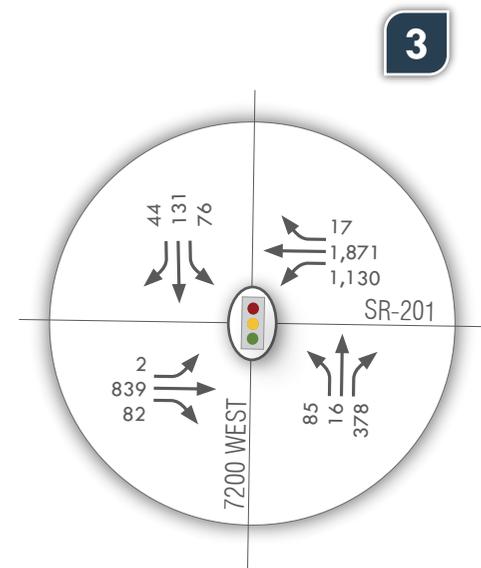
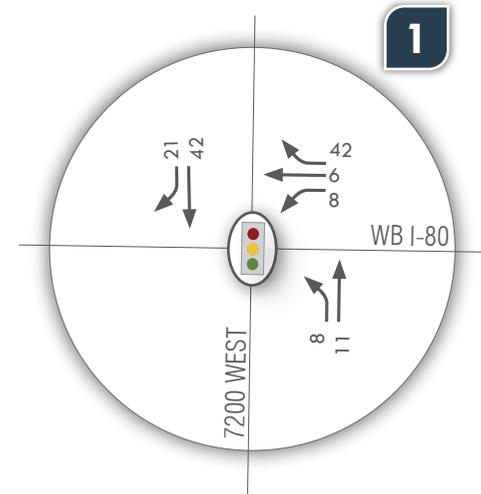
Figure 3
2018 Volumes
Existing AM





7200W Study

Figure 4
2018 Volumes
Existing PM



SAFETY

The study area includes two interchanges: 7200 West / I-80 and 7200 W / SR-201. Both interchanges present some safety concerns that were analyzed to identify safety needs. The safety data for both interchanges, reflecting crashes and crash rates for 2010 through 2017, was collected from the UDOT website Numetric.

7200 W / I-80

The 7200 West / I-80 interchange included in the analysis is shown in **Figure 5** below. In this area, there were 48 crashes during 2010-2017 period, of which none were fatal and one was serious. Most crashes were in the mainline of I-80 with only three at the ramp terminals. Of all the crashes in the area, most were single vehicle crashes. In the figures, the colors represent crash severity, with the lighter yellow dots representing "property damage/no injury", the orange dots representing "possible injury" and the red dots representing "serious injury".

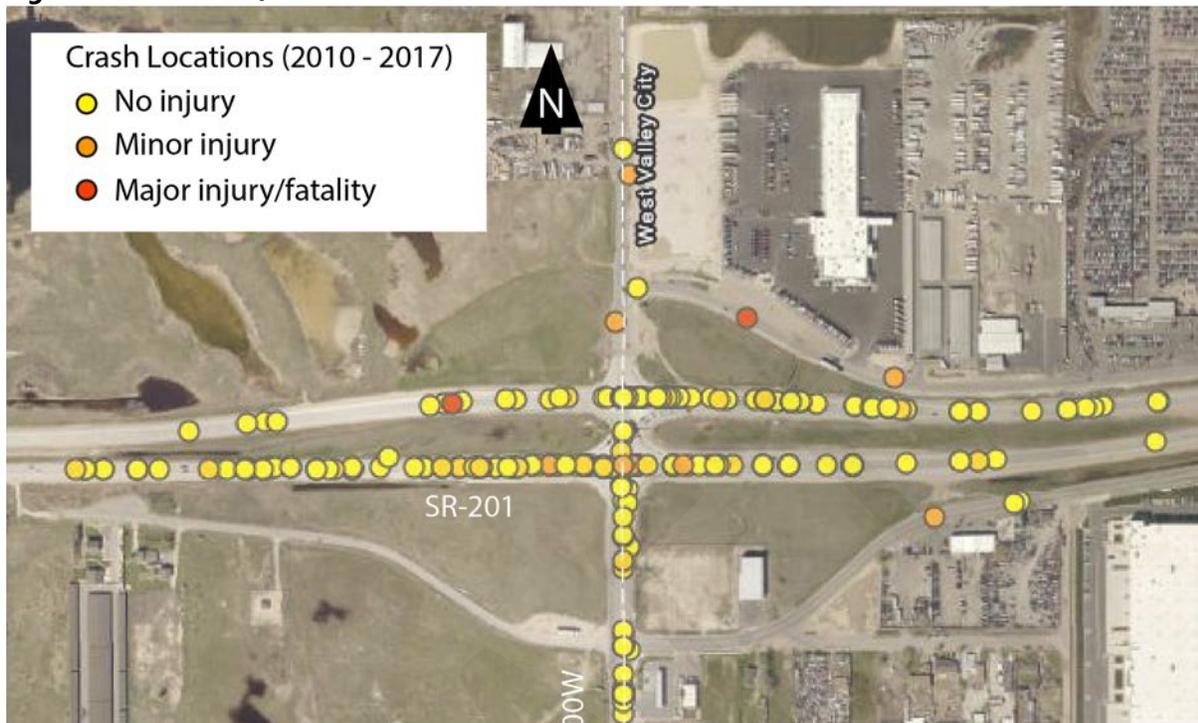
Figure 5: 7200 West / I-80 Intersection Crashes



