

# Air Quality Memorandum

**REPORT NO.** 31

**DATE** August 28, 2014

**SUBJECT** CONFORMITY ANALYSIS FOR THE WFRC AMENDED 2040 REGIONAL TRANSPORTATION PLAN.

**ABSTRACT** The Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and the Clean Air Act Amendments (CAAA) require that all regionally significant highway and transit projects in air quality non-attainment and maintenance areas be derived from a “conforming” Regional Transportation Plan and Transportation Improvement Program. A conforming Plan or Program is one that has been analyzed for emissions of controlled air pollutants and found to be within emission limits established in the State Implementation Plan (SIP) or within guidelines established by Environmental Protection Agency (EPA) until such time that a SIP is approved. This conformity analysis is made by the Wasatch Front Regional Council (WFRC), as the Metropolitan Planning Organization for the region, and submitted to the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for their concurrence. This conformity analysis is being prepared according to the transportation conformity rulemakings promulgated by the EPA as of March 2010 and according to FHWA final rulemakings found in the MAP-21 legislation. The EPA approved MOVES model for estimating vehicle emissions was used for this conformity analysis.

This conformity analysis addresses additional amendments to the previously amended 2011-2040 RTP. The amendments include widening Antelope Drive (Main Street - Woodland Park Drive), widening State Street (11400 South - 10600 South), a new interchange on Bangerter Highway at 9000 South, and advancing the upgrade of the Hillfield Road interchange at I-15 from Phase 2 to Phase 1. See Appendix 2 for a more detailed description of the project amendments.

Based on the analysis presented in this document, the Amended WFRC 2011-2040 RTP conforms to the State Implementation Plan or the Environmental Protection Agency interim conformity guidelines for all pollutants in applicable non-attainment or maintenance areas. Therefore, all the transportation projects in Weber, Davis, and Salt Lake Counties in the Amended 2011-2040 RTP are found to conform.

**Wasatch Front Regional Council**

295 North Jimmy Doolittle Road  
Salt Lake City, Utah 84116

## Table of Contents

	<u>Page</u>
<b>A. Conformity Requirements</b> .....	<b>4</b>
Conformity Process .....	4
Latest Planning Assumptions .....	5
Latest Emissions Model .....	5
Consultation Process .....	5
TCM Implementation .....	6
Emissions Budget .....	6
Currently Conforming Plan and TIP .....	6
Projects from a Conforming Plan and TIP .....	6
Regionally Significant .....	6
CO, PM <sub>10</sub> and PM <sub>2.5</sub> “Hot Spot” Analysis .....	7
PM <sub>10</sub> Control Measures .....	7
Other Conformity Requirements .....	7
<b>B. Transportation Modeling</b> .....	<b>8</b>
Planning Process .....	8
Travel Characteristics .....	8
Peak and Off-Peak Speeds .....	9
Comparison of Modeled Speeds with Observed Data .....	10
<b>C. Emission Modeling</b> .....	<b>10</b>
I/M Programs .....	10
VMT Mix .....	10
Vehicle Weights .....	11
Post Model Adjustments .....	11
MOVES Inputs .....	12
Road Dust Estimates .....	13
<b>D. Conformity Determination</b> .....	<b>14</b>
Salt Lake City CO Conformity .....	14
Ogden CO Conformity .....	14
Ogden PM <sub>10</sub> Conformity .....	15
Salt Lake County PM <sub>10</sub> Conformity .....	17
Salt Lake PM <sub>2.5</sub> Conformity .....	19
Salt Lake and Davis County Ozone Conformity .....	20
<b>Appendix – 1 Definition of Regionally Significant Projects</b> .....	<b>21</b>
<b>Appendix – 2 Salt Lake and Ogden Areas Highway and Transit Projects</b> .....	<b>25</b>
<b>Appendix – 3 Box Elder County Highway and Transit Projects</b> .....	<b>42</b>
<b>Appendix – 4 Tooele County Highway and Transit Projects</b> .....	<b>44</b>

## List of Tables

	<u>Page</u>
<b>Table 1 Wasatch Front Region Non-attainment Designations .....</b>	<b>4</b>
<b>Table 2 Vehicle Miles Traveled (Average Weekday HPMS Adjusted) .....</b>	<b>9</b>
<b>Table 3 Percent of Home Based Trips by Time of Day .....</b>	<b>9</b>
<b>Table 4 Percent of Other Trips by Time of Day .....</b>	<b>10</b>
<b>Table 5 Salt Lake County Modeled Speeds Compared to Observed Speeds .....</b>	<b>10</b>
<b>Table 6 MOVES Data – Input Database Folders.....</b>	<b>12</b>
<b>Table 7 Salt Lake City CO Conformity .....</b>	<b>14</b>
<b>Table 8 Ogden CO Conformity .....</b>	<b>15</b>
<b>Table 9a Ogden PM10 Conformity – Direct Particulates .....</b>	<b>16</b>
<b>Table 9b Ogden PM10 Conformity – NOx Precursor.....</b>	<b>17</b>
<b>Table 10 Salt Lake County PM10 Budgets.....</b>	<b>17</b>
<b>Table 11a Salt Lake County PM10 Conformity – Direct Particulates .....</b>	<b>18</b>
<b>Table 11b Salt Lake County PM<sub>10</sub> Conformity – Nox Precursors .....</b>	<b>18</b>
<b>Table 12a Salt Lake Area PM<sub>2.5</sub> Conformity – Nox Precursor .....</b>	<b>19</b>
<b>Table 12b Salt Lake Area PM<sub>2.5</sub> Conformity – Direct Exhaust Particles.....</b>	<b>20</b>

## A. Conformity Requirements

### Conformity Process

Since the commencement of the planning requirements in the late 1960s, further requirements (most recently the 2012 Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and the 1990 Clean Air Act Amendments) have added to the responsibilities and the decision making powers of local governments through the Metropolitan Planning Organization. The Wasatch Front Regional Council (WFRC) is the Metropolitan Planning Organization for the Salt Lake/West Valley and Ogden / Layton Urbanized Areas. This report summarizes WFRC's conformity analysis of the Amended 2011-2040 RTP with the Division of Air Quality's State Implementation Plan (SIP) and the Environmental Protection Agency's interim conformity guidelines. This conformity analysis is subject to public and agency review, and requires the concurrence of the Federal Highway Administration and Federal Transit Administration.

In November, 1993, the Environmental Protection Agency and the Department of Transportation issued rules establishing the procedures to be used to show that transportation plans and programs conform to the SIP. The conformity rules establish that federal funds may not be used for transportation projects that add capacity in areas designated as "non-attainment (or maintenance) with respect to the National Ambient Air Quality Standards", until and unless a regional emissions analysis of the Plan and TIP demonstrates that the projects conform to the SIP. This restriction also applies to "regionally significant" transportation projects sponsored by recipients of federal funds even if the regionally significant transportation project uses local funds exclusively.

Davis, and Salt Lake Counties, Salt Lake City, Ogden City and portions of Weber, Box Elder and Tooele Counties are designated as non-attainment (or maintenance) for one or more air pollutants. Specifically, there are four areas in the Wasatch Front region for which the conformity rules apply. These areas are listed in Table 1 below.

**Table 1**  
**Wasatch Front Region Non-attainment Designations**

Area	Designation	Pollutant
Salt Lake City	Maintenance Area	Carbon Monoxide (CO)
Ogden City	Maintenance Area	Carbon Monoxide (CO)
	Moderate Non-Attainment Area	Particulate Matter (PM <sub>10</sub> )
Salt Lake County	Moderate Non-Attainment Area	Particulate Matter (PM <sub>10</sub> )
Salt Lake (including Davis, Salt Lake, and portions of Weber, Box Elder, and Tooele Counties)	Moderate Non-Attainment Area	Particulate Matter (PM <sub>2.5</sub> )

The CAAA established requirements for conformity. These requirements are outlined in 40 CFR 93.109 and include the following:

- Latest planning assumptions
- Transportation Control Measures (TCM)
- Emissions budget
- Project from a conforming plan and TIP
- PM<sub>10</sub> control measures
- Latest emissions model
- Consultation
- Currently conforming plan and TIP
- CO and PM<sub>10</sub> “hot spots”

Each of these requirements will be discussed in the following paragraphs.

### **Latest Planning Assumptions**

Current travel models are based on socioeconomic data and forecasts from local building permits, the Utah Division of Workforce Services, and the Governor’s Office of Management and Budget (GOMB). Socioeconomic data are from calendar year 2007. Forecasts of population and employment by traffic analysis zone were developed by WFRC in 2009 and 2010 and are based on county-level forecasts published by GOMB in January, 2008.

### **Latest Emissions Model**

The conformity analysis presented in this document is based on EPA mobile source emissions models: MOVES2010b for tailpipe emissions and AP-42 section 13.2.1 for paved road dust emissions. The application of these models will be discussed in greater detail in the Emissions Model section of this document. Application of the new MOVES model is required since March 2013.

### **Consultation Process**

Section 105 of 40 CFR Part 93 (Conformity Rule) requires, among other things, interagency consultation in the development of conformity determinations. To satisfy this requirement, the State Division of Air Quality (DAQ) prepared a Conformity SIP document to outline the consultation procedures to be used in air quality and transportation planning. The Conformity SIP also defines the membership of the Interagency Consultation Team (ICT) as representatives from DAQ, WFRC, Mountainland Association of Governments, Utah Department of Transportation, Utah Transit Authority, EPA, FHWA, and the FTA. The Conformity SIP has been approved by EPA. WFRC followed the consultation procedures as outlined in the Conformity SIP in the preparation of this conformity analysis. As part of the consultation procedures defined in the Conformity SIP, WFRC presented this report to the Transportation Committee (or TransCom) for review and comment. This committee includes a member of the Utah Air Quality Board as well as representatives of UDOT, UTA, and FHWA. In addition, management level staff members from the Utah Division of Air Quality are notified of meetings and agendas of the above committees. The Utah Division of Air Quality and other members of the ICT were also provided with a copy of this report at the beginning of the public comment period for the Amended 2011-2040 RTP.

This Conformity Analysis for the Amended 2011-2040 RTP was made available for public inspection and comment for a 30-day period in accordance with EPA conformity regulations. This analysis was also posted on the WFRC website at the beginning of the comment period. Notification of the comment period was sent by electronic mail to interested stakeholders. In addition, public comment was taken during various committee meetings of the Wasatch Front Regional Council, as well as public open houses with the express purpose of soliciting public comment on this document.

### **TCM Implementation**

A conformity analysis for the Amended 2011-2040 RTP must certify that the RTP does not interfere with the implementation of any Transportation Control Measure (TCM) identified in the applicable State Implementation Plan (SIP). There is one TCM from the original SIP section for the 1-hour ozone standard which has been carried forward to the current ozone maintenance plan, even though the 1-hour ozone standard has been revoked. This TCM, the employer-based trip reduction program, applies to local, state, and federal government employers. The program emphasizes measures to reduce the drive-alone rate such as subsidized bus passes, carpooling, telecommuting, and flexible work schedules. UTA has in place the ECO pass discount for a number of large employers including the University of Utah and Weber State University. Ridesharing, telecommuting, and flexible work schedules are programs currently managed, promoted, or operated by UTA Rideshare and the UDOT Travelwise program. Congestion Mitigation and Air Quality (CMAQ) funds and other transportation funds are used to support these ongoing programs.

### **Emissions Budget**

A comparison of mobile source emission estimates to emission budgets defined in the SIP is outlined in this document in Section D - Conformity Determination.

### **Currently Conforming Plan and TIP**

The existing 2040 RTP for the Wasatch Front Area conforms to State air quality goals and objectives as noted in a letter from FHWA and FTA dated September 26, 2012. The existing TIP for the Wasatch Front Area was also found to conform and this was noted in the same letter from FHWA and FTA.

### **Projects from a Conforming Plan and TIP**

**TIP Time Frame** - All projects which must be started no later than 2019 in order to achieve the transportation system envisioned by the Amended 2011-2040 RTP are included in the 2014-2019 TIP. The TIP is fiscally constrained, meaning that only those projects with an identified source of funds are included in the TIP. Estimated funding availability is based on current funding levels and reasonable assumptions that these funds will continue to be available. Conformity for the 2014-2019 TIP is addressed separately in Air Quality Memorandum 30a.

### **Regionally Significant**

All regionally significant projects, regardless of funding source (federal, state, or local) are included in the RTP. All regionally significant projects are also included in the regional emissions analysis of the RTP. Regionally significant projects are identified as those projects functionally classified as a principal arterial or higher order facility, and certain minor arterials as identified through the interagency consultation process (see Appendix 1 for a complete definition of regionally significant projects). The latest Utah Department of Transportation Functional Classification map is used to identify functional classification. Interstate highways, freeways, expressways, principal arterials, certain minor arterials, light rail, and commuter rail are treated as regionally significant projects.

Because of their relative impact on air quality, all regionally significant projects regardless of funding source must be included in the regional emissions analysis, and any significant change in the design or scope of a regionally significant project must also be reflected in the analysis. All regionally significant projects have been included in the regional emissions analysis, and the

modeling parameters used for these projects are consistent with the design and scope of these projects as defined in the RTP. In order to improve the quality of the travel model, other minor arterials and collectors, as well as transit service, are also included in the regional travel model (and thus the regional emissions analysis) but these facilities are not considered regionally significant since they do not serve regional transportation needs as defined by EPA. For a list of projects included in this conformity analysis please refer to Appendix 2 for Weber, Davis, and Salt Lake Counties, Appendix 3 for Box Elder County, and Appendix 4 for Tooele County.

### **CO, PM<sub>10</sub> and PM<sub>2.5</sub> “Hot Spot” Analysis**

In addition to the regional emissions conformity analysis presented in this document, specific projects within carbon monoxide (CO) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) non-attainment areas are required to prepare a “hot spot” analysis of emissions. The “hot spot” analysis serves to verify whether or not localized emissions from a specific project will meet air quality standards. This requirement is addressed during the NEPA phase of project development before FHWA or FTA can issue final project approval.

FHWA has issued guidance on quantitative PM<sub>10</sub> and PM<sub>2.5</sub> “hot spot” analysis to be used for the NEPA process.

### **PM<sub>10</sub> Control Measures**

**Construction-related Fugitive Dust** - Construction-related dust is not identified in the Utah SIP as a contributor to the PM<sub>10</sub> non-attainment area. Therefore, there is no conformity requirement for construction dust. Section 93.122(d) (1) of 40 CFR reads as follows:

“For areas in which the implementation plan does not identify construction-related fugitive PM<sub>10</sub> as a contributor to the non-attainment problem, the fugitive PM<sub>10</sub> emissions associated with highway and transit project construction are not required to be considered in the regional emissions analysis.”

In the Utah PM<sub>10</sub> SIP, construction-related PM<sub>10</sub> is not included in the inventory, nor is it included in the attainment demonstration or control strategies. Control of construction-related PM<sub>10</sub> emissions are mentioned in qualitative terms in Section IX.A.7 of the SIP as a maintenance measure to preserve attainment of the PM<sub>10</sub> standard achieved by application of the control strategies identified in the SIP. Section IX.A.7.d of the SIP requires UDOT and local planning agencies to cooperate and review all proposed construction projects for impacts on the PM<sub>10</sub> standard. This SIP requirement is satisfied through the Utah State Air Quality Rules. R307-309-4 requires that sponsors of any construction activity file a dust control plan with the State Division of Air Quality.

### **Other Conformity Requirements**

**Transit Fares** - Transit fares have increased periodically and will continue to increase in response to rising operating costs. The Plan assumes that transit fare box revenues will cover a constant percentage of all transit operating cost, so future fare increases are consistent with the Plan. With any price increase some market reaction is expected. While there have been some short term fluctuations in transit patronage in response to fare increases, the implementation of light rail service and other transit improvements has retained and increased transit patronage consistent with the levels anticipated by the RTP.

