

A Comprehensive List

The purpose of the 2040 RTP is to document a comprehensive list of planned improvements to the regional transportation system designed to meet the travel needs of Wasatch Front Region residents for the next 30 years. The planning process evaluated long-range capacity needs and developed a list of planned highway, transit, and other improvements needed by the year 2040. The process considered the Wasatch Front's travel demand, examined various transportation alternatives, designated transportation improvements, and provided proper construction phasing. The 2040 RTP relied on extensive public review and input that helped generate recommended projects that can be implemented using estimated available funding between 2011 and 2040. The 2040 RTP also recommends general policy for transportation systems, enhancements, regional freight movement, bicycle routes, pedestrian amenities, multi-purpose trails, safety, and homeland security.



Chapter 7

Photo at Left: Light rail construction of the new Airport Line at the new North Temple bridge illustrates a significant planned improvement in the region's transportation system. North Temple, along the Airport