7200 W / SR-201

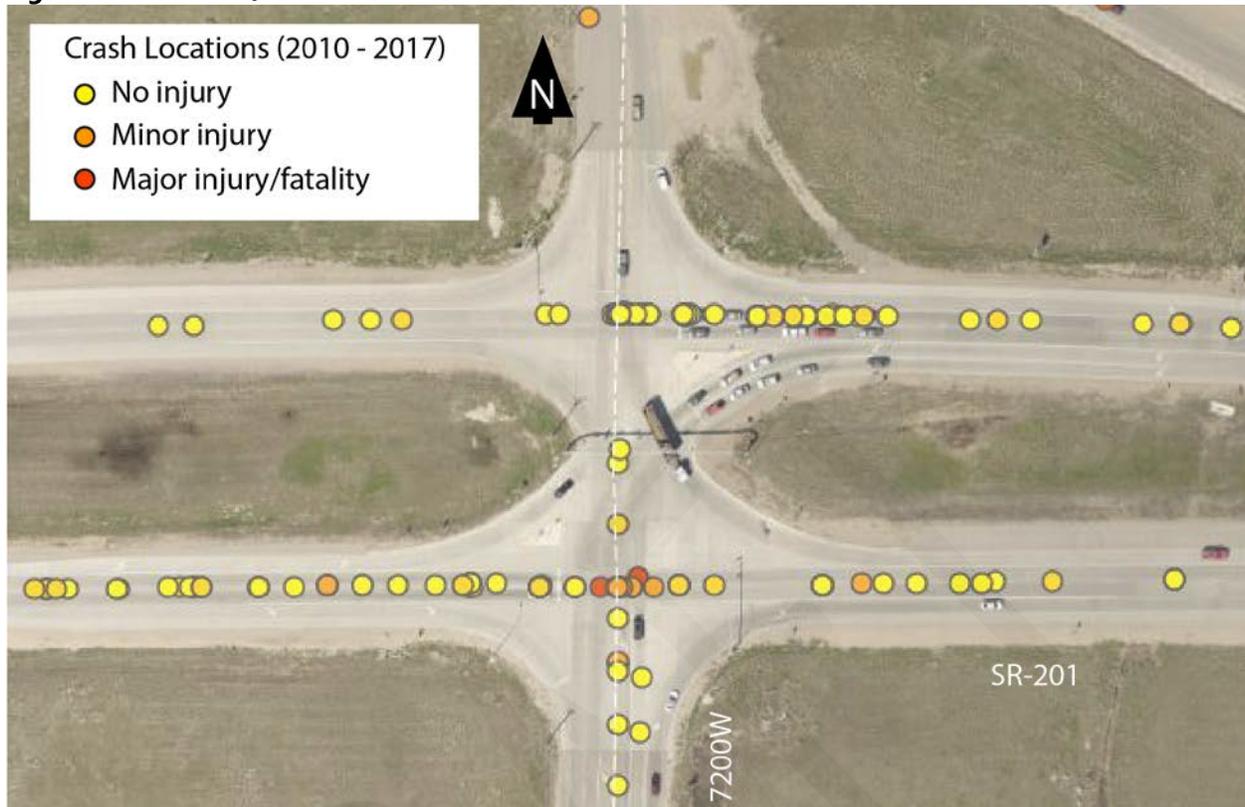
The 7200 West / SR-201 intersection is an at-grade Single Point Urban Interchange (SPUI) – the only one in the State of Utah. This intersection has brought many safety concerns and is part of this analysis. The area included in the study is shown in **Figure 6**.

Figure 6: 7200 West / SR-201 Intersection Crashes



UDOT crash records indicate that this area experiences a high number of crashes in both the mainline and the cross street. The study area shown in Figure 4 includes 274 crashes during 2010-2018. Focusing on the SPUI portion of the area, shown in **Figure 7**, there were 120 crashes, of which none were fatal and nine were serious. In this area, most crashes are intersection related (96).

Figure 7: 7200 West/ SR-201 SPUI Crashes



FUTURE CONDITIONS

PURPOSE

The Future Conditions evaluation was completed to evaluate how the corridor is expected to function in 2050 under the land use assumptions depicted in Figure 1 above. This analysis was conducted for both the No-Build scenario (including all improvements currently contained in WFRC's Long Range Transportation Plan) and Build scenario (with the additional improvements described below) in order to understand the effects of the Build Scenario.