Plans to expand light rail service, to increase and enhance bus service, and to extend commuter rail operations are moving forward. These transit projects are envisioned in the Plan and the steps necessary to implement these projects are moving forward including various voter approved sales tax increases for transit funding.

## **B. Transportation Modeling**

Improvement to the WFRC travel demand model practice and procedure is an ongoing process. This conformity analysis is based on the latest version (7.0) of the travel demand model. Version 7.0 of the travel demand model updates the base year of the model from 2005 to 2007. Version 7.0 of the model also has added more traffic analysis zones, and the transit mode choice portion of the model has been enhanced. Details of Version 7.0 of the travel model are documented in a report titled “WFRC/MAG Version 7.0 Travel Demand Model Documentation” which is available upon request.

### **Planning Process**

Federal funding for transportation improvements in urban areas requires that these improvements be developed through a comprehensive, coordinated, and continuous planning process involving all affected local governments and transportation planning agencies. The planning process is certified annually by the Regional Council and reported to the Federal Highway Administration and Federal Transit Administration. Every four years FHWA and FTA conduct a comprehensive certification review. The certification review of May 2009 found that the WFRC planning process meets federal requirements. Recommendations were made to improve WFRC’s planning process and these are being addressed.

The documentation of the planning process includes at a minimum, a twenty-year Regional Transportation Plan updated at least every four years; and a four-year Transportation Improvement Program (capital improvement program) updated and adopted at least every four years. The planning process includes the involvement of local elected officials, state agencies, and the general public.

### **Travel Characteristics**

The WFRC travel model is used to estimate and forecast highway Vehicle Miles Traveled (VMT) and vehicle speeds for Weber, Davis, and Salt Lake Counties. A separate travel model is used to estimate VMT and speed in Tooele County. For VMT and speed estimates in Box Elder County, WFRC relied on forecasts provided by the Utah Department of Transportation. The WFRC travel demand model is based on the latest available planning assumptions and a computerized representation of the transportation network of highways and transit service. The base data for the travel demand model is reviewed regularly for accuracy and updates. The travel model files used for this conformity analysis are available upon request on compact disc.

Shown below in Table 2 is a summary of weekday VMT for the cities and counties in designated non-attainment areas. Totals for VMT are given for various air quality analysis years from 2012 to



2040. Note that the VMT values for Weber, Box Elder, and Tooele Counties are not for the entire county but only that portion of the county designated as non-attainment for a criteria pollutant.

**Table 2**  
**Vehicle Miles Traveled (Average Winter Weekday HPMS Adjusted)**

	2015	2020	2030	2040
<b>Salt Lake City</b>	6,844,402	7,372,557	8,441,217	9,145,100
<b>Ogden City</b>	1,634,320	1,760,837	2,000,337	2,213,895
<b>Salt Lake County</b>	28,969,518	31,976,820	38,125,117	44,599,126
<b>Davis County</b>	8,666,311	9,526,442	10,624,931	11,572,128
<b>Weber County*</b>	5,328,080	5,908,979	7,025,996	8,204,092
<b>Box Elder County*</b>	2,463,576	2,709,337	3,227,017	3,844,694
<b>Tooele County*</b>	2,074,524	2,507,527	3,373,539	4,562,662

\*non-attainment portion of the county

### Peak and Off-Peak Speeds

The modeled VMT and speed for each time period (AM, midday, PM, and evening) defined in the travel demand model depend on the number of vehicle trips assigned for that time period. The percentage of trips by purpose varies for each time period. The percentages in Table 3 and Table 4 below are based on data from the 1993 Home Interview Survey and 2008 observed traffic count information. Trip purposes “commercial” (COM) and “through” (THRU) were not sampled in the Home Interview Survey. These two trip types are allocated to the four time periods according to the percentages for “non-home based” (NHB) and “internal/external” (IXXI) trips respectively (with some rounding as necessary for the COM trips).

**Table 3**  
**Percent of Home Based Trips by Time of Day**

Purpose	AM		Mid-day		PM		Evening	
	From Home	To Home	From Home	To Home	From Home	To Home	From Home	To Home
HBW	35%	2%	7%	8%	2%	25%	6%	15%
HBO	11%	1%	16%	15%	11%	15%	12%	18%

**Table 4**  
**Percent of Other Trips by Time of Day**

<b>Purpose</b>	<b>AM</b>	<b>Mid-day</b>	<b>PM</b>	<b>Evening</b>
NHB	7%	51%	26%	16%
IXXI	20%	29%	26%	25%
COM	6%	53%	26%	15%
THRU	20%	29%	26%	25%

*Trip Purpose abbreviations:*

*HBO - Home Based Other*

*HBW - Home Based Work*

*IXXI - Internal/External, External/Internal*

*NHB - Non-Home Based*

*COM - Commercial*

*THRU - Through*

### **Comparison of Modeled Speeds with Observed Data**

WFRC continues to adjust modeled speeds to improve consistency with samples of observed speeds. A review of Salt Lake County modeled speed and observed speed is summarized in Table 5. Modeled speeds in Table 5 are within -4.5% to 7.4% of observed speeds.

**Table 5**  
**Salt Lake County Modeled Speeds Compared to Observed Speeds**

	<b>Arterial</b>		<b>Freeway</b>	
	<b>AM Peak</b>	<b>PM Peak</b>	<b>AM Peak</b>	<b>PM Peak</b>
2007 Modeled Speeds (mph)	31	29	64	64
2008 Observed Speeds (mph)	31	27	67	67

## **C. Emission Modeling**

### **I/M Programs**

Assumptions for the input files for EPA's MOVES vehicle emissions model include I/M programs in Salt Lake, Davis, and Weber Counties. Box Elder and Tooele Counties do not presently have I/M programs.

### **VMT Mix**

The VMT mix describes how much a particular vehicle type is used in the transportation network. While no longer a required input for the MOVES model as it was for MOBILE6.2, VMT mix is used in several instances to generate the input files required to run the MOVES model. The national default VMT mix found in the MOVES database was used to disaggregate local vehicle type data. The local vehicle type data is collected by UDOT as part of the federal HPMS data collection system and is based on automated counters which classify vehicles based on axle spacing. The UDOT classification is used to calculate control percentages for light duty (LD) vehicles and heavy duty (HD) vehicles for each facility type. The EPA default VMT mix is then applied to disaggregate the

two UDOT control percentages into detailed percentages for the thirteen vehicle classes used in MOVES.

### **Vehicle Weights**

Facility specific VMT mix data described above was also used to estimate the average vehicle weight on each facility type. Since vehicle weight affects the rate of re-entrained road dust emissions estimated using the AP-42 method, vehicle weight variations on different facilities will affect the amount of fugitive dust created. The VMT mix for each facility type was used to estimate an average vehicle weight for each facility type with the following results:

<b><u>Facility</u></b>	<b><u>Average Vehicle Weight</u></b>
Urban - Freeway	6,500 lbs, or 3.25 tons
Urban - Arterial	6,100 lbs, or 3.05 tons
Urban - Local	3,900 lbs, or 1.95 tons

### **Post Model Adjustments**

For conformity analyses prior to 2000, the WFRC applied post model adjustments to vehicle emission estimates. Emission credits for work trips were modeled for reductions in single occupant vehicle rates based primarily on increased investments in transit service and rideshare programs, and the projected increase in telecommuting. Other less significant post model adjustments were also estimated for incident management, pavement re-striping, and signal coordination. Other emission reducing programs and projects supported by CMAQ funds such as park and ride lots, bicycle facilities, transit vehicles, intelligent transportation systems (ITS), and intersection improvements have also been implemented.

WFRC believes that these programs have a positive effect in reducing vehicle emissions. In practice, however, WFRC has found that documenting the air quality benefits of these programs can be challenging. WFRC will continue to support these emission reduction programs, but credits from these programs have not been included in this conformity analysis.

## MOVES Inputs

The MOVES model is a very data intensive computer program based on the MySQL database software. Through the interagency consultation process the required MOVES inputs reflecting local conditions have been established.

Data files defining local conditions by county and year are created for vehicle population, emission testing programs, fuel supply, fuel formulation, meteorological conditions, and vehicle age are listed are all required inputs to the MOVES model.

Vehicle activity input files for the MOVES model are generated by the WFRC travel demand model using a customized in-house program for this purpose. The MOVES input files required include data for ramp fractions, road distribution, speed distribution, and VMT by vehicle type for each county (Box Elder, Davis, Salt Lake, Tooele, and Weber) and analysis year (2009, 2016, 2020, 2030, and 2040) as required for operating the MOVES model.

The input files listed above are read into the MOVES program as database files. The input database folders in Table 6 below contain the database files used for each county and year modeled using MOVESb for this conformity analysis. The results of the MOVES model are stored in the output database “Conf14\_out”. Results unchanged by this amendment (Box Elder and Tooele files, and files for 2009 and 2016) are found in the output database “Conf13\_out”.

**Table 6**  
**MOVES Data – Input Database Folders**

<b>Box Elder</b>	<b>Weber</b>	<b>Davis</b>	<b>Salt Lake</b>	<b>Tooele</b>
conf13_be2009w_in	conf13_we2009w_in	conf13_da2009w_in	conf13_sl2009w_in	conf13_to2009w_in
conf13_be2016w_in	conf13_we2016w_in	conf13_da2016w_in	conf13_sl2016w_in	conf13_to2016w_in
conf14a_be2020w_inb	conf14a_we2020w_inb	conf14a_da2020w_inb	conf14a_sl2020w_inb	conf14a_to2020w_inb
conf14a_be2030w_inb	conf14a_we2030w_inb	conf14a_da2030w_inb	conf14a_sl2030w_inb	conf14a_to2030w_inb
conf14a_be2040w_inb	conf14a_we2040w_inb	conf14a_da2040w_inb	conf14a_sl2040w_inb	conf14a_to2040w_inb

## Road Dust Estimates

In January 2011, the EPA released new guidance for estimating dust emissions from paved roads. These guidelines are published in Chapter 13.2.1 of the AP-42 document. The new formula is

$$E = k (sL)^{0.91} \times (W)^{1.02}$$

where:  $E$  = particulate emission factor (grams/mile),  
 $k$  = particle size multiplier for particle size range and units of interest (for  $PM_{10}$ ,  $k=1.0$  and for  $PM_{2.5}$   $k=0.25$ ),  
 $sL$  = road surface silt loading (grams per square meter -  $g/m^2$ ), and  
 $W$  = average weight (tons) of the vehicles traveling the road.

Based on vehicle type counts on roads in the WFRC region, average vehicle weights for local roads, arterials, and freeways are 1.95, 3.05, and 3.25 tons respectively. The silt load ( $sL$ ) factor varies by highway functional class and by traffic volume. The default silt load factors found in Table 13.2.1-2 of the AP-42 document are summarized below.

<b>Traffic Volume</b>	<b>Functional Class</b>	<b>Silt Load (grams/meter<sup>2</sup>)</b>
500-5,000	local roads	0.200
5,000-10,000	arterial roads	0.060
limited access	freeways	0.015

A precipitation reduction factor is also applied to the above equation using the following expression:

$$(1 - P/4N)$$

Where:  $P$  = number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and  
 $N$  = number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly).

The AP-42 guidance recommends a value of 90 precipitation days per year for the Wasatch Front region. Using these values, the precipitation reduction factor yields a value of 0.9384. Combined with the basic road dust emission rate, the net  $PM_{2.5}$  and  $PM_{10}$  road dust factors by highway functional class are as follows:

<b>Functional Class</b>	<b><math>PM_{10}</math> Road Dust Rate (grams/mile)</b>	<b><math>PM_{2.5}</math> Road Dust Rate (grams/mile)</b>
local roads	0.429	0.107
arterials	0.226	0.057
freeways	0.068	0.017

## D. Conformity Determination

The following conformity findings for the Amended 2011-2040 Regional Transportation Plan for the Wasatch Front are based on the transportation systems and planning assumptions described in this report and the EPA approved vehicle emissions model (MOVES).

### Salt Lake City CO Conformity

The carbon monoxide maintenance plan for Salt Lake City was approved by EPA effective September 30, 2005 as recorded in the Federal Register (Vol. 70, No. 146, August 1, 2005). The maintenance plan defines a motor vehicle emission budget for the years 2005 and 2019 of 278.62 tons/day. Table 7 below demonstrates that projected mobile source emissions are within the emission budget defined in the maintenance plan for the 2019 budget year. The other years listed in Table 7 are in accordance with requirements of the Conformity Rule (40 CFR Part 93) as noted in the table.

From this demonstration it is concluded that the Amended RTP conforms to the applicable controls and goals of the State Implementation Plan (Maintenance Plan) for Carbon Monoxide in Salt Lake City.

Table 7

### Salt Lake City - CO Conformity Determination

Year	<i>b</i>	<i>c</i>	<i>c</i>	<i>e</i>
	2019	2020	2030	2040
<b>Budget<sup>#</sup> (tons/day)</b>	278.62	278.62	278.62	278.62
<i>emission rate (grams/mile)</i>	9.14	8.66	8.04	8.32
<i>seasonal VMT</i>	7,261,483	7,372,557	8,441,217	9,145,100
<b>Projection* (tons/day)</b>	73.15	70.36	74.82	83.87
<b>Conformity (Projection &lt; Budget?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*a* - attainment year, *b* - budget year, *c* - 10-year rule, *d* - no budget 5-year rule, *e* - last year of Plan,

<sup>#</sup> Federal Register Vol. 70 No. 146, August 1, 2005, Table V-2.

\* Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

### Ogden CO Conformity

The carbon monoxide maintenance plan for Ogden City was approved by EPA effective November 14, 2005 as recorded in the Federal Register (Vol. 70, No. 177, September 14, 2005). The maintenance plan defines a motor vehicle emission budget for the years 2005 and 2021 of 75.36 and 73.02 tons/day respectively. Table 8 below demonstrates that projected mobile source emissions are within the emission budget defined in the maintenance plan for the 2021 budget year. The other years listed in Table 8 are in accordance with requirements of the Conformity Rule (40 CFR Part 93) as noted in the table.

From this demonstration it is concluded that the Amended 2011-2040 RTP conforms to the applicable controls and goals of the State Implementation Plan (Maintenance Plan) for Carbon Monoxide in Ogden City.

**Table 8**  
**Ogden City - CO**  
**Conformity Determination**

Year	<sup>c</sup> 2020	<sup>b</sup> 2021	<sup>c</sup> 2030	<sup>e</sup> 2040
<b>Budget (tons/day)</b>	75.36	73.02	75.36	75.36
<i>emission rate (grams/mile)</i>	10.01	9.92	9.25	9.35
<i>seasonal VMT</i>	1,760,837	1,784,787	2,000,337	2,213,895
<b>Projection* (tons/day)</b>	19.43	19.52	20.40	22.81
<b>Conformity (Projection &lt; Budget?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*a - attainment year, b - budget year, c - 10-year rule, d - no budget 5-year rule, e - last year of Plan,*

*# Federal Register Vol. 70 No. 177, September 14, 2005, Table V-2.*

*\* Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.*

### Ogden PM10 Conformity

Ogden City was designated a PM<sub>10</sub> non-attainment area in August of 1995 based on PM<sub>10</sub> violations in 1993 or earlier. Since a PM<sub>10</sub> SIP for Ogden has not yet been approved by EPA, it must be demonstrated that Ogden PM<sub>10</sub> emissions are either less than 1990 emissions or less than “no-build” emissions. The analysis years 2012, 2015, 2025, and 2030 were selected in accordance with the requirements of 40 CFR Section 93.119(e).