BUILD SCENARIO

The Build scenario's proposed configuration is a five-lane cross-section with the following intersection improvements in place:

7200 West / I-80 Ramps

- Both intersections would be signalized as a traditional diamond configuration
- A single northbound left at the westbound ramp intersection
- Dual right turns and a separate through/left lane for the westbound approach to the westbound ramp intersection
- Dual left turns for the southbound movement at the eastbound ramp intersection

- An exclusive, channelized right turn lane for the northbound approach at the eastbound ramp intersection

7200 West / California Avenue

- Intersection would be signalized
- Exclusive left turn lanes and right turn lanes for all directions of traffic
- Permissive/Protected left turn phasing for the northbound and southbound directions from 7200 West to California Avenue

7200 West / SR-201

- The eastbound and westbound directions at the intersection would be grade-separated and the intersection would be converted to a Single Point Urban Interchange (SPUI)
- Dual left turn lanes for each direction, and a channelized right turn lane in each direction

7200 West / Union Pacific Railroad (UPRR)

- 7200 West would be grade-separated from the existing UPRR alignment (at approximately 850 South)

It was also assumed that a direct access ramp would be provided between the development areas north of I-80 and the adjacent highway network in order to provide additional capacity for the southbound left and westbound right movements at 7200 West and I-80. This direct access ramp could connect directly to the Mountain View Corridor or directly to I-80 west of 7200 West. This additional capacity would be needed by the time that approximately 35-40% of the development is in place (assumed to be 2030-2035).

LOS ANALYSIS

The forecasting peak hour traffic volumes for 2050 are shown in **Figure 8** and **Figure 9**. The resulting future (2050) delay and LOS under the Build scenario are shown in **Table 3** below.

TABLE 3 FUTURE BUILD (2050) AVERAGE VEHICLE DELAY (S) / LOS

Intersection	Control	AM Peak Hour	PM Peak Hour
7200 West / I-80 WB Ramps	Signal	53 / D	48 / D
7200 West / I-80 EB Ramps	Signal	38 / D	24 / C
7200 West / California Avenue	Signal	7 / A	67 / C
7200 West / SR-201	Signal	34 / C	53 / D

As shown in **Table 3**, the assumed configurations are anticipated to provide adequate capacity assuming that the additional capacity is provided between the proposed development north of I-80 and I-80/Mountain View Corridor.

FORECASTING ANALYSIS

The Wasatch Front Regional Council travel demand model was used for the forecasting analysis. The 2050 employment assumptions used for the analysis, which were developed collaboratively with the WFRC, Salt Lake City, Salt Lake County, and the Salt Lake City Redevelopment Authority, are shown in **Figure 1** above.

A travel time buffer was performed for both the No Build and Build scenarios to illustrate the additional accessibility of the developments adjacent to 7200 West provided by the Build scenario. This analysis yields estimates of the number of households within a defined driving distance of the area with and without the proposed project. **Table 4** shows that while there is no change between the number of households in 5 minute and 10 minute buffers of the corridor, the Build scenario provides an increase of over 8,800 households within the 15 minute travel time buffer. This shows that the 7200 West corridor improves accessibility to the job centers proposed at the Inland Port. **Figures 10 and 11** graphically show the travel time buffer results for No Build and Build, respectively.

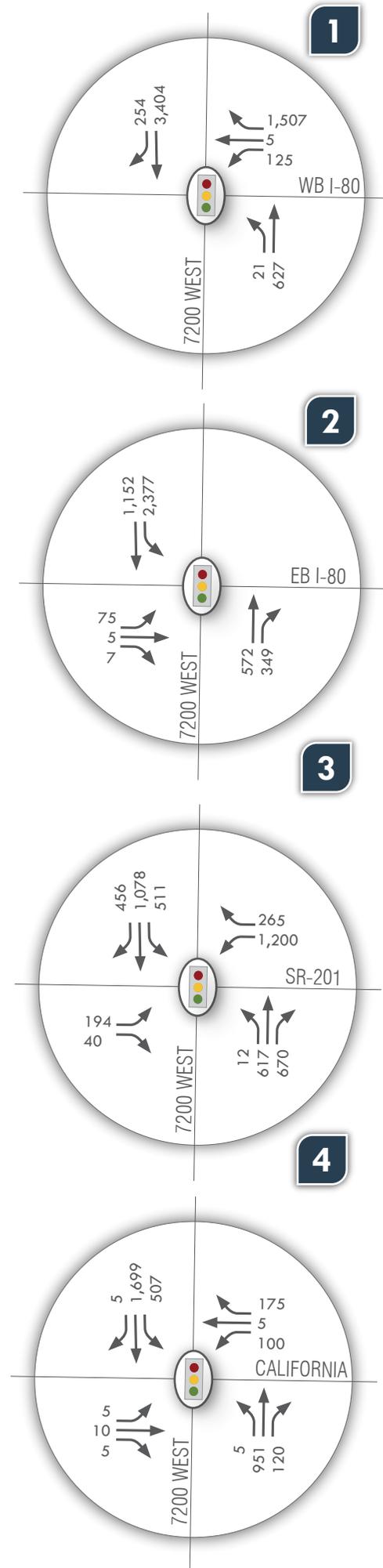
TABLE 4 HOUSEHOLDS (HH) ACCESSIBLE WITHIN TRAVEL TIME BUFFERS (BY SCENARIO)

Scenario	5 Minute HH	10 Minute HH	15 Minute HH	30 Minute HH
No Build	0	1	4	296,673
Build	0	1	8,888	356,017
% Difference	0%	0%	222,100%	20%

A Select Link analysis was performed for the Build scenario for the 7200 West corridor. This analysis provides information on where traffic projected to use 7200 West in the study area would come from and go to. **Figure 12** graphically shows the results of the select link analysis. In this figure, thicker lines represent higher magnitudes of trips using the indicated route. This shows that the highest volumes are from the south and west – primarily coming from Magna, West Valley, West Jordan, Taylorsville, and the West Bench area near the Oquirrh mountains.



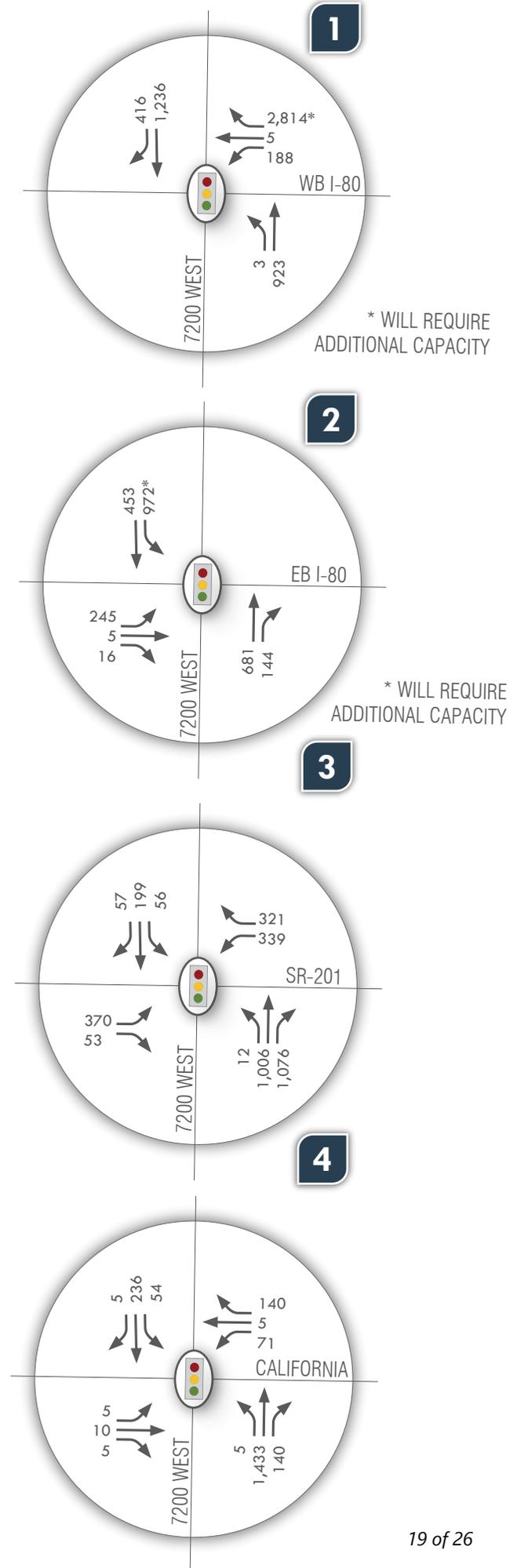
7200W Study
Figure 8
Forecast Volumes
Future Year 2050 AM