PM<sub>10</sub> emissions are present in two varieties referred to as primary and secondary PM<sub>10</sub>. Primary PM<sub>10</sub> consists mostly of fugitive road dust but also includes particles from brake wear and tire wear and some “soot” particles emitted directly from the vehicle tailpipe. The methods defined in the January 2011 version of the EPA publication known as “AP-42” were used to estimate dust from paved roads. Secondary PM<sub>10</sub> consists of gaseous tailpipe emissions that take on a particulate form through subsequent chemical reactions in the atmosphere. Nitrogen oxides are the main component of secondary PM<sub>10</sub> emissions with sulfur oxides a distant second.

As summarized in Tables 9a and 9b, emission estimates for the Amended 2011-2040 RTP satisfy the “Build < 1990” test for secondary PM<sub>10</sub> (NO<sub>x</sub> precursors) and primary PM<sub>10</sub> (direct tailpipe particulates and road dust) in Ogden City. The 1990 emission estimates based on the Mobile6.2 vehicle emissions model for the 2003 conformity analysis have been updated for this conformity analysis using the MOVES model and the January 2011 AP-42 road dust methodology for consistency with current emission modeling requirements. Specifically, the NO<sub>x</sub> precursor budget (1990 emission estimate) changes from 4.57 tons/day to 6.92 tons/day, and the direct PM<sub>10</sub> budget (1990 estimate) changes from 2.28 tons/day to 1.09 tons/day. The 1990 primary PM<sub>10</sub> estimate for

Ogden City includes emissions from the unpaved access road to the Ogden landfill which was closed in 1998.

For projections of primary PM<sub>10</sub> emissions, no credit was taken for a number of programs adopted since Ogden City last violated the PM<sub>10</sub> standard. These particulate reducing programs include covered load ordinances, increased frequency of street sweeping, and reduced application of deicing and skid resistant materials (salt and sand). Documentation of these programs has been provided by Ogden City but the actual benefits of these programs are not included in the emission projections below. Other areas that have estimated the benefit of these programs have found a silt load reduction of over 30% for effective street sweeping programs and a 5% silt load reduction when limiting the amount of sand and salt applied to the roads. Ogden City has also implemented a number of specific projects that have a positive effect in reducing particulate emissions including park and ride lots, storm water improvements, shoulder widening and edge striping, and addition of curb and gutter on several projects.

From this demonstration it is concluded that the RTP conforms under the Emission Reductions Criteria for areas without motor vehicle emissions budgets for PM<sub>10</sub> in Ogden City.

**Table 9a**

**Ogden City - PM10 (NOx Precursor)  
Conformity Determination**

Year	<i>d</i>	<i>c</i>	<i>c</i>	<i>e</i>
	2016	2020	2030	2040
<b>1990 Emissions (tons/day)</b>	6.92	6.92	6.92	6.92
<i>emission rate (grams/mile)</i>	1.44	1.08	0.82	0.74
<i>seasonal VMT</i>	1,657,393	1,760,837	2,000,337	2,213,895
<b>Projection* (tons/day)</b>	2.64	2.10	1.80	1.82
<b>Conformity (Projection &lt; 1990 Emissions?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*a - attainment year, b - budget year, c - 10-year rule, d - no budget 5-year rule, e - last year of Plan,*

*\* Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.*



Table 9b

**Ogden City - PM10 (Primary Particulates\*\*) Conformity Determination**

Year	<sup>d</sup> 2016	<sup>c</sup> 2020	<sup>c</sup> 2030	<sup>e</sup> 2040
<b>1990 Emissions (tons/day)</b>	1.09	1.09	1.09	1.09
<i>emission rates (grams/mile)</i>				
<i>exhaust particulates - (Ec, Oc, SO4)</i>	0.0597	0.0476	0.0328	0.0298
<i>brake particulates</i>	0.0363	0.0369	0.0438	0.0401
<i>tire particulates</i>	0.0083	0.0085	0.0088	0.0087
<i>road dust particulates</i>	0.2638	0.2627	0.2605	0.2586
<i>seasonal VMT</i>	1,657,393	1,760,837	2,000,337	2,213,895
<b>Projection* (tons/day)</b>	0.67	0.69	0.76	0.82
<b>Conformity (Projection &lt; 1990 Emissions?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

\*\* Includes road dust, elemental carbon, organic carbon, gasoline exhaust particulates, tire wear, and brake wear.

a - attainment year, b - budget year, c - 10-year rule, d - no budget 5-year rule, e - last year of Plan,

\* Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

**Salt Lake County PM10 Conformity**

The PM<sub>10</sub> SIP for Salt Lake County does not define a budget beyond the year 2003. Therefore, conformity tests are required only for analysis years which are identified in accordance with 40 CFR 93.118. All analysis years after 2003 must meet the 2003 budgets for primary particulates and secondary particulates (see the discussion above under Ogden PM<sub>10</sub> Conformity for an explanation of primary and secondary PM<sub>10</sub> emissions). The State air quality rule R307-310 allows a portion of the surplus primary PM<sub>10</sub> budget to be applied to the secondary PM<sub>10</sub> budget for conformity purposes as seen for the year 2015 in Table 10 below. For the analysis years 2020, 2030, and 2040, no budget adjustments were necessary.

Table 10

**Salt Lake County - PM10 Budgets  
Direct (Dust) and Precursor (NO<sub>x</sub>) PM10 Emission Budgets  
(tons/day)**

Year	2020	2030	2040
<b>Total PM10 Budget<sup>#</sup></b>	72.60	72.60	72.60
<i>Direct PM10 Budget to be Traded</i>	0.00	0.00	0.00
<b>Direct PM10 Budget</b>	40.30	40.30	40.30
<b>NO<sub>x</sub> Precursor PM10 Budget</b>	32.30	32.30	32.30

Table 11a and Table 11b below demonstrate that projected mobile source emissions are within the emission budget defined in the SIP. The years listed in Table 10a and Table 10b are in accordance with requirements of the Conformity Rule (40 CFR Part 93) as noted in the tables.

From this demonstration it is concluded that the RTP conforms to the applicable controls and goals of the State Implementation Plan for PM<sub>10</sub> in Salt Lake County.

**Table 11a**  
**Salt Lake County - PM10 (NOx Precursor)**  
**Conformity Determination**

Year	<sup>c</sup> 2020	<sup>c</sup> 2030	<sup>e</sup> 2040
<b>Budget<sup>#</sup> (tons/day)</b>	32.30	32.30	32.30
<i>emission rate (grams/mile)</i>	0.70	0.51	0.50
<i>seasonal VMT</i>	31,976,820	38,125,117	44,599,126
<b>Projection* (tons/day)</b>	24.52	21.42	24.37
<b>Conformity (Projection &lt; Budget?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*a - attainment year, b - budget year, c - 10-year rule, d - no budget 5-year rule, e - last year of Plan,*

<sup>#</sup> *WFRC Memo to Jeff Houk of EPA, April 15, 1994.*

\* *Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.*

**Table 11b**  
**Salt Lake County - PM10 (Primary Particulates\*\*)**  
**Conformity Determination**

Year	<sup>c</sup> 2020	<sup>c</sup> 2030	<sup>e</sup> 2040
<b>Budget<sup>#</sup> (tons/day)</b>	40.30	40.30	40.30
<i>emission rates (grams/mile)</i>			
<i>exhaust particulates - (Ec, Oc, SO4)</i>	0.0584	0.0480	0.0475
<i>brake particulates</i>	0.0249	0.0260	0.0257
<i>tire particulates</i>	0.0069	0.0070	0.0069
<i>road dust particulates</i>	0.2070	0.2026	0.1928
<i>seasonal VMT</i>	31,976,820	38,125,117	44,599,126
<b>Projection* (tons/day)</b>	10.48	11.92	13.41
<b>Conformity (Projection &lt; Budget?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

\*\* *Includes road dust, elemental carbon, organic carbon, gasoline exhaust particulates, tire wear, and brake wear.*

<sup>#</sup> *WFRC Memo to Jeff Houk of EPA, April 15, 1994.*

*a - attainment year, b - budget year, c - 10-year rule, d - no budget 5-year rule, e - last year of Plan,*

\* *Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.*

### Salt Lake PM<sub>2.5</sub> Conformity (Includes Davis, Salt Lake, and portions of Weber, Tooele, and Box Elder Counties)

Davis, Salt Lake, and portions of Weber, Tooele, and Box Elder Counties have been designated as non-attainment areas under the new PM<sub>2.5</sub> standard (35 µg/m<sup>3</sup>) that was established in 2006. Work has begun on a PM<sub>2.5</sub> section of the State Implementation Plan which will establish a motor vehicle emission budget for emissions associated with PM<sub>2.5</sub>. Until the PM<sub>2.5</sub> SIP is completed and approved by EPA, PM<sub>2.5</sub> interim conformity requirements apply. EPA interim conformity for PM<sub>2.5</sub> emissions requires that future NOx emissions (a precursor to PM<sub>2.5</sub>) and primary particulate emissions not exceed 2008 levels.

Table 12a below demonstrates that projected mobile source emissions of NOx (a precursor to PM<sub>2.5</sub> emissions) in the five-county PM<sub>2.5</sub> non-attainment area are less than 2008 NOx emissions. Table 12b below demonstrates that direct particle emissions of PM<sub>2.5</sub> in the five-county PM<sub>2.5</sub> non-attainment area are also less than 2008 direct particle emissions. Direct particle emissions include exhaust emissions of elemental carbon, organic carbon, and sulfates (SO<sub>4</sub>); and mechanical emissions from brake wear and tire wear.

From this demonstration it is concluded that the RTP conforms under the interim conformity guidelines for PM<sub>2.5</sub> areas without an approved motor vehicle emissions budget for the Salt Lake PM<sub>2.5</sub> non-attainment area.

**Table 12a**  
**Salt Lake Area<sup>#</sup> - PM<sub>2.5</sub> (NOx Precursor)**  
**Conformity Determination**

Year	<sup>a</sup> 2014	<sup>c</sup> 2020	<sup>c</sup> 2030	<sup>e</sup> 2040
<b>2008 Emissions (tons/day)</b>	105.88	105.88	105.88	105.88
<i>emission rate (grams/mile)</i>	1.40	0.80	0.57	0.55
<i>seasonal VMT</i>	46,459,302	52,629,105	62,376,600	72,782,702
<b>Projection* (tons/day)</b>	71.64	46.54	39.52	44.35
<b>Conformity (Projection &lt; Budget?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

<sup>#</sup> Salt Lake PM<sub>2.5</sub> Non-Attainment Area includes: Davis, Salt Lake, and portions of Weber, Box Elder and Tooele Counties.

<sup>a</sup> - attainment year, <sup>b</sup> - budget year, <sup>c</sup> - 10-year rule, <sup>d</sup> - no budget 5-year rule, <sup>e</sup> - last year of Plan,

\* Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

**Table 12b**  
**Salt Lake Area<sup>#</sup> - PM2.5 (Direct PM Emissions<sup>\*\*</sup>)**  
**Conformity Determination**

<b>Year</b>	<i>a</i>	<i>c</i>	<i>c</i>	<i>e</i>
	<b>2014</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>
<b>2008 Emissions (tons/day)</b>	8.19	8.19	8.19	8.19
<i>emission rate (grams/mile)</i>	0.14	0.12	0.10	0.10
<i>seasonal VMT</i>	46,459,302	52,629,105	62,376,600	72,782,702
<b>Projection* (tons/day)</b>	7.25	6.79	7.17	8.15
<b>Conformity (Projection &lt; Budget?)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*# Salt Lake PM2.5 Non-Attainment Area includes: Weber, Davis, Salt Lake, and portions of Box Elder and Tooele Counties.*

*a - attainment year, b - budget year, c - 10-year rule, d - no budget 5-year rule, e - last year of Plan,*

*\* Projection = Emission Rate x seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.*

*\*\* Direct PM for interim conformity includes road dust, gasoline particulates, elemental carbon, organic carbon, SO<sub>4</sub>, brake wear, and tire wear.*

### **Salt Lake and Davis County Ozone Conformity**

The 1-hour ozone standard was revoked on June 19, 2005. Therefore, a conformity analysis under the 1-hour ozone standard in Salt Lake and Davis Counties is no longer required.

The current 8-hour ozone standard is 75 ppb. All counties within the Wasatch Front area are in attainment of the current 8-hour ozone standard.

# **Appendix – 1**

## **Definition of Regionally Significant Projects**

**Process for Determining Regionally Significant Facilities  
for Purposes of Regional Emissions Analysis (see CFR 93.105.2.c.1.ii)**

Background: 40 FR 93.101 defines “regionally significant project” and associated facilities for the purpose of transportation conformity. The federal definition does not specifically include minor arterials. The following definitions and processes will be used by the Wasatch Front Regional Council (WFRC) and Mountainlands Association of Governments (MAG) in consultation with DAQ, UDOT, UTA, FHWA, FTA, and EPA to determine which facilities shall be considered regionally significant for purposes of regional emissions analysis. It is the practice of the MPO to include minor arterials and collectors in the travel model for the purpose of accurately modeling regional VMT and associated vehicle emissions. The inclusion of minor arterials and collectors in the travel model, however, does not identify these facilities as regionally significant.

1. Any new or existing facility with a functional classification of principal arterial or higher on the latest UDOT Functional Classification Map (currently found at <http://www.dot.utah.gov/index.php/m=c/tid=1228>) shall be considered regionally significant.
2. Any fixed guide-way transit service including light rail, commuter rail, or portions of bus rapid transit that involve exclusive right-of-way shall be considered regionally significant.
3. As traffic conditions change in the future, the MPO’s - in consultation with DAQ, UDOT, FHWA, and EPA (and UTA and FTA in cases involving transit facilities) - will consider 1) the relative importance of minor arterials serving major activity centers, and 2) the absence of principal arterials in the vicinity to determine if any minor arterials in addition to those listed in Exhibit A should be considered as regionally significant for purposes of regional emissions analysis.

**Exhibit A**  
**Minor Arterials Determined to be Regionally Significant**  
**for Purposes of Regional Emissions Analysis**

In consultation with DAQ, UDOT, FHWA, and EPA; and based on inspection and engineering judgment of current traffic conditions; and based on application of the “Process for Determining Regionally Significant Facilities for Purposes of Regional Emissions Analysis” agreed upon by the aforementioned agencies; the WFRC and MAG designate the following minor arterials as regionally significant.

**Salt Lake County**

300 West/Beck Street: 600 South to I-15  
U-111: SR-201 to New Bingham Highway  
New Bingham Highway: U-111 to 9000 South

**Davis County**

Syracuse Road: I-15 west to Antelope Island  
SR-108 (2000 West): Syracuse Road to Weber County line

**Weber County**

SR-108 (3500 West): Davis County line to Midland Drive  
SR-108 (Midland Drive): 3500 West to Hinckley Drive  
SR-79 (Hinckley Drive): SR-108 to I-15

**Utah County**

Redwood Road: Salt Lake County line to Highway-73

**Process for Determining Significant Change in Design Concept and Scope  
for Purposes of Regional Emissions Analysis (see CFR 93.105.2.c.1.ii)**

Changes to regionally significant projects may or may not necessitate a new regional emissions analysis. The following definitions and processes will be used to determine what changes to project concept and scope are to be considered significant or not for purposes of regional emissions analysis.

1. Adding or extending freeway auxiliary lanes or weaving lanes between interchanges is not considered a significant change in concept and scope since these lanes are not normally included in the travel model.
2. Adding or extending freeway auxiliary/weaving lanes from one interchange to a point beyond the next interchange is considered a significant change in concept and scope.
3. A change to a regionally significant project defined in the Regional Transportation Plan that does not change how the project is defined in the travel model is not considered a significant change in concept and scope. These changes include but are not limited to lane or shoulder widening, cross section (other than the number of through lanes), alignment, interchange configuration, intersection traffic control, turn lanes, continuous or center turn lanes, and storage lanes.
4. A change to a regionally significant project defined in the Regional Transportation Plan that does alter the number of through lanes, lane capacity, or speed classification as defined in the travel model is considered a significant change in concept and scope.
5. Advancing or delaying the planned implementation of a regionally significant project that does not result in a change in the transportation network described in the travel model for any horizon year (as defined in CFR 93.101) is not considered a significant change in concept and scope.
6. Advancing or delaying the planned implementation of a regionally significant project that does result in a change in the transportation network described in the travel model for any horizon year (as defined in CFR 93.101) is considered a significant change in concept and scope.
7. Project changes not addressed in the above statements will be decided on a case by case basis through consultation by representatives from DAQ, WFRC, MAG, UDOT, UTA, FHWA, FTA, and EPA.



## **Appendix-2**

### **Highway and Transit Projects Amended 2011-2040 RTP**

### **Salt Lake/West Valley and Ogden/Layton Areas**

## 2013 Amended RTP HIGHWAY PROJECTS LIST

### Project Amendments to the 2011-2040 RTP

#### Project Description

#### Weber County

**Pioneer Road – SR126 to 4700 West** – *Marriott-Slaterville has requested this project be amended into Phase 1 of the RTP. Marriott-Slaterville has identified operational improvements regarding this section of the facility.*

**Funding:** Potential for Weber County corridor preservation funds and County 1/4c Local Option Sales Tax

**RTP Amendment:** Include the project in Phase 1 of the Plan. (This project is not currently in the RTP).

**Adams Avenue – US-89 Washington Blvd to Washington Terrace City Limits** – *Washington Terrace has requested this project be amended into Phase 1 of the RTP. This project will convert the facility from 2 to 4 lanes to accommodate increasing demand.*

**Funding:** STP Funds already programmed for reconstruction (\$4.3M)

**RTP Amendment:** Move the project from Phase 2 to Phase 1.

**4000 South (SR-37) – 5100 West to 1900 West (SR-126)** – *UDOT has requested this project be amended into Phase 1 of the RTP. This project will convert the facility from 2 to 4 lanes to accommodate increasing demand.*

**Funding:** House Bill 377 adopted in the 2013 Utah State Legislative session programmed \$15M for this project and Weber County has programmed \$10M for this project.

**RTP Amendment:** Move the project from Phase 2 to Phase 1.

#### Salt Lake County

**Bangerter Highway and Redwood Road Interchange** – *UDOT has requested this project be amended into Phase 1 of the RTP. This project would construct a grade separated interchange, improving traffic flow on Bangerter and Redwood Road. Environmental analysis would be conducted in 2013 with anticipated construction in 2014.*

**Funding:** House Bill 377 adopted in the 2013 Utah State Legislative session programmed \$42M for this project.

**RTP Amendment:** Move the project from Phase 3 to Phase 1.

## 2011-2040 RTP Amendments (Number 4) January 2014

### Proposed I-15 Point of the Mountain Projects

#### 1. Location: I-15 from 12300 South to Bangerter Highway

**Description:** Increase the number of total lanes from 5 northbound and 5 southbound to 5 northbound and 6 southbound lanes.

**Proposed Design:** The proposed design remains the same for northbound I-15, including the auxiliary lane. The southbound onramp from 12300 South, rather than serving as an auxiliary lane and an exit-only lane to Bangerter Highway, would instead continue through the Bangerter Highway structure, thereby providing a fifth general purpose and one High Occupancy Toll (HOT) lane profile through this section.

**Funding Source:** Transportation Investment Fund (TIF)

**RTP Amendment:** The above proposed design improvements and moving this project to Phase 1 of the 2011-2040 RTP.

#### 2. Location: I-15 from Bangerter Highway to the Utah County Line

**Description:** Increase the current number of lanes in this section of I-15, from 4 and 5 north and southbound lanes, to a total of 6 lanes, thereby providing a fifth general purpose and one High Occupancy Toll (HOT) lane profile through this section.

**Proposed Design:** The proposed design remains the same as the FEIS, except that the truck-climbing lanes would not be constructed at this time. The 5 general purpose lanes in each direction is consistent with the RTP and the Air Quality Conformity determination for Phase 2.

**Funding Source:** Transportation Investment Fund (TIF)

**RTP Amendment:** The above proposed design improvements and moving this project to Phase 1 of the 2011-2040 RTP.

**Cost:** \$250,000,000

In addition to the above, the Utah Department of Transportation is requesting an amendment to the 2011-2040 RTP to include the following projects in Phase 1 of the RTP.

#### 3. I-15 Interchange at I-215 (Near Fashion Place Mall – Approximately 6600 South).

- Move from Phase 3 to Phase 1

**Cost:** \$66,000,000

The following projects are new additions to the RTP. While they are Congestion Management System / Operational type projects, which are not typically included in the RTP, the UDOT is requesting their inclusion to maintain full transparency and funding flexibility through the Transportation Investment Fund.

#### 4. I-15 SR-201 to 5300 South

- Add a southbound auxiliary lane from SR-201 to 5300 South

- Add an additional, left turn lane (making it a triple left) on I-15 southbound ramp to eastbound 3300 South
- May need to modify the SPUI with compound curves

**Cost:** \$32,000,000

**5. I-15 Northbound 9000 South to I-215**

- Decrease snow storage to 5 feet
- Add an auxiliary lane using existing shoulder from 9000 South to the I-215 off ramp
- Three lanes exit to I-215 (2 trap or "exit only" lanes, 1 option lane, with emergency pullout)

**Cost:** \$6,000,000

**6. I-15 400 South to Bangerter Highway**

- Add second northbound and southbound HOV lane during peak hours using inside shoulder and dynamic lane use signing

**Cost:** \$11,000,000

**7. I-15 400 South to 10600 South**

- I-15 ITS improvements
- Integrated corridor management
- Freeway to freeway ramp metering
- Traffic signal optimization

**Cost:** \$9,000,000

**8. I-215 SR-201 to 4700 South**

- Add auxiliary lanes

**Cost:** \$35,000,000

Layton City is requesting an amendment to the 2011-2040 RTP to include the following project in Phase 1 of the RTP.

**9. I-15 Overpass at 1200 North Layton**

- Move facility from the Unfunded Phase to Phase 1

**Cost:** \$20,000,000

Moving the projects listed above to Phase 1 of the 2011-2040 RTP will require that the following projects currently in Phase 1 will need to be moved to Phase 2.

- SR-171/3500 South Mountain View corridor to 4000 West \$105,000,000
- US-89 / Antelope Drive Interchange \$72,000,000
- Layton Parkway – 1475 West to West Davis Corridor \$17,000,000

## **2011-2040 RTP Amendments (Number 5) May 2014**

1. Antelope Drive (Main Street - Woodland Park Drive) - Widen from 4 lanes to 6 lanes by 2020 (project is new to RTP and placed in phase 1).
2. State Street (11400 South - 10600 South) - Widen from 4 lanes to 6 lanes by 2020 (project is new to RTP and placed in phase 1).
3. Bangerter Highway interchange at 9000 South - new interchange by 2020 (moved from phase 3 to phase 1).
4. Advance the upgrade of the Hillfield Road interchange on I-15 from Phase 2 to Phase 1 (conversion to a SPUI).

ID#	PROJECT	DESCRIPTION	PHASE	
<b>Salt Lake County, East-West Facilities</b>				
S-1	<b>Sports Complex Boulevard (2400 North)</b> I-215 East Frontage Road to Redwood Road	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 0.5 miles / Local Bike Class: None	1
S-2	<b>700 South / 500 South</b> 5600 West to 2700 West	Widening: 2 to 4 lanes ROW: 2007 - 50 ft / 2040 - 99 ft	COL / 3.6 miles / Local Bike Class: 2	3
S-3	<b>California Avenue</b> Mountain View Corridor to 4800 West	Widening: 2 to 4 lanes ROW: 2007 - 110 ft / 2040 - 110 ft	MA / 1 miles / Local Bike Class: Priority 2	3
S-4	<b>I-80</b> 1300 East to I-215 (East)	Widening: 6 to 8 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 3.5 miles / UDOT Bike Class: Priority 1	2
S-5	<b>I-80</b> I-215 (East) to Summit County Line	Widening: 3 EB to 4 EB lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 11 miles / UDOT Bike Class: 3	3
S-6	<b>2100 South</b> I-15 to 1300 East	Operational	MA / 2.7 miles / Local Bike Class: 2	1
S-7	<b>SR-201</b> I-80 (West) to SR-111 Bypass	Widening: 4 to 6 lanes ROW: 2007 - 300 ft / 2040 - 300 ft	FWY / 6.6 miles / UDOT Bike Class: Priority 1	3
S-8	<b>SR-201</b> SR-111 Bypass to Mountain View Corridor	Widening: 4 to 6 lanes ROW: 2007 - 300 ft / 2040 - 300 ft	FWY / 4 miles / UDOT Bike Class: Priority 1	2
S-9	<b>SR-201</b> Mountain View Corridor to I-15	Widening: 6 to 6+HOT lanes ROW: 2007 - 300 ft / 2040 - 300 ft	FWY / 7 miles / UDOT Bike Class: None	2
S-10	<b>Parkway Boulevard (2700 South)</b> 7200 West to 5600 West	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 86 ft	COL / 2 miles / Local Bike Class: 2	3
S-11	<b>3300 South / 3500 South</b> I-215 (West) to Highland Drive	Operational	PA / 2.7 miles / UDOT Bike Class: 1, 2, and None	1
S-12	<b>3500 South</b> SR-111 Bypass to 7200 West	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	PA / 1.3 miles / Local Bike Class: 2 and 3	3
S-13	<b>3500 South</b> 7200 West to Mountain View Corridor	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	PA / 1.7 miles / Local Bike Class: None	2
S-14	<b>3500 South</b> Mountain View Corridor to 4000 West	Widening: 2/4 to 6 lanes ROW: 2007 - 80 ft / 2040 - 113 ft	PA / 2.3 miles / UDOT Bike Class: None	1
S-15	<b>4100 South</b> SR-111 to Mountain View Corridor	Widening: 2 to 4 lanes ROW: 2007 - 76 ft / 2040 - 99 ft	MA / 4.3 miles / Local Bike Class: Priority 2	3
S-16	<b>4700 South</b> 6400 West to 4000 West	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 110 ft	PA / 2.3 miles / Local Bike Class: 2	2
S-17	<b>4700 South</b> 4000 West to 2700 West	Widening: 4 to 6 lanes ROW: 2007 - 110 ft / 2040 - 110 ft	PA / 1.5 miles / Local Bike Class: 3	1
S-18	<b>4500 South / 4700 South</b> Redwood Road to I-15	Widening: 4 to 6 lanes ROW: 2007 - 150 ft / 2040 - 150 ft	PA / 2 miles / UDOT Bike Class: 3 and None	3
S-19	<b>4500 South</b> 900 East to 2300 East	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 110 ft	PA / 2.2 miles / UDOT Bike Class: 2 and 3	3
S-20	<b>5400 South</b> SR-111 to Mountain View Corridor	Widening: 2 to 4 lanes ROW: 2007 - 70 ft / 2040 - 99 ft	MA / 2.4 miles / UDOT Bike Class: Priority 2	2
S-21	<b>5400 South</b> SR-111 to Mountain View Corridor	Widening: 4 to 6 lanes ROW: 2007 - 70 ft / 2040 - 123 ft	MA / 2.4 miles / UDOT Bike Class: Priority 2	3
S-22	<b>5400 South</b> Mountain View Corridor to Bangert Highway	Widening: 4 to 6 lanes ROW: 2007 - 65 ft / 2040 - 110 ft	MA / 2.5 miles / UDOT Bike Class: Priority 2 and 3	1
S-23	<b>5400 South</b> 5600 West to Bangert Highway	Operational	MA / 2.3 miles / UDOT Bike Class: Priority 2 and 3	1
S-24	<b>5400 South</b> Redwood Road to I-15	Operational	MA / 2 miles / UDOT Bike Class: Priority 3 and None	1
S-25	<b>6200 South</b> SR-111 to Mountain View Corridor	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 1.6 miles / Local Bike Class: 1 and 2	1
S-27	<b>6200 South</b> Mountain View Corridor to 5600 West	Widening/NC: 2/0 to 4 ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 0.3 miles / Local Bike Class: 2	1
S-28	<b>7000 South</b> Bangert Highway to Redwood Road	Widening: 3 to 4 lanes ROW: 2007 - 56 ft / 2040 - 99 ft	MA / 1.9 miles / Local Bike Class: 2	2
S-29	<b>7000 South / 7200 South</b> Redwood Road to Bingham Junction Boulevard	Widening: 4 to 6 lanes ROW: 2007 - 90 ft / 2040 - 123 ft	MA / 2 miles / UDOT Bike Class: 1 and 2	3
S-30	<b>7000 South / 7200 South</b> Bingham Junction Boulevard to I-15	Widening: 4 to 6 lanes ROW: 2007 - 90 ft / 2040 - 123 ft	MA / 0.6 miles / UDOT Bike Class: 1	1
S-31	<b>Fort Union Boulevard</b> Union Park Boulevard to 3000 East	Operational	MA / 2.8 miles / Local Bike Class: 2	1
S-32	<b>7800 South</b> SR-111 to New Bingham Highway	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 120 ft	MA / 3.7 miles / Local Bike Class: Priority 2	1
S-34	<b>9000 South</b> SR-111 to 5600 West	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	PA / 1.7 miles / Local Bike Class: 2	1
S-35	<b>9000 South</b> 5600 West to Bangert Highway	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 2.5 miles / UDOT Bike Class: 2	3
S-36	<b>9000 South</b> Bangert Highway to I-15	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 4 miles / UDOT Bike Class: 1 and 2	2
S-37	<b>10200 South</b> SR-111 to Mountain View Corridor	Widening: 2 to 4 lanes ROW: 2007 - 82 ft / 2040 - 110 ft	COL / 2.6 miles / Local Bike Class: 2	1
S-38	<b>10400 South / 10800 South</b> SR-111 to Mountain View Corridor	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 2 miles / Local Bike Class: None	2
S-39	<b>10400 South / 10800 South</b> Mountain View Corridor to 4800 West	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 1.2 miles / Local Bike Class: 1 and None	1
S-40	<b>10600 South / 10400 South</b> Bangert Highway to I-15	Operational	MA / 4.2 miles / UDOT Bike Class: 2 and None	1
S-41	<b>10600 South</b> 1300 East to Highland Drive	Widening: 2 to 4 lanes ROW: 2007 - 86 ft / 2040 - 86 ft	MA / 0.9 miles / Local Bike Class: 1	1
S-42	<b>11800 South</b> SR-111 to 5600 West	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 99 ft	MA / 2.4 miles / Local Bike Class: Priority 2	2