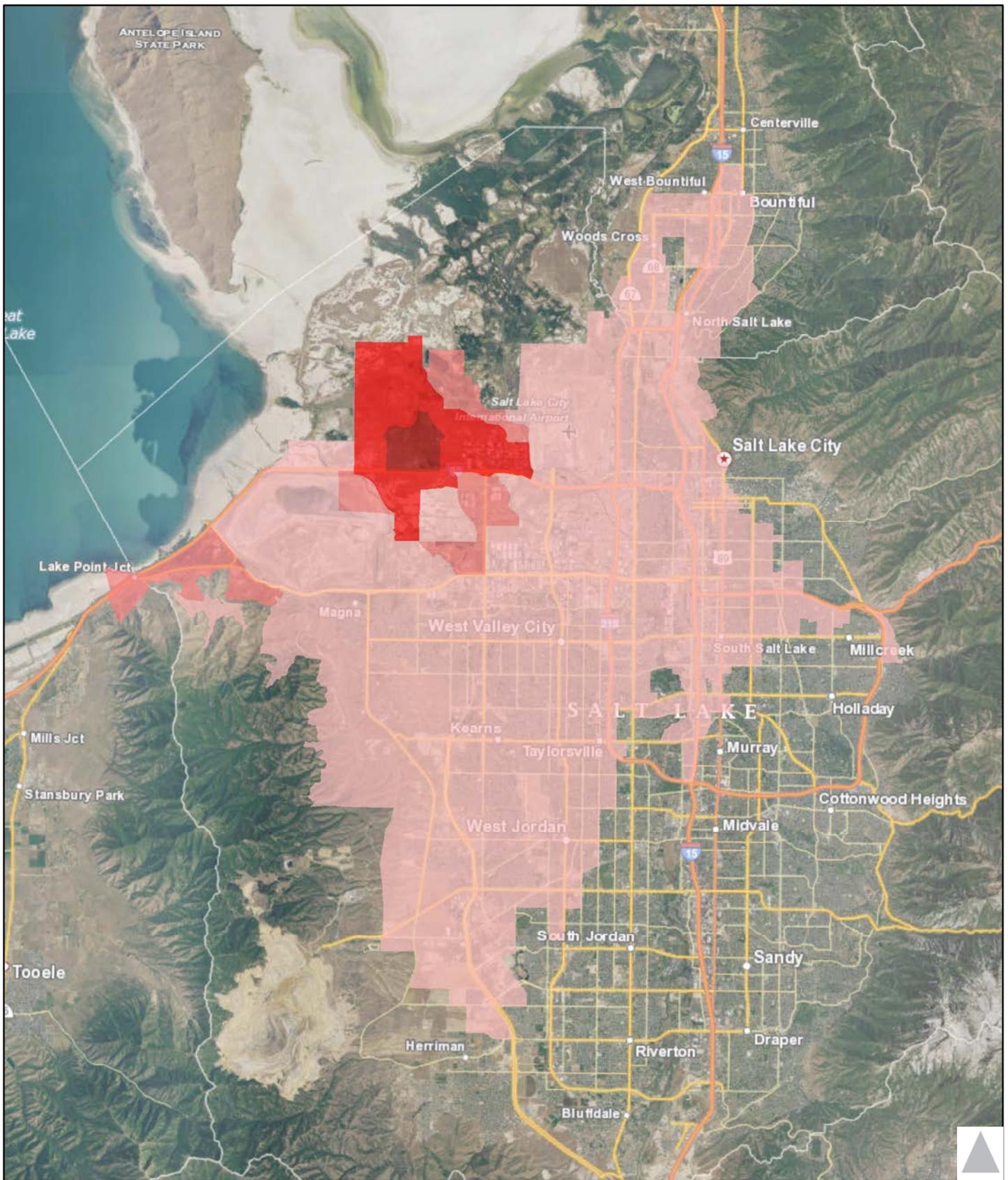




7200W Study

Figure 9
Forecast Volumes
Future Year 2050 PM



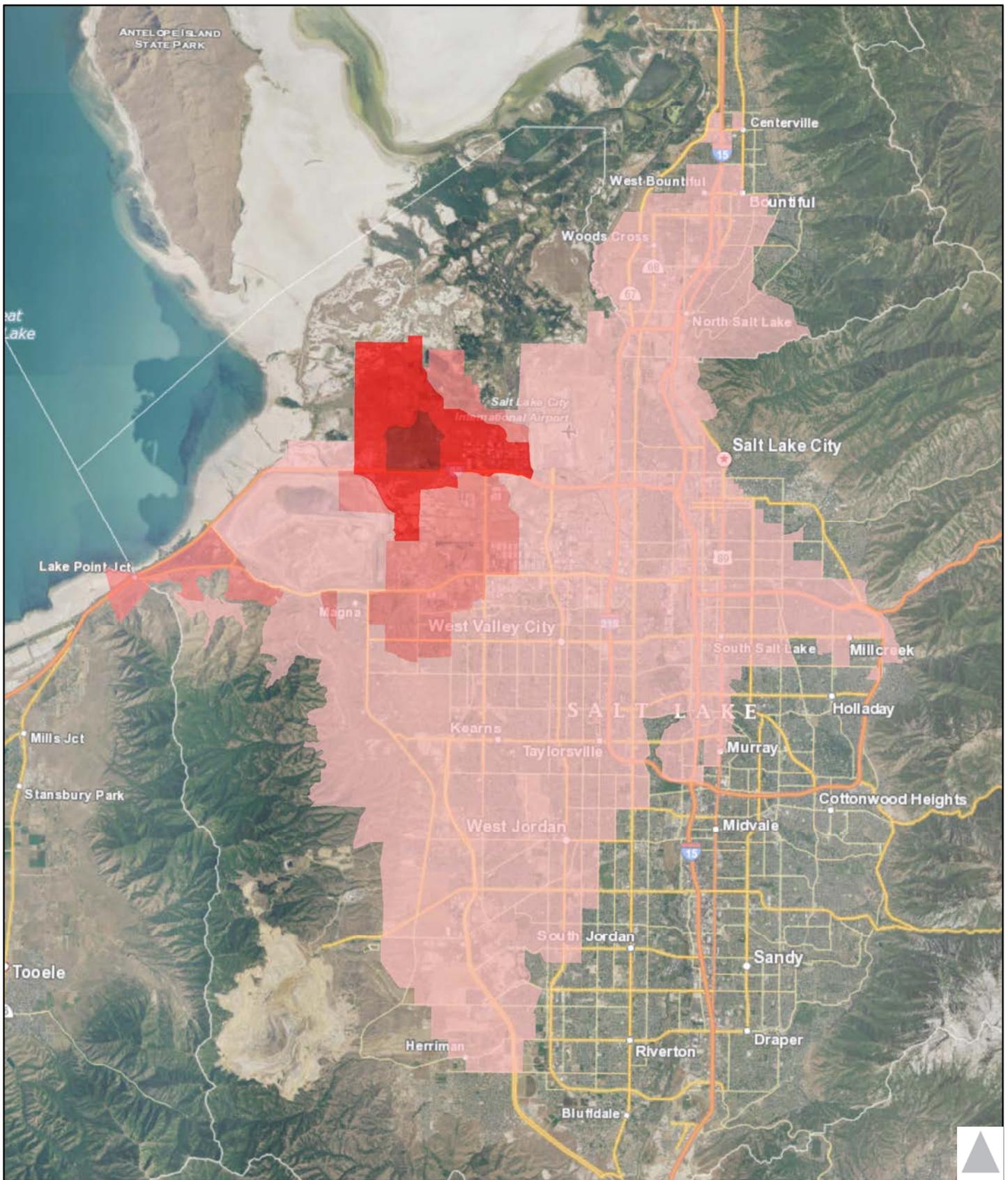


- 5 Minute Buffer
- 10 Minute Buffer
- 15 Minute Buffer
- 30 Minute Buffer



Figure 10

No Build - 2050 Peak Period Travel Time Access



- 5 Minute
- 10 Minute
- 15 Minute
- 30 Minute Buffer



Figure 11

Build - 2050 Peak Period Travel Time Access

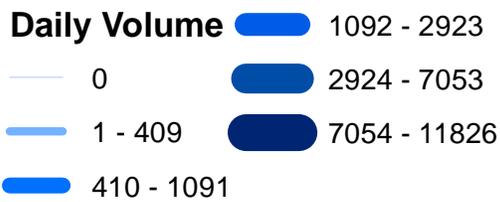
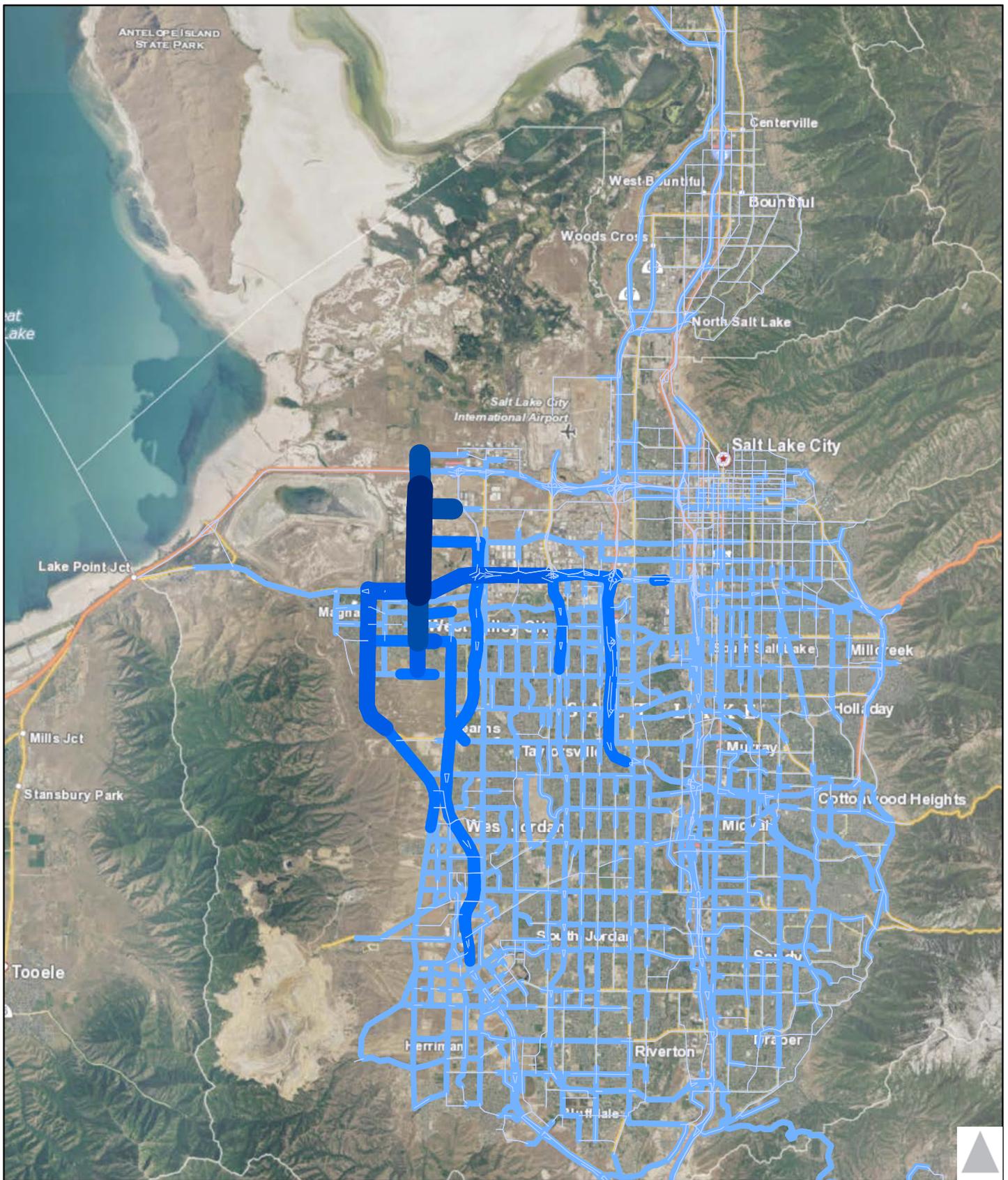


Figure 12

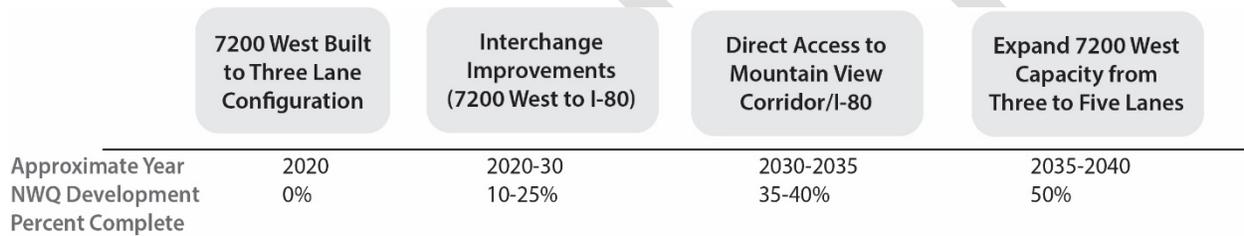
Build - Daily Volume (Select Link - 7200 W.)

PHASING ANALYSIS

For the future (2050) analysis, it was assumed that a 5-lane cross-section would be in place. It is assumed that a 3-lane arterial will operate at LOS D for up to 13,000 – 16,500 vehicles per day (vpd) and that a 5-lane arterial will operate at LOS D for up to 30,500-39,000 vpd. Based on the travel demand forecasting described previously in this memorandum, 7200 West is expected to have up to 27,000 vpd by 2050. Much of this volume will be driven by the development north of I-80. Based on these values, it is expected that the facility will need to be widened from three lanes to five lanes when the development has been about 50% completed (assumed to be 2035-2040 given a linear absorption rate).

As discussed in the Build Scenario description above, additional capacity between the development north of I-80 and the adjacent highways (in the form of a direct access link between the development area and Mountain View Corridor or I-80) will likely be needed when the development is approximately 35-40% completed (assumed to be 2030-2035). An outline of key phases by approximate point in time (year or percent completion of the contemplated 2050 buildout) is shown in **Figure 13** (below).

Figure 13: 7200 West Phasing



IDENTIFIED NEEDS

FREIGHT

Heavy truck traffic data at the study interchanges was gathered from the UDOT database. Heavy truck traffic data is not available for the mainline of the 7200 West corridor. Peak hour truck percentage at SR-201/7200 W is 1% bus, 2% Single Unit Truck and 2% Combo Trucks. Peak hour truck percentages at I-80/7200 W are much higher, with 85% trucks for the southbound and westbound approaches, predominately haul trucks for the Correctional Facility construction. This construction likely skewed the percentage of trucks to a higher share than would be typical. It is anticipated that this corridor will be heavily used in the short- and long-term future by freight trucks as the area builds out.

Fehr & Peers used the WFRC/MAG travel demand model (version 8.3 beta) to estimate future traffic volumes and truck percentages along the 7200 West corridor in the study area. The model network assumes four through lanes of traffic on 7200 West in the future, and the network was coded to connect the missing pieces of 7200 West between I-80 and SR-201. Using this model network, the future traffic projections on 7200 West ranged from 17,000-27,000 average daily vehicles across the corridor, with daily truck volumes of between 5,000-7,000. Projected traffic volumes were greatest at the southernmost portion of the proposed corridor, with lowest volumes projected adjacent to 700 South and somewhat higher volumes occurring adjacent to I-80. On average, throughout the corridor, trucks represented approximately 27% of all projected vehicles.

ACTIVE TRANSPORTATION

The 7200 West alignment sits in a unique part of the Salt Lake Valley, dominated by industrial land uses and where the famous Salt Lake City grid is not as obvious. This section outlines needs for active transportation users along 7200 West and identifies a recommended active transportation facility type for 7200 West.

Planning and Community Context

Current levels of pedestrian and bicycle activity in the 7200 West corridor are likely low; in fact, no bicyclists or pedestrians were detected when counts were gathered along the corridor in February 2018. Regional plans completed by Salt Lake County and UDOT identify active transportation needs on the west side of the Salt Lake Valley. The Salt Lake County Active Transportation Implementation Plan (or ATIP) recommends a multi-use pathway along the future Mountain View Corridor alignment. The Mountain View Corridor is currently unfunded between 1300 South and I-80, but had previously been shown as a Phase 2 project in the Wasatch Front Regional Council Regional Transportation Plan. Mountain View Corridor will be roughly 1.5 miles east of 7200 West. Similarly, the UDOT Region 2 bike plan (found online in the UPLAN map gallery) identified SR-111 as a proposed bike facility, although this plan did not specify the proposed facility type. SR-111 is about 1.5 miles west of 7200 West.