ID#	PROJECT	DESCRIPTION	PHASE	
S-43	<b>11400 South</b> 11800 South / 5600 West to Valdania Street (5200 West)	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 110 ft	MA / 1 miles / Local Bike Class: Priority 2	1
S-45	<b>11400 South</b> 1300 East to Highland Drive	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 99 ft	MA / 1.2 miles / Local Bike Class: Priority 3 and None	3
S-46	<b>Herriman Parkway (12600 South)</b> 8000 West to 6000 West	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	PA / 1.5 miles / Local Bike Class: 1 or 2	3
S-47	<b>12600 South</b> Mountain View Corridor to Bangert Highway	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 1.6 miles / Local Bike Class: Priority 2	2
S-48	<b>12300 South / 12600 South</b> Redwood Road to 700 East	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 2 miles / UDOT Bike Class: Priority 2	2
S-49	<b>Riverton Boulevard</b> 4570 West to 13400 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 89 ft	COL / 0.6 miles / Local Bike Class: None	1
S-50	<b>13400 South</b> 8000 West to Mountain View Corridor	Widening/NC: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	COL / 3 miles / Local Bike Class: 2 and 3	3
S-51	<b>13400 South</b> Mountain View Corridor to Bangert Highway	Widening: 4 to 6 lanes ROW: 2007 - 66 ft / 2040 - 106 ft	COL / 1.7 miles / Local Bike Class: 2	1
S-52	<b>Juniper Crest</b> 4800 West to Mountain View Corridor	New Construction: 0 to 6 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 1 miles / Local Bike Class: 2	1
S-53	<b>Juniper Crest / 14400 South</b> Mountain View Corridor to 3600 West	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 0.9 miles / Local Bike Class: Priority 2 and 3	1
S-54	<b>Traverse Ridge Road</b> Highland Drive to Mike Weir Drive	Widening: 2 to 4 lanes ROW: 2007 - 89 ft / 2040 - 99 ft	COL / 1.3 miles / Local Bike Class: 2	3
S-55	<b>Porter Rockwell Road</b> Redwood Road to 14600 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 167 ft	PA / 3 miles / Local Bike Class: Priority 1 and 2	1
<b>Salt Lake County, North-South Facilities</b>				
S-56	<b>SR-111 Bypass</b> SR-201 to SR-111	Widening/NC: 0/2 to 4 lanes ROW: 2007 - 55 ft / 2040 - 150 ft	PA / 2.5 miles / UDOT Bike Class: 1 and None	3
S-57	<b>SR-111</b> 5400 South to 11800 South	Widening: 2 to 4 lanes ROW: 2007 - 106 ft / 2040 - 106 ft	PA / 8.5 miles / Local-UDOT Bike Class: Priority 2	2
S-58	<b>8000 West</b> 11800 South to 13400 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 106 ft	COL / 1.8 miles / Local Bike Class: None	3
S-59	<b>7200 West</b> SR-201 to 3500 South	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 86 ft	MA / 2.5 miles / Local Bike Class: 3	1
S-61	<b>Mountain View Corridor</b> SR-201 to 4100 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 328 ft	PA / 3 miles / UDOT Bike Class: Priority 1 & None	1
S-62	<b>Mountain View Corridor</b> 4100 South to 5400 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 328 ft	PA / 2.2 miles / UDOT Bike Class: Priority 1	1
S-63	<b>Mountain View Corridor</b> 5400 South to Redwood Road	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 328 ft	PA / 14.4 miles / UDOT Bike Class: Priority 1 & None	1
S-64	<b>Mountain View Corridor</b> Redwood Road to Utah County Line	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 328 ft	PA / 2.9 miles / UDOT Bike Class: Priority 1	2
S-66	<b>Mountain View Corridor</b> SR-201 to 4100 South	Widening & Interchanges: 4 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 3 miles / UDOT Bike Class: Priority 1 & None	2
S-67	<b>Mountain View Corridor</b> 4100 South to 5400 South	Widening & Interchanges: 4 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 2.2 miles / UDOT Bike Class: Priority 1	2
S-68	<b>Mountain View Corridor</b> 5400 South to 9000 South	Widening & Interchanges: 4 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 4.5 miles / UDOT Bike Class: Priority 1 and None	2
S-69	<b>Mountain View Corridor</b> 9000 South to 10200 South	Widening & Interchanges: 4 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 1.5 miles / UDOT Bike Class: Priority 1 and None	3
S-70	<b>Mountain View Corridor</b> 10200 South to Redwood Road	New Construction & Ints: 0 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 8.4 miles / UDOT Bike Class: Priority 1 & None	3
S-71	<b>Mountain View Corridor</b> Redwood Road to Utah County Line	Widening & Interchanges: 4 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 2.9 miles / UDOT Bike Class: None	2
S-72	<b>Mountain View Corridor</b> SR-201 to Utah County Line	Widening: 6 to 6+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 22.5 miles / UDOT Bike Class: Priority 1 & None	3
S-73	<b>5600 West</b> I-80 to SR-201	Widening: 2 to 4 lanes ROW: 2007 - 86 ft / 2040 - 120 ft	MA / 3.1 miles / UDOT Bike Class: Priority 2	2
S-74	<b>5600 West</b> 2700 South to 6200 South	Operational	PA / 5 miles / Local-UDOT Bike Class: 2	1
S-75	<b>5600 West</b> 6200 South to New Bingham Highway	Widen/ NC: 0/2 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 3.1 miles / Local Bike Class: 2	1
S-76	<b>5600 West</b> 6200 South to New Bingham Highway	Operational	MA / 3.1 miles / Local Bike Class: 2	2
S-77	<b>5600 West</b> New Bingham Highway to Old Bingham Highway	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	COL / 1.5 miles / Local Bike Class: 2	2
S-78	<b>5600 West</b> Old Bingham Highway to 10400 South / 10800 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 1.7 miles / Local Bike Class: None	1
S-79	<b>5600 West</b> 11800 South to 13100 South	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 3.2 miles / Local Bike Class: 2	1
S-80	<b>5600 West Connection</b> 5600 West to 11800 South	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 0.7 miles / Local Bike Class: 2 and None	1
S-81	<b>4800 West</b> SR-201 to Lake Park Boulevard (2700 South)	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 0.9 miles / Local Bike Class: Priority 3	2
S-82	<b>4800 West</b> Skye Drive to Mountain View Corridor	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 2.7 miles / Local Bike Class: Priority 2 and None	1
S-83	<b>4570 West</b> 12600 South to 13400 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 89 ft	COL / 1 miles / Local Bike Class: None	1
S-84	<b>4200 West / Riverton Boulevard</b> 13400 South to 14400 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 89 ft	COL / 1.5 miles / Local Bike Class: None	1
S-85	<b>4150 West</b> 12600 South to Riverton Boulevard	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 0.6 miles / Local Bike Class: None	1
S-86	<b>3600 West</b> 13400 South to 14400 South	Widening: 2 to 4 lanes ROW: 2007 - 73 ft / 2040 - 89 ft	COL / 1.3 miles / Local Bike Class: Priority 3	3

ID#	PROJECT	DESCRIPTION	PHASE	
S-87	<b>3200 West</b> California Avenue to 1820 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 99 ft	COL / 0.7 miles / Local Bike Class: 2	2
S-88	<b>3200 West</b> 1820 South to Parkway Boulevard (2700 South)	Widening: 2 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	COL / 1.3 miles / Local Bike Class: 2	2
S-89	<b>I-215</b> 2100 North to I-80	Widening: 6 to 8 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 3.3 miles / UDOT Bike Class: None	3
S-90	<b>I-215 Frontage Road</b> 2700 South to 4100 South	New Construction: 0 to 1 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 2.1 miles / Local Bike Class: None	1
S-91	<b>Redwood Road</b> I-215 (North) to 1000 North	Widening: 2 to 4 lanes ROW: 2007 - 110 ft / 2040 - 110 ft	MA / 3 miles / UDOT Bike Class: 2	3
S-92	<b>Redwood Road</b> SR-201 to 4700 South	Operational	PA / 3.9 miles / UDOT Bike Class: 1, 2, and None	1
S-93	<b>Redwood Road</b> 9000 South to Bangerter Highway	Widening: 4 to 6 lanes ROW: 2007 - 66 ft / 2040 - 123 ft	PA / 6 miles / UDOT Bike Class: Priority 2 and None	3
S-94	<b>Redwood Road</b> 9000 South to 11400 South	Operational	PA / 3 miles / UDOT Bike Class: Priority 2 and None	1
S-95	<b>Redwood Road</b> 12600 South to Bangerter Highway	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 99 ft	PA / 1.5 miles / UDOT Bike Class: Priority 2	1
S-96	<b>Redwood Road</b> Bangerter Highway to Porter Rockwell Road	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 2.7 miles / UDOT Bike Class: Priority 2	3
S-97	<b>1200 West</b> 3100 South to 3300 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 0.5 miles / Local Bike Class: 3	1
S-98	<b>Bingham Junction Boulevard</b> 7800 South to 8400 South	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	MA / 2.8 miles / Local Bike Class: 2	1
S-99	<b>Galena Park Boulevard</b> 12300 South to 13490 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 89 ft	COL / 1.8 miles / Local Bike Class: 1 and 3	1
S-100	<b>Lone Peak Parkway</b> 11400 South to 12300 South	Widening: 2 to 4 lanes ROW: 2007 - 65 ft / 2040 - 99 ft	COL / 1.2 miles / Local Bike Class: 2	3
S-101	<b>Lone Peak Parkway</b> 12300 South to Bangerter Highway	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 99 ft	COL / 2 miles / Local Bike Class: 2	1
S-103	<b>I-15 Collectors (Monroe Street)</b> 10000 South to 10600 South	Collector/Distributor: 0 to 1 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 0.7 miles / Local Bike Class: None	1
S-104	<b>I-15</b> 12300 South to Bangerter Highway	Widening: 7+HOV to 8+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 1.6 miles / UDOT Bike Class: None	1
S-105	<b>I-15</b> Bangerter Highway to Utah County Line	Widening: 6/7+HOV to 8+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 3.9 miles / UDOT Bike Class: None	1
S-106	<b>I-15</b> Bangerter Highway to Utah County Line	Widening: 8+HOV to 10+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 3.9 miles / UDOT Bike Class: None	1
S-107	<b>Cottonwood Street</b> 4500 South to Vine Street	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 89 ft	COL / 0.9 miles / Local Bike Class: None	1
S-108	<b>State Street</b> 600 South to I-215	Operational	MA / 8.6 miles / UDOT Bike Class: None	2
S-109	<b>State Street</b> I-215 to 12300 South	Operational	MA / 7.2 miles / UDOT Bike Class: None	1
S-110	<b>State Street</b> 6200 South to 9000 South	Widening: 4 to 6 lanes ROW: 2007 - 100 ft / 2040 - 110 ft	MA / 3.3 miles / UDOT Bike Class: None	1
S-111	<b>900 East</b> 3300 South to 4500 South	Operational	COL / 1.7 miles / Local Bike Class: Priority 2	1
S-112	<b>900 East / 700 East</b> Fort Union Boulevard to 9400 South	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 3 miles / UDOT Bike Class: Priority 2 and 3	3
S-113	<b>700 East</b> 11400 South to 12300 South	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 110 ft	PA / 1.2 miles / UDOT Bike Class: Priority 2	1
S-114	<b>Union Park Boulevard / 1300 East</b> Fort Union Boulevard to 7800 South	Operational	MA / 1.2 miles / Local Bike Class: 1 and None	1
S-115	<b>Highland Drive</b> Murray Holladay Boulevard to Van Winkle Expressway	Operational	PA / 2 miles / Local Bike Class: None	2
S-116	<b>2000 East</b> Fort Union Boulevard to 9400 South	Widening: 4 to 6 lanes ROW: 2007 - 106 ft / 2040 - 123 ft	PA / 3.1 miles / Local Bike Class: Priority 2	3
S-117	<b>Highland Drive</b> 9400 South to 9800 South	Widening: 2 to 4 lanes ROW: 2007 - 106 ft / 2040 - 114 ft	PA / 0.5 miles / Local Bike Class: Priority 2	2
S-118	<b>Highland Drive</b> 9800 South to Draper City Limit	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 114 ft	PA / 2.8 miles / Local Bike Class: Priority 2	3
S-119	<b>Highland Drive</b> Draper City Limit to 14600 South	Widening: 2 to 4 lanes ROW: 2007 - 106 ft / 2040 - 114 ft	PA/MA / 5.8 miles / Local Bike Class: Priority 2	3
S-120	<b>Highland Drive Connection</b> Traverse Ridge Road to 13800 South	Widening: 2 to 4 lanes ROW: 2007 - 106 ft / 2040 - 114 ft	PA / 1.8 miles / Local Bike Class: 2 and None	3
S-121	<b>500 South / Foothill Drive</b> 1300 East to 2300 East	Operational	PA / 2.4 miles / UDOT Bike Class: 2 and 3	1
S-122	<b>Foothill Boulevard</b> 2300 East to I-80	Widening: 4 to 6 lanes ROW: 2007 - 110 ft / 2040 - 110 ft	PA / 2.4 miles / UDOT Bike Class: Priority 1 and 2	3
<b>Salt Lake County, Spot Facilities</b>				
S-123	<b>SR-201 Interchange</b> @ I-80	Upgrade	FWY / UDOT Bike Class: Priority 2	2
S-124	<b>SR-201 Interchange</b> @ SR-111 Bypass	New Construction	FWY / UDOT Bike Class: Priority 3	3
S-125	<b>SR-201 Interchange</b> @ 8400 West	New Construction	FWY / UDOT Bike Class: Priority 3	2
S-126	<b>SR-201 Interchange</b> @ 7200 West	New Construction	FWY / UDOT Bike Class: Priority 3	2
S-127	<b>SR-201 Interchange</b> @ I-215	Upgrade	FWY / UDOT Bike Class: None	3
S-128	<b>SR-111 Rail Road Structure</b> @ 4300 South	Widening: 2 to 4 lanes	PA / UDOT Bike Class: Priority 2	1



ID#	PROJECT	DESCRIPTION	PHASE	
S-130	<b>5600 West Rail Road Crossing</b> @ 750 South	New Construction: 2 to 4 lanes	PA / UDOT Bike Class: Priority 2	1
S-131	<b>4800 West Overpass</b> @ SR-201	New Construction: 0 to 2 lanes	COL / Local Bike Class: Priority 3	2
S-133	<b>Bangerter Highway Interchange</b> @ SR-201	Upgrade	FWY / UDOT Bike Class: None	3
S-140	<b>Bangerter Highway Interchange</b> @ 6200 South	New Construction	FWY / UDOT Bike Class: 2	3
S-141	<b>Bangerter Highway Interchange</b> @ 7000 South	New Construction	FWY / UDOT Bike Class: 2	3
S-142	<b>Bangerter Highway Interchange</b> @ 7800 South	New Construction	FWY / UDOT Bike Class: Priority 2	1
S-143	<b>Bangerter Highway Interchange</b> @ 9000 South	New Construction	FWY / UDOT Bike Class: 2	1
S-144	<b>Bangerter Highway Interchange</b> @ 9800 South	New Construction	FWY / UDOT Bike Class: Priority 2	3
S-145	<b>Bangerter Highway Interchange</b> @ 10400 South	New Construction	FWY / UDOT Bike Class: 2	3
S-146	<b>Bangerter Highway Interchange</b> @ 11400 South	New Construction	FWY / UDOT Bike Class: Priority 2	3
S-147	<b>Bangerter Highway Interchange</b> @ 12600 South	New Construction	FWY / UDOT Bike Class: Priority 2	3
S-148	<b>Bangerter Highway Interchange</b> @ 13400 South	New Construction	FWY / UDOT Bike Class: 2	2
S-149	<b>Bangerter Highway Interchange</b> @ 2700 West	New Construction	FWY / UDOT Bike Class: None	3
S-150	<b>Bangerter Highway Interchange</b> @ Redwood Road	New Construction	FWY / UDOT Bike Class: Priority 2	1
S-151	<b>Bangerter Highway Interchange</b> @ 600 West	New Construction	FWY / UDOT Bike Class: None	1
S-152	<b>Bangerter Highway Interchange</b> @ I-15	Upgrade	FWY / UDOT Bike Class: None	2
S-154	<b>I-215 Interchange</b> @ 5400 South	New Construction	FWY / UDOT Bike Class: Priority 3	3
S-155	<b>I-215 Interchange</b> @ Redwood Road (South)	Upgrade	FWY / UDOT Bike Class: None	3
S-156	<b>I-15 Interchange</b> @ 100 South (HOV Ramps)	New Construction: 0 to 2 lanes	FWY / UDOT Bike Class: None	3
S-157	<b>I-15 Interchange</b> @ I-215 (South)	Upgrade	FWY / UDOT Bike Class: None	1
S-158	<b>13800 South Overpass</b> @ I-15	New Construction: 0 to 2 lanes	COL / Local Bike Class: Priority 2	3
S-160	<b>I-15 Interchange</b> @ 14600 South	Upgrade	FWY / UDOT Bike Class: Priority 2	2
S-161	<b>I-80 Interchange</b> @ I-215 / Foothill Drive	Upgrade	FWY UDOT Bike Class: 3	2
S-163	<b>Avalanche Snow Shed</b> Little Cottonwood Canyon Road @ Whitepine Chutes	New Construction	MA UDOT Bike Class: 2	3
<b>Davis County, East-West Facilities</b>				
D-1	<b>1800 North</b> West Davis Corridor to 2000 West	Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 99 ft	MA / 2 miles / UDOT Bike Class: Priority 2	2
D-2	<b>1800 North</b> 2000 West to SR-126	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 99 ft	MA / 2 miles / UDOT Bike Class: Priority 2	1
D-3	<b>SR-193 Extension</b> West Davis Corridor to 2000 West	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 2.2 miles / UDOT Bike Class: Priority 2	2
D-4	<b>SR-193 Extension</b> 2000 West to State Street	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 110 ft	MA / 2.9 miles / UDOT Bike Class: Priority 2	1
D-6	<b>SR-193</b> I-15 to US-89	Operational	MA / 5 miles / UDOT Bike Class: Priority 2	1
D-7	<b>Syracuse Road (SR-127)</b> West Davis Corridor to 2000 West	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	MA / 1 miles / UDOT Bike Class: Priority 2	1
D-8	<b>Antelope Drive</b> Oak Forest Drive (2500 East) to US-89	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	MA / 0.3 miles / Local Bike Class: Priority 2	1
D-9	<b>Gordon Avenue (1000 North)</b> Fairfield Road to 1600 East	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 86 ft	COL / 0.7 miles / Local Bike Class: None	2
D-10	<b>Gordon Avenue (1000 North)</b> 1600 East to US-89	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 1.3 miles / Local Bike Class: None	2
D-11	<b>Hill Field Road Extension</b> 3650 West (Layton) to 2200 West (Layton)	Widening: 2 to 4 lanes ROW: 2007 - 60 ft / 2040 - 110 ft	MA / 1.5 miles / Local Bike Class: 2	3
D-12	<b>Layton Parkway</b> West Davis Corridor to Flint Street	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	MA / 2.6 miles / Local Bike Class: None	1
D-13	<b>200 North (Kaysville)</b> West Davis Corridor to I-15	Widening: 2 to 4 lanes ROW: 2007 - 60 ft / 2040 - 99 ft	MA / 2.1 miles / Local Bike Class: Priority 2	3
D-14	<b>2600 South / 1100 North</b> Redwood Road to I-15	Operational	MA / 1.4 miles / Local Bike Class: Priority 2	1
D-15	<b>Center Street</b> Redwood Road to US-89	Operational	COL / 1.1 miles / Local Bike Class: Priority 1	1
<b>Davis County, North-South Facilities</b>				
D-16	<b>West Davis Corridor</b> Weber County Line to Syracuse Road	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 320 ft	FWY / 4.8 miles / UDOT Bike Class: Priority 1	2
D-17	<b>West Davis Corridor</b> Syracuse Road to I-15 / US-89 / Legacy Parkway	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 320 ft	FWY / 11.8 miles / UDOT Bike Class: Priority 1	1

ID#	PROJECT	DESCRIPTION	PHASE	
D-18	<b>West Davis Corridor</b> Weber County Line to Syracuse Road	Corridor Preservation ROW: 2007 - 0 ft / 2040 - 320 ft	FWY / 4.8 miles / UDOT Bike Class: Priority 1	1
D-19	<b>3000 West</b> 6000 South (Weber County) to 2300 North	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 75 ft	COL / 0.5 miles / Local Bike Class: Priority 2	1
D-20	<b>2000 West (SR-108)</b> Weber County Line to Syracuse Road (SR-108)	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	MA / 4.4 miles / UDOT Bike Class: Priority 2	1
D-21	<b>2000 West</b> Syracuse Road (SR-108) to West Davis Corridor	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 99 ft	COL / 1.5 miles / Local Bike Class: Priority 2	3
D-22	<b>3650 West (Layton)</b> 700 North to Gentile Street	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 0.7 miles / Local Bike Class: None	3
D-23	<b>2700 West (Layton)</b> Gordon Avenue to Layton Parkway	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 99 ft	COL / 1.8 miles / Local Bike Class: 2	3
D-24	<b>Redwood Road</b> 500 South to 2600 South	Widening: 2 to 4 lanes ROW: 2007 - 100 ft / 2040 - 110 ft	MA / 1.7 miles / UDOT Bike Class: Priority 2	2
D-25	<b>I-15</b> Weber County Line to Hill Field Road (SR-232)	Widening: 6 to 6+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 6.3 miles / UDOT Bike Class: None	1
D-26	<b>I-15</b> US-89 (Farmington) to I-215	Widening: 8 to 8+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 10.6 miles / UDOT Bike Class: None	1
D-28	<b>US-89</b> I-84 to Antelope Drive	Widening: 4 to 6 lanes ROW: 2007 - 120 ft / 2040 - 150 ft	FWY / 3.2 miles / UDOT Bike Class: Priority 2	2
D-29	<b>US-89</b> Antelope Drive to I-15 (Farmington)	Widening: 4 to 6 lanes ROW: 2007 - 120 ft / 2040 - 150 ft	FWY / 7.4 miles / UDOT Bike Class: Priority 2	3
<b>Davis County, Spot Facilities</b>				
D-30	<b>1800 North Overpass</b> @ 500 West Rail Road Crossing	New Construction: 2 to 4 lanes	MA / UDOT Bike Class: Priority 2	1
D-31	<b>I-15 Interchange</b> @ 1800 North	New Construction	FWY / UDOT Bike Class: Priority 2	1
D-32	<b>I-15 Interchange</b> @ 650 North	Upgrade	FWY / UDOT Bike Class: None	3
D-33	<b>I-15 Interchange</b> @ Syracuse Road	Upgrade	FWY / UDOT Bike Class: Priority 2	3
D-35	<b>I-15 Interchange</b> @ Hill Field Road	Upgrade	FWY / UDOT Bike Class: None	1
D-36	<b>I-15 Interchange</b> @ Shepard Lane	New Construction	FWY / UDOT Bike Class: None	1
D-37	<b>I-15 Interchange</b> @ Parrish Lane	Upgrade	FWY / UDOT Bike Class: Priority 2	3
D-38	<b>I-15 Interchange</b> @ 400 North / 500 West	Upgrade	FWY / UDOT Bike Class: None	3
D-39	<b>I-15 Interchange</b> @ 500 South	Upgrade	FWY / UDOT Bike Class: Priority 2	1
D-40	<b>I-15 Interchange</b> @ 2600 South	Upgrade	FWY / UDOT Bike Class: Priority 2	1
D-41	<b>2600 South / 1100 North</b> @ 1150 West Rail Road Crossing	New Construction	MA / Local Bike Class: Priority 2	2
D-42	<b>Legacy Parkway Interchange</b> @ Center Street	New Construction	FWY / UDOT Bike Class: Priority 1	3
D-45	<b>US-89 Interchange</b> @ Antelope Drive	New Construction	FWY / UDOT Bike Class: Priority 2	1
D-46	<b>US-89 Interchange</b> @ Gordon Avenue	New Construction	FWY / UDOT Bike Class: Priority 2	2
D-47	<b>US-89 Interchange</b> @ Oakhills Drive (SR-109)	New Construction	FWY / UDOT Bike Class: Priority 2	2
D-48	<b>US-89 Interchange</b> @ 400 North (Fruit Heights)	New Construction	FWY / UDOT Bike Class: Priority 2	1
D-49	<b>Nicholl's Road Overpass</b> @ US-89	New Construction: 0 to 2 lanes	COL / Local Bike Class: None	3
<b>Weber County, East-West Facilities</b>				
W-1	<b>Skyline Drive (North)</b> US-89 to 450 East	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 3.6 miles / Local Bike Class: Priority 3	1
W-2	<b>Skyline Drive (North)</b> 450 East to 2600 North	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	COL / 3.1 miles / Local Bike Class: Priority 3	2
W-3	<b>1700 North</b> US-89 to 400 East	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 1.2 miles / Local Bike Class: 1	3
W-4	<b>Larsen Lane</b> US-89 / Wall Avenue to 400 East	Widening: 2 to 4 lanes ROW: 2007 - 60 ft / 2040 - 89 ft	MA / 0.5 miles / Local Bike Class: None	3
W-5	<b>Pioneer Road (400 North)</b> I-15 to 1200 West	Re-stripe: 2 to 4 lanes ROW: 2007 - 110 ft / 2040 - 110 ft	COL / 1 miles / Local Bike Class: Priority 2	1
W-5a	<b>Pioneer Road</b> SR-126 (1900 West) to SR-134 (4700 West)	Re-align ROW: 2007 - 110 ft / 2040 - 110 ft	COL / 2.5 miles / Local Bike Class: Priority 2	1
W-6	<b>1200 South</b> SR-67 (North Legacy Corridor) to 4700 West	Widening: 2 to 4 lanes ROW: 2007 - 55 ft / 2040 - 110 ft	COL / 2.1 miles / UDOT Bike Class: Priority 2	3
W-7	<b>1200 South</b> 4700 West to I-15	Widening: 2 to 4 lanes ROW: 2007 - 92 ft / 2040 - 110 ft	PA / 4.8 miles / UDOT Bike Class: Priority 2	2
W-8	<b>20th Street</b> Wall Avenue to Harrison Boulevard	Operational	MA / 1.6 miles / Local Bike Class: None	1
W-9	<b>21st Street</b> Wall Avenue to Adams Avenue	Operational	COL / 0.6 miles / Local Bike Class: None	1
W-10	<b>24th Street</b> I-15 to Lincoln Avenue	Widening: 2 to 4 lanes ROW: 2007 - 86 ft / 2040 - 110 ft	MA / 1.6 miles / UDOT Bike Class: Priority 3	2
W-11	<b>2550 South</b> I-15 to 3500 West	Widening: 2 to 4 lanes ROW: 2007 - 60 ft / 2040 - 86 ft	COL / 3 miles / Local Bike Class: Priority 3	3

ID#	PROJECT	DESCRIPTION	PHASE	
W-12	<b>Country Hills Drive</b> Adams Avenue to Gramercy Avenue	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 99 ft	MA / 1 miles / Local Bike Class: Priority 2	1
W-13	<b>4000 South (SR-37)</b> SR-67 (North Legacy Corridor) to 1900 West (SR-126)	Widening: 2 to 4 lanes ROW: 2007 - 86 ft / 2040 - 110 ft	MA / 3.9 miles / UDOT Bike Class: Priority 3	1
W-14	<b>Midland Drive (SR-108)</b> 3500 West to 1900 West (SR-126)	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	MA / 2.9 miles / UDOT Bike Class: Priority 3	1
W-16	<b>Riverdale Road (SR-26)</b> 1900 West (SR-126) to I-84	Widening: 4 to 6 lanes ROW: 2007 - 99 ft / 2040 - 120 ft	PA / 1 miles / UDOT Bike Class: 3	1
W-17	<b>5600 South / 5500 South</b> 5900 West (Hooper) to 3500 West	Widening: 2 to 4 lanes ROW: 2007 - 68 ft / 2040 - 86 ft	MA / 3.1 miles / UDOT Bike Class: Priority 3	2
W-18	<b>5600 South</b> 3500 West to 1900 West (SR-126)	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 99 ft	MA / 2 miles / UDOT Bike Class: Priority 2 and 3	2
<b>Weber County, North-South Facilities</b>				
W-19	<b>SR-67 (North Legacy Corridor)</b> I-15 (North) to 4000 South	Corridor Preservation ROW: 2007 - 0 ft / 2040 - 220 ft	FWY / 15.6 miles / UDOT Bike Class: Priority 1	1
W-20	<b>SR-67 (North Legacy Corridor)</b> 4000 South to Davis County Line	Corridor Preservation ROW: 2007 - 0 ft / 2040 - 220 ft	FWY / 3.3 miles / UDOT Bike Class: Priority 1	1
W-21	<b>SR-67 (North Legacy Corridor)</b> 4000 South to 5500 South	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 220 ft	FWY / 2.5 miles / UDOT Bike Class: Priority 1	3
W-22	<b>SR-67 (North Legacy Corridor)</b> 5500 South to Davis County Line	New Construction: 0 to 4 lanes ROW: 2007 - 0 ft / 2040 - 220 ft	FWY / 0.8 miles / UDOT Bike Class: Priority 1	2
W-23	<b>4700 West</b> 1200 South to 4000 South	Widening: 2 to 4 lanes ROW: 2007 - 82 ft / 2040 - 110 ft	MA / 3.8 miles / Local Bike Class: None	3
W-24	<b>4700 West</b> 4600 South to 4800 South	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft	COL / 0.3 miles / Local Bike Class: None	1
W-25	<b>3500 West</b> 1200 South to Midland Drive	Operational	COL / 4.6 miles / Local Bike Class: Priority 3	2
W-26	<b>3500 West (SR-108)</b> Midland Drive to Davis County Line	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 110 ft	MA / 1.6 miles / UDOT Bike Class: Priority 3	1
W-27	<b>1900 West / 2000 West (SR-126)</b> 2700 North to 1200 South	Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 120 ft	MA / 4.3 miles / UDOT Bike Class: Priority 3	3
W-28	<b>1900 West (SR-126)</b> Riverdale Road to 5600 South	Widening: 4 to 6 lanes ROW: 2007 - 100 ft / 2040 - 113 ft	MA / 0.4 miles / UDOT Bike Class: Priority 3	1
W-29	<b>I-15</b> Box Elder County Line to 2700 North	Widening: 4 to 6 lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 2.2 miles / UDOT Bike Class: None	1
W-30	<b>I-15</b> I-84 to Davis County Line	Widening: 6 to 6+HOV lanes ROW: 2007 - 328 ft / 2040 - 328 ft	FWY / 2.8 miles / UDOT Bike Class: None	1
W-31	<b>600 West</b> Elberta Drive to 2600 North	Operational	COL / 0.9 miles / Local Bike Class: None	2
W-32	<b>Adams Avenue</b> US-89 / Washington Boulevard to Washington Terrace City Limits	Widening: 2 to 4 lanes ROW: 2007 - 86 ft / 2040 - 99 ft	MA / 0.6 miles / Local Bike Class: 2	1
W-33	<b>450 East / 400 East</b> 3300 North to 2600 North	Widening: 2 to 4 lanes ROW: 2007 - 68 ft / 2040 - 89 ft	COL / 0.8 miles / Local Bike Class: 3	1
W-34	<b>Monroe Boulevard</b> 3100 North to 1300 North	New Construction: 0 to 2/4 lanes ROW: 2007 - 0 ft / 2040 - 86 ft	MA / 2.3 miles / Local Bike Class: 3 and None	3
W-35	<b>Harrison Boulevard</b> 2600 North to 12th Street	Operational	PA / 3.8 miles / Local Bike Class: Priority 3	2
W-36	<b>Harrison Boulevard</b> 12th Street to Country Hills Drive	Operational	PA / 4.7 miles / UDOT Bike Class: Priority 2 & None	1
W-37	<b>Harrison Boulevard</b> Country Hills Drive to US-89	Widening: 4 to 6 lanes ROW: 2007 - 99 ft / 2040 - 123 ft	PA / 4.8 miles / UDOT Bike Class: Priority 2	3
W-38	<b>US-89</b> Harrison Boulevard to I-84	Widening: 4 to 6 lanes ROW: 2007 - 120 ft / 2040 - 120 ft	FWY / 2 miles / UDOT Bike Class: Priority 2	2
W-39	<b>Skyline Drive</b> 1. Fern Drive / 2. Ogden City Limits to 1. 4600 South / 2. Eastwood Boulevard	New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 80 ft	COL / 0.6 miles / Local Bike Class: Priority 3	1
<b>Weber County, Spot Facilities</b>				
W-41	<b>I-15 Interchange</b> @ 24th Street	Upgrade	FWY / UDOT Bike Class: Priority 3	2
W-42	<b>I-15 Interchange</b> @ Riverdale Road (SR-26)	Upgrade	FWY / UDOT Bike Class: 3	1
W-43	<b>I-15 Interchange</b> @ 5600 South	Upgrade	FWY / UDOT Bike Class: 2	3
W-44	<b>US-89 Interchange</b> @ I-84	Upgrade	FWY / UDOT Bike Class: Priority 2	3