The Northwest Quad Plan prepared by the Salt Lake City Redevelopment Agency identified 7200 West north of I-80 as the major gateway in and out of the Inland Port area from Salt Lake City. This plan called for 7200 West to contain 4-5 stories of development along the roadway with lodging, office, and other visitor services. It is reasonable to think that walking and bicycling activity may be expected along this part of the corridor.

South of SR-201, 7200 West is a 5-lane cross section with pedestrian-scale street lighting (including decorative banners), and with a shared-lane bicycle stencil in the outside northbound lane between 3500 South and the SR-201 interchange. The land use along this section of the corridor, south of the study area, is primarily single family residential.

The WFRC/MAG model also contains future land use projections for the areas around 7200 West. According to the available employment projections, the zones along the 7200 West corridor and immediately surrounding its interchanges with I-80 and SR-201 will contain over 20,000 jobs by 2050.

Facility Needs

Available regional plans identify proposed parallel bicycle routes on either side of the 7200 West corridor, while not on 7200 West itself. However, without a north-south bicycle facility on 7200 West, cyclists attempting to travel between the Inland Port and Magna along 7200 West would have to compete with on-street traffic (including a high percentage of trucks) or travel a significant out-of-direction distance to reach an appropriate facility. For these reasons, we recommend providing a dedicated and separated space for active transportation users along 7200 West. Given the land use pattern and distance involved, cyclists would be the most likely users of a pathway along 7200 West, but the facility could be designed to accommodate a range of non-motorized users.

The 7200 West corridor provides a unique opportunity for a bicycle and pedestrian facility. The current lack of development along this corridor makes it easier to obtain additional right-of-way width for a separated shared use path. A shared use path along 7200 West could be modeled after the “cycle super highway” concept seen paralleling US-36 in Boulder, Colorado and elsewhere (cycle super highway networks have been built in Germany, Denmark, and the United Kingdom). Features of a 7200 West shared use path could include:

- Standard 10’ pavement width, with 2’ clear zones on either side of the path
- Landscape buffer of at least 10’ between roadway edge and shared use path
- Periodic human-scale lighting along the corridor, since ambient light from surrounding land uses is minimal
 - LED or solar lighting could provide an energy-efficient method of lighting the path, although they may involve more up-front costs than more traditional lighting means. On Copenhagen’s cycle super highway, the LED lighting senses whether users are on the trail and turns off lighting in sections that are not currently in use. ²
- Placement of bicycle pumps or DIY stands at regular intervals along the corridor
- Grade separated crossings at rail corridors and minor roads (such as 1300 South and 2100 South) as well as at interchanges with SR-201 and I-80
 - Grade separated crossings at interchanges could involve considerable cost but provides a significant improvement in safety to cyclists as well as to any pedestrians who may be using these crossings. If grade separated crossings are infeasible at the interchanges, refer to the Institute of Transportation Engineers’ *Recommended Design Guidelines to Accommodate Bicycles and Pedestrians at Interchanges*.

² Urban Land Institute: *Active Transportation and Real Estate: The Next Frontier*. Washington, D.C.: the Urban Land Institute, 2016. Accessed online in March 2018 at <http://uli.org/wp-content/uploads/ULL-Documents/Active-Transportation-and-Real-Estate-The-Next-Frontier.pdf>

CONCLUSIONS

This needs assessment identifies key benefits that the Build scenario for the 7200 West corridor would provide. It would provide thousands of households with 15 minute or better connectivity to the large quantity of new jobs that are expected to be generated by the Northwest Quadrant developments. It will provide congestion relief to adjacent facilities, including 5600 West and the Mountain View Corridor. It will also provide better “grid” connectivity in the area, which will serve to improve the reliability and robustness of the transportation network in this emerging area of growth. Furthermore, the following improvements are recommended:

- The 7200 West / SR-201 intersection should be converted to a grade-separated SPUI as soon as possible to address both congestion and safety concerns
- 7200 West should be initially constructed with a 3-lane cross-section
- Right-of-way preservation should be planned to accommodate a future 5-lane cross-section which is expected to be needed when the development north of I-80 is approximately 50% completed (assumed to be 2035-2040)
- The intersections at 7200 West / I-80 Westbound, 7200 West / I-80 Eastbound, 7200 West / 300 South, 7200 West / 700 South and 7200 West / California Avenue have the potential to need signalization in the future. When 7200 West is constructed, these locations should be provided with future-use signal conduit to accommodate the future signals
- It is anticipated that this corridor will be heavily used by freight and large trucks, and should be designed to accommodate these vehicles
- A shared-use path should be provided for active transportation users as described above
- A grade-separation should be provided at the UPRR crossing