### 2040 RTP TRANSIT PROJECT LIST

PROJECT		LOCATION	
Needed Mode	Funded Mode	From	To
<b>Phase 1</b>			
<b>North Ogden - Salt Lake (First of Three Phases)</b>			
<i>North Ogden - Ogden Intermodal Center - Ogden CBD - Newgate Mall - Riverdale - Clearfield - Hill Air Force Base - Layton FrontRunner Station - Farmington FrontRunner Station - Centerville - Bountiful - Woods Cross - North Salt Lake - Salt Lake Central - Downtown Salt Lake City</i>			
Bus Rapid Transit	Corridor Preservation	4400 S. (Roy)	Davis County Line
Bus Rapid Transit	Corridor Preservation	Davis County Line	651 N./SR-126
Bus Rapid Transit	Bus Rapid Transit	HAFB West Gate	200 N./SR-126
Bus Rapid Transit	Enhanced Bus (BRTI)	200 N./SR-126	Clearfield FrontRunner
Rail/Bus Rapid Transit	Enhanced Bus (BRTI)	Main St/Parrish Lane	3800 S. Bountiful/US-89
Rail/Bus Rapid Transit	Bus Rapid Transit	3800 S. Bountiful/US-89	US-89/Eagleridge Dr
<b>Ogden - Weber State University (First of Two Phases)</b>			
<i>Ogden Intermodal Center - Ogden - South Ogden - Weber State University - McKay Dee Hospital</i>			
Streetcar	Enhanced Bus (BRTI)	Ogden Intermodal Center	Washington/27th St
Streetcar	Bus Rapid Transit	Washington/27th St	Washington/36th St
Streetcar	Enhanced Bus (BRTI)	Washington/36th St	Harrison Boulevard/Edvalson
Streetcar	Bus Rapid Transit	Harrison Boulevard/Edvalson Ave	McKay-Dee Hospital
<b>West Davis - West Weber</b>			
<i>Ogden Intermodal Center - Ogden CBD - Newgate Mall - Riverdale - Roy FrontRunner Station - West Haven - Clinton - West Point - Syracuse - Clearfield - Hill Airforce Base - Layton FrontRunner Station</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	3500 W./Midland Dr	Davis County Line
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Weber County Line	2000 W./Antelope Dr
<b>Ogden Valley Park-And-Ride</b>			
<i>Near Pineview Dam</i>			
Park-and -Ride	Park-and-ride	Near Pineview Dam	
<b>Falcon Hill - Hill AFB West Transit Center</b>			
<i>Falcon Hill - Hill AFB West Gate</i>			
Transit Hub	Transit Hub	New Hill AFB West Gate	
<b>Salt Lake City - Foothill Drive - Wasatch Drive (First of Three Phases)</b>			
<i>Salt Lake Central - Salt Lake City - University of Utah - Medical Center - Research Park - Parley's Canyon - Interstate 215 - Cottonwood Corporate Center - Big Cottonwood Canyon - Little Cottonwood Canyon</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	Salt Lake Central	Medical Dr./ Research Rd
Bus Rapid Transit	Bus Rapid Transit	Medical Dr./ Research Rd	New Rd at Wakara Way
Bus Rapid Transit	Enhanced Bus (BRTI)	New Rd at Wakara Way	Arapeen Dr/Chipeta Way
<b>Park City</b>			
<i>Salt Lake Central - 200 South - University of Utah - Medical Center - Foothill - Interstate 80 - Summit County Line</i>			
Enhanced Bus (BRTI)	Operations only	Salt Lake Central	Summit County Line
<b>State (First of Three Phases)</b>			
<i>Salt Lake Central - Capitol - South Salt Lake - Millcreek - Murray FrontRunner Station - Midvale - Sandy/South Jordan FrontRunner Station - Draper FrontRunner Station</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	200 S./State St	State St/Winchester St
Bus Rapid Transit	Enhanced Bus (BRTI)	State St/Winchester St	9000 S.
Bus Rapid Transit	Enhanced Bus (BRTI)	9000 S.	Draper FrontRunner
<b>Redwood (First of Three Phases)</b>			
<i>Downtown Salt Lake - Salt Lake Central - Interstate 80 - Airport East Hub - West Valley - Taylorsville - West Jordan - South Jordan - Riverton - Draper FrontRunner Station</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	N. Temple/Redwood Rd	SR-201
Bus Rapid Transit	Enhanced Bus (BRTI)	SR-201	4700 S.
Bus Rapid Transit	Enhanced Bus (BRTI)	4700 S.	9000 S.
Bus Rapid Transit	Corridor Preservation	9000 S.	12600 S.
Bus Rapid Transit	Corridor Preservation	12600 S./Redwood Rd	12300 S./Pony Express

PROJECT		LOCATION	
Needed Mode	Funded Mode	From	To
<b>Draper Line North Segment</b>			
<i>10000 South TRAX Station - 12600 South TRAX Station</i>			
Light Rail	Light Rail	10000 S. TRAX Station	12600 S. TRAX
<b>5600 West (First of Two Phases)</b>			
<i>Downtown Salt Lake - Salt Lake Central - Interstate 80 - Airport East Hub - International Center - West Valley - Kearns - West Jordan - Daybreak Station</i>			
Rail/Bus Rapid Transit	Corridor Preservation	Salt Lake International Airport	5600 W./2700 S.
Rail/Bus Rapid Transit	Bus Rapid Transit	5600 W./2700 S.	5600 W./6200 S.
Rail/Bus Rapid Transit	Corridor Preservation	5600 W./6200 S.	11800 S.
<b>200 South Streetcar</b>			
<i>Salt Lake Central - Downtown Salt Lake - Harmons Grocery</i>			
Streetcar	Streetcar	600 W./200 S.	200 S./200 East
<b>Sugarhouse</b>			
<i>Sugarhouse - South Salt Lake - North/South TRAX Line</i>			
Streetcar	Streetcar	2100 S. TRAX	Highland Dr/Sugarmont
<b>3900/3500 South (First of Three Phases)</b>			
<i>East Millcreek - Holladay - Millcreek - South Salt Lake - West Valley West Bench</i>			
Bus Rapid Transit	Bus Rapid Transit	3500 S./3600 W.	3500 W./6000 W.
<b>Taylorville Murray, Central Segment (First of Two Phases)</b>			
<i>Downtown Murray - Murray FrontRunner Station - Sorensen Research Park - SLCC Redwood Campus</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	Box Elder St/4800 S.	SLCC Redwood Campus
<b>Taylorville Murray, West Valley Extension (First of Two Phases)</b>			
<i>Salt Lake Community College Redwood Campus - American Express - West Valley Intermodal Center</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	4500 S./Redwood Rd	W. Valley Intermodal Ctr
<b>West Bench, Daybreak Segment</b>			
<i>Daybreak - 8400 West</i>			
Corridor Preservation	Corridor Preservation	Daybreak S. Station	11400 S./8400 W.
<b>Phase 2</b>			
<b>Ogden - Pleasant View Frequency Improvements</b>			
<i>Downtown Ogden - Pleasant View</i>			
Commuter Rail	Commuter Rail	Ogden Intermodal Center	Pleasant View FrontRunner
<b>Ogden - Weber State University (Second of Two Phases)</b>			
<i>Ogden Intermodal Center - Ogden - South Ogden - Weber State University - McKay Dee Hospital</i>			
Streetcar	Streetcar	Ogden Intermodal Center	Washington/27th St
Streetcar	Streetcar	Washington/27th St	Washington/36th St
Streetcar	Streetcar	Washington/36th St	Harrison/Edvalson Av
Streetcar	Streetcar	Harrison Boulevard/Edvalson Av	McKay-Dee Hospital
<b>North Ogden - Salt Lake (Second of Three Phases)</b>			
<i>North Ogden - Ogden Intermodal Center - Ogden CBD - Newgate Mall - Riverdale - Roy FrontRunner Station - West Haven - Clinton - West Point - Syracuse - Clearfield - Hill Air Force Base - Layton FrontRunner Station - Farmington FrontRunner Station - Centerville - Bountiful - Woods Cross - North Salt Lake - Salt Lake Central - Downtown Salt Lake</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	2700 N./Washington Boulevard	12th St/Washington Boulevard
Bus Rapid Transit	Bus Rapid Transit	12th St/Washington Boulevard	Ogden Intermodal Ctr
Bus Rapid Transit	Enhanced Bus (BRTI)	Washington Boulevard/36th St	4400 S./UP-HAFB ROW
Bus Rapid Transit	Bus Rapid Transit	4400 S./UP-HAFB ROW	Davis County Line
Bus Rapid Transit	Bus Rapid Transit	Davis County Line	HAFB West Gate
Bus Rapid Transit	Bus Rapid Transit	200 N./State St	Clearfield FrontRunner
Bus Rapid Transit	Enhanced Bus (BRTI)	Clearfield FrontRunner	Farmington FrontRunner
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Farmington FrontRunner	Parrish Lane/Main St
Rail/Bus Rapid Transit	Bus Rapid Transit	1500 S./Main St	3800 S. Bountiful/US-89
Rail/Bus Rapid Transit	Bus Rapid Transit	US-89/Eagleridge Dr	Salt Lake County Line
Rail/Bus Rapid Transit	Bus Rapid Transit	Salt Lake County Line	Salt Lake Intermodal Center
<b>Hill AFB South Transit Center</b>			

PROJECT		LOCATION	
Needed Mode	Funded Mode	From	To
<i>Hill AFB South Gate</i>			
Transit Hub	Transit Hub		
<b>Antelope Drive Park-And-Ride</b>			
<i>Antelope Dr/US-89</i>			
Park-and -Ride	Park-and-Ride		
<b>North Redwood (First of Two Phases)</b>			
<i>East Bountiful - West Bountiful - Woods Cross FrontRunner Station - N. Salt Lake - North Temple - Downtown Salt Lake</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	500 S./Orchard Dr	500 S./Redwood Rd
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	500 S./Redwood Rd	2600 S. Redwood Rd
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	2600 S. Redwood Rd	Salt Lake County Line
<b>Salt Lake City - Foothill Drive - Wasatch Drive (Second of Three Phases)</b>			
<i>Salt Lake Central - Salt Lake City - University of Utah - Medical Center - Research Park - Parley's Canyon - Interstate 215 - Cottonwood Corporate Center - Big Cottonwood Canyon - Little Cottonwood Canyon</i>			
Bus Rapid Transit	Bus Rapid Transit	Salt Lake Central	200 S./200 East
Bus Rapid Transit	Bus Rapid Transit	200 East/200 S.	Medical Dr./Research Rd
Bus Rapid Transit	Bus Rapid Transit	New Rd/Wakara Way	Arapeen Dr/Chipeta Way
Bus Rapid Transit	Enhanced Bus (BRTI)	Arapeen Dr/Chipeta Way	I-80/I-215/Foothill Dr
<b>State (Second of Three Phases)</b>			
<i>Salt Lake Central - Capitol - South Salt Lake - Millcreek - Murray FrontRunner Station - Midvale - Sandy/South Jordan FrontRunner Station - Draper FrontRunner Station</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	200 S./300 W.	600 S./State St
Bus Rapid Transit	Bus Rapid Transit	600 S./State St	Interstate 80
Bus Rapid Transit	Bus Rapid Transit	Interstate 80	Winchester St
<b>Redwood (Second of Three Phases)</b>			
<i>Downtown Salt Lake - Salt Lake Central - Interstate 80 - Airport East Hub - West Valley - Taylorsville - West Jordan - South Jordan - Riverton - Draper FrontRunner Station</i>			
Bus Rapid Transit	Bus Rapid Transit	SR-201	5400 S.
Bus Rapid Transit	Bus Rapid Transit	5400 S.	9000 S.
Bus Rapid Transit	Bus Rapid Transit	9000 S.	12600 S.
Bus Rapid Transit	Enhanced Bus (BRTI)	12600 S./Redwood Rd	12300 S./Pony Express Rd
<b>University to Salt Lake Central</b>			
<i>Medical Center - University of Utah - Salt Lake Downtown West - Salt Lake Central</i>			
Light Rail	Light Rail	400 S./Main St	Salt Lake Central
<b>3900/3500 South (Third of Four Phases)</b>			
<i>East Millcreek - Holladay - Millcreek - South Salt Lake - West Valley West Bench</i>			
Bus Rapid Transit	Bus Rapid Transit	3500 W./6000 W.	3500 S./9200 W.
Bus Rapid Transit	Enhanced Bus (BRTI)	Millcreek TRAX	3900 S./Highland Dr
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	3900 S./Highland Dr	3900 S./Wasatch Dr
<b>Taylorsville Murray, Holladay Extension</b>			
<i>Downtown Murray - Holladay - Wasatch Drive</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Box Elder St/4800 S.	3900 S./Wasatch Dr
<b>Taylorsville Murray Central Segment (Second of Two Phases)</b>			
<i>Downtown Murray - Murray FrontRunner Station - Sorensen Research Park - SLCC Redwood Campus</i>			
Bus Rapid Transit	Bus Rapid Transit	Box Elder St/4800 S.	Murray-Taylorsville Rd/500 W.
Bus Rapid Transit	Bus Rapid Transit	Murray-Taylorsville Rd/500 W.	Murray-Taylorsville/Redwood
<b>Taylorsville Murray West Valley Extension (Second of Two Phases)</b>			
<i>Salt Lake Community College Redwood Campus - American Express - West Valley Intermodal Center</i>			
Bus Rapid Transit	Bus Rapid Transit	4500 S./Redwood Rd	4400 S./Constitution
<b>5400 South (First of Two Phases)</b>			
<i>Murray FrontRunner Station - Taylorsville - Kearns - USANA Amphitheater - West Bench</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	Murray Boulevard/Vine St	5400 S./6400 W.
Bus Rapid Transit	Bus Rapid Transit	5400 S./6400 W.	5400 S./7200 W.
<b>7000 South/7800 South (First of Two Phases)</b>			
<i>Murray FrontRunner Station - Bingham Junction - Jordan Landing - West Bench</i>			

PROJECT		LOCATION	
Needed Mode	Funded Mode	From	To
Enhanced Bus (BRTI)	Corridor Preservation	State St/7200 S.	Redwood Rd/7000 S.
Enhanced Bus (BRTI)	Corridor Preservation	Redwood Rd/7000 S.	Bangerter Highway/7000 S.
<b>12300/12600 South (First of Three Phases)</b>			
<i>Draper TRAX Station - Draper FrontRunner Station - Riverton - Herriman - Daybreak TRAX Station</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	Daybreak S. TRAX	Redwood Rd/12600 S.
Bus Rapid Transit	Enhanced Bus (BRTI)	700 East	Draper TRAX
Bus Rapid Transit	Enhanced Bus (BRTI)	700 East	Pony Express Rd
Bus Rapid Transit	Corridor Preservation	700 East	Pony Express Rd
<b>Salt Lake Downtown Bus Transit Center</b>			
<i>200 South ./ State Street</i>			
Transit Hub	Transit Hub	200 S./State St	
<b>East Airport Transit Hub</b>			
<i>1950 West Redwood Road Airport TRAX Line Station</i>			
Transit Hub	Transit Hub	1950 W. Redwood Rd	
<b>Interstate-80 Transit Only Ramps</b>			
<i>About 900 West / Interstate 80</i>			
Transit Only Ramps	Transit Only Ramps	Near 900 W. and 200 S.	
<b>Phase 3</b>			
<b>Pleasant View – Brigham City</b>			
<i>Downtown Ogden - Box Elder County Line</i>			
Mode Undetermined	Corridor Preservation	Pleasant View FrontRunner	Box Elder County Line
<b>West Weber/West Davis (Second of Two Phases)</b>			
<i>Ogden Intermodal Center - Ogden CBD - Newgate Mall - Riverdale - Roy FrontRunner Station - West Haven - Clinton - West Point - Syracuse - Clearfield - Hill Air Force Base - Layton FrontRunner Station</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	4400 S./UP-HAFB Rail Line	3500 W./Midland Dr
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	2000 W./Antelope Dr	Hill Field Rd/Main St.
<b>Ogden Circulator</b>			
<i>Ogden Intermodal Center - Downtown Ogden</i>			
Mode Undetermined	Streetcar	25th/Washington	20th/Lincoln
Mode Undetermined	Streetcar	20th/Lincoln	20th/Washington
Mode Undetermined	Streetcar	20th/Washington	23rd/Washington
<b>North Ogden – Salt Lake (Third of Three Phases)</b>			
<i>North Ogden - Ogden Intermodal Center - Ogden CBD - Newgate Mall - Riverdale - Roy FrontRunner Station - West Haven - Clinton - West Point - Syracuse - Clearfield - Hill Air Force Base - Layton FrontRunner Station - Farmington FrontRunner Station - Centerville - Bountiful - Woods Cross - North Salt Lake - Salt Lake Central - Downtown Salt Lake</i>			
Bus Rapid Transit	Bus Rapid Transit	Washington Boulevard/36th St	4400 S./UP-HAFB ROW
Bus Rapid Transit	Bus Rapid Transit	Clearfield FrontRunner	Farmington FrontRunner
<b>North Redwood (Second of Two Phases)</b>			
<i>East Bountiful - West Bountiful - Woods Cross FrontRunner Station - North Salt Lake - North Temple - Downtown Salt Lake</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Davis County Line	N. Temple/Redwood Rd
<b>Salt Lake City - Foothill Drive - Wasatch Drive</b>			
<i>Salt Lake Central - Salt Lake City - University of Utah - Medical Center - Research Park - Parley's Canyon - Interstate 215 - Cottonwood Corporate Center - Big Cottonwood Canyon - Little Cottonwood Canyon</i>			
Bus Rapid Transit	Bus Rapid Transit	Arapeen Dr/Chipeta Way	I-80/I-215/Foothill Dr.
Bus Rapid Transit	Bus Rapid Transit	I-215 Ramp/3300 S.	I-215 Ramp/3900 S.
Mode Undetermined	Bus Rapid Transit	6200 S./Interstate 215	Little Cottonwood Canyon
<b>1300 East (North)</b>			
<i>Medical Center - University of Utah - Sugar House - Millcreek - Holladay - Murray - Fort Union - Cottonwood Heights – Midvale - Fashion Place West TRAX Station</i>			
Bus Rapid Transit	Enhanced Bus (BRTI)	1300 East/200 S.	Ft Union Boulevard/Union Park
<b>1300 East (South)</b>			
<i>Murray FrontRunner Station - Fashion Place West TRAX Station - Midvale - Fort Union - Cottonwood Heights - Sandy – Draper</i>			
Bus Rapid Transit	Bus Rapid Transit	Ft Union Boulevard/Union Park Av	1000 East Pioneer Rd
<b>700 East</b>			

PROJECT		LOCATION	
Needed Mode	Funded Mode	From	To
<i>Salt Lake Central – South Salt Lake - Millcreek - Murray - Holladay - Cottonwood Heights - Fort Union</i>			
Bus Rapid Transit	Bus Rapid Transit	200 S./200 East	Highland/Ft Union Boulevard
<b>State (Third of Three Phases)</b>			
<i>Salt Lake Central - Capitol - South Salt Lake - Millcreek - Murray FrontRunner Station - Midvale - Sandy/South Jordan FrontRunner Station - Draper FrontRunner Station</i>			
Bus Rapid Transit	Bus Rapid Transit	9000 S.	Draper FrontRunner
<b>Draper South Segment</b>			
<i>Salt Lake Central - South Salt Lake - Millcreek - Murray FrontRunner Station - Midvale - Sandy - Draper - Utah County Line</i>			
Light Rail	Light Rail	Draper TRAX	14600 S./Interstate 15
Light Rail	Light Rail	14600 S./Interstate 15	Utah County Line
<b>Redwood (Third of Three Phases)</b>			
<i>Downtown Salt Lake - Salt Lake Central - Interstate 80 - Airport East Hub - West Valley - Taylorsville - West Jordan - South Jordan - Riverton - Draper FrontRunner Station</i>			
Bus Rapid Transit	Bus Rapid Transit	200 S./600 W.	Transit Ramp to I-80
Bus Rapid Transit	Bus Rapid Transit	I-80/Redwood Rd	East Airport Hub
Bus Rapid Transit	Bus Rapid Transit	I-80/Redwood Rd	SR-201/Redwood Rd
Bus Rapid Transit	Bus Rapid Transit	12600 S./Redwood Rd	12300S/Pony Exp Rd
<b>5600 West (Second of Two Phases)</b>			
<i>Downtown Salt Lake - Salt Lake Central - Interstate 80 - Airport East Hub - International Center - West Valley - Kearns - West Jordan - Daybreak Station</i>			
Rail/Bus Rapid Transit	Bus Rapid Transit	East Airport Hub	N. Temple/I-80
Rail/Bus Rapid Transit	Bus Rapid Transit	I-80/Wright Brothers Dr	2700 S./5600 W.
Rail/Bus Rapid Transit	Bus Rapid Transit	6200 S./5600 W.	11800 S.
<b>Sugarhouse, Westminster Segment</b>			
<i>Westminster College - Sugarhouse – South Salt Lake – North/South TRAX Line</i>			
Streetcar	Streetcar	Highland Dr/Sugarmont Dr	1700 S./1100 East
<b>Parkway</b>			
<i>Downtown Salt Lake - Salt Lake Central - Interstate 80 - Airport East Hub - Decker Lake - Lake Park - West Valley City – Kearns</i>			
Bus Rapid Transit	Bus Rapid Transit	Redwood Rd/Parkway Boulevard	5600 W./Parkway Boulevard
<b>3900/3500 South (Forth of Four Phases)</b>			
<i>East Millcreek - Holladay - Millcreek - South Salt Lake - West Valley West Bench</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	9200 W./3500 S.	Little Valley
Bus Rapid Transit	Bus Rapid Transit	3500 S./Constitution Boulevard	3500 S./Redwood Rd
Bus Rapid Transit	Bus Rapid Transit	3500 S./Redwood Rd	Millcreek TRAX
Bus Rapid Transit	Bus Rapid Transit	Millcreek TRAX	3900 S./Highland Dr
<b>5400 South (Second of Two Phases)</b>			
<i>Murray FrontRunner Station - Taylorsville - Kearns - USANA Amphitheater - West Bench</i>			
Bus Rapid Transit	Bus Rapid Transit	Murray Boulevard/Vine St	7200 W.
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	7200 W.	8400 W.
<b>Fort Union</b>			
<i>Big Cottonwood Canyon - Cottonwood Corporate Center - Fort Union - Midvale - Fashion Place West TRAX Station</i>			
Mode Undetermined	Bus Rapid Transit	State St/Fort Union Boulevard	Little Cottonwood Canyon
<b>7000 South/7800 South (Second of Two Phases)</b>			
<i>Murray FrontRunner Station - Bingham Junction - Jordan Landing - West Bench</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	State St/7200 S.	Redwood Rd/7000 S.
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Redwood Rd/7000 S.	Bangerter Highway/7000 S.
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Bangerter Highway/7000 S.	8400 W./7800 S.
<b>9000 South</b>			
<i>Sandy/South Jordan FrontRunner Station - Mid-Jordan TRAX Station</i>			
Bus Rapid Transit	Bus Rapid Transit	9000 S./State St	9000 S./Redwood Rd
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	9000 S./Redwood Rd	Mid-Jordan TRAX
<b>9400 South</b>			
<i>Mouth of Little Cottonwood Canyon - Sandy - Sandy/South Jordan FrontRunner Station</i>			
Mode Undetermined	Bus Rapid Transit	9400 S./State St	Little Cottonwood Canyon



PROJECT		LOCATION	
Needed Mode	Funded Mode	From	To
<b>10200/10400 South</b>			
<i>South Jordan FrontRunner Station - Daybreak TRAX Station</i>			
Enhanced Bus (BRTI)	Enhanced Bus (BRTI)	Jordan Gateway/S Jordan Parkway	Daybreak North TRAX
<b>12300/12600 South (Third of Three Phases)</b>			
<i>Draper TRAX Station - Draper FrontRunner Station - Riverton - Herriman - Daybreak TRAX Station</i>			
Bus Rapid Transit	Bus Rapid Transit	Daybreak S. TRAX	Redwood Rd/12600 S.
Bus Rapid Transit	Bus Rapid Transit	700 East	Draper TRAX
<b>5400 South Redwood Rd Park-And-Ride</b>			
<i>5400 South/Redwood Rd</i>			
Park- and-Ride	Park-and-Ride	5400 S./Redwood Rd	
<b>3100 South/5600 West Park-And-Ride</b>			
<i>3100 South/5600 West</i>			
Park-and-Ride	Park-and-Ride	3100 S./5600 W.	
<b>6200 South/5600 West Park-And-Ride</b>			
<i>6200 South/5600 West</i>			
Park-and-Ride	Park-and-Ride	6200 S./5600 W.	
<b>5400 South/5600 West Park-And-Ride</b>			
<i>5400 South/5600 West</i>			
Park-and-Ride	Park-and-Ride	5400 S./5600 W.	
<b>Fort Union Transit Center</b>			
<i>Union Park Avenue/Fort Union Boulevard</i>			
Transit Hub	Transit Hub	Union Park Ave/Ft Union Boulevard	
<b>Little Cottonwood Canyon Park-And-Ride</b>			
<i>Wasatch Boulevard - Mouth of Little Cottonwood Canyon</i>			
Park-and-Ride	Park-and -Ride	Little Cottonwood Canyon	
<b>Big Cottonwood Canyon Park-And-Ride</b>			
<i>Wasatch Boulevard - Mouth of Big Cottonwood Canyon</i>			
Park-and-Ride	Park-and-Ride	Big Cottonwood Canyon	

## **Appendix-3**

### **Box Elder County Highway and Transit Projects 2040 RTP**

#### **Box Elder County**

**Box Elder County**  
**Air Quality Conformity Regionally Significant Project List**  
**Draft March 30, 2011**

Project Name and Location	Improvement Type	Time
<b>UDOT Region 1</b>		
I-15 at MP 362.0 US-91, (1100 South Brigham City) <b>STIP CD</b>	Interchange Upgrade	2011-2020
*SR-30 I-15 to SR-38 (Collinston) MP 90.7 to 95.1	Widening	2010-2020
*SR-30 MP 95 to 108	Planning Study	2010-2020
*SR-30 MP 90.7 to MP 107.6, from SR-38 to Cache MPO Boundary at 1900 West	Widening	2021-2030
SR-13 MP 2.9 to 5.7, from SR-38 Junction to I-15	Widening	2020-2030
SR-240 MP 0.1 to MP 1.2, from I-15 to SR-38	Widening	2020-2030
US-89 at MP 435 US-90 (Brigham City)	Interchange Upgrade	2020-2030
I-15 MP 351.5 to MP 362, from Box Elder/Weber CL to Brigham City south Interchange	Widening/Safety /Rest area	2031-2040
<b>Local Government</b>		
6800 West (Iowa String Road) from SR-38 to I-84	Widening	2031-2040
10400 North (Rocket Road) from I-84 to 5200 West (SR-13)	Widening	2031-2040

*\*These projects are outside the PM2.5 non-attainment area.*

**Appendix-4**  
**Highway and Transit Projects**  
**2040 RTP**  
**Tooele County**

**TOOELE VALLEY LONG RANGE PLAN 2007 -2030 PROJECTS**

ID	STREET TO - FROM	PROJECT TYPE	LENGTH (MILES)	2030	BIKE CLASS	2006 LANE	2030 LANE	2006 ROW (FT.)	2030 RO (FT.)	PHASE		SPONSOR	PHASE COST
				FUNCTIONAL CLASS						1=2007-2020 2=2021-2030			
1	Additional I-80 Interchange I-80	New Construction	0.0	Interchange	0	0	0	0	0	1	UDOT	\$47,900,000	
2	Additional I-80 Access Road I-80 - SR-36	New Construction	1.0	Principal Arterial	0	0	4	0	200	1	UDOT	\$15,000,000	
3	I-80 Additional I-80 Interchange - SR-201	Widening	4.9	Freeway	0	4	6	375	375	2	UDOT	\$516,200,000	
4	SR-138 SR-112 - Mid-Valley Highway	Widening	3.1	Minor Arterial	1	2	4	100	100	1	UDOT	\$29,800,000	
5	SR-138 Mid-Valley Highway - SR-36	Widening	5.1	Minor Arterial	1,0	2	4	100	100	2	UDOT	\$78,500,000	
6	1000 North SR-112 - SR-36	New Construction	2.4	Minor Arterial	2	0	4	0	66	1	Local	\$18,800,000	
7	1000 North SR-36 - Droubay Road	Restripping	1.3	Minor Arterial	2	2	4	66	66	2	Local	\$1,400,000	
8	2000 North SR-112 - SR-36	New Construction	3.6	Minor Arterial	0	0	2	0	66	1	Local	\$29,500,000	
9	3700 North Mid-Valley Highway - Droubay Road	New Construction	6.5	Minor Arterial	0	0	2	0	66	2	Local	\$81,700,000	
10	SR-112 Mid-Valley Highway - Tooele Blvd.	Widening	3.3	Principal Arterial	0	2	4	100	100	1	UDOT	\$31,800,000	
11	Mid-Valley Highway SR-36 - I-80	Corridor Preservation	11.7	Freeway	0	0	4	0	200	1	UDOT	\$12,300,000	
12	Mid-Valley Highway SR-36 - I-80	New Construction	11.7	Principal Arterial	0	0	4	0	200	1	UDOT	\$193,600,000	
13	Mid-Valley Highway SR-36 - I-80	New Construction	11.7	Freeway	0	0	4	0	200	2	UDOT	\$442,500,000	
14	Tooele Blvd SR-36 - 1000 North/SR-36	New Construction	4.1	Minor Arterial	0	0	4	0	84	1	Local	\$38,300,000	
15	SR-36 South Depot Entrance - 500 South	Widening	2.4	Principal Arterial	1	2	4	100	100	1	UDOT	\$19,900,000	
16	SR-36 Stockton - South Depot Entrance	Widening	3.3	Minor Arterial	1	2	4	100	100	2	UDOT	\$57,800,000	
17	400 West 1000 North - 3700 North	New Construction	2.7	Minor Arterial	0	0	2	0	66	1	Local	\$21,200,000	
18	1200 West 1000 North - 3700 North	New Construction	2.7	Minor Arterial	0	0	2	0	66	1	Local	\$21,200,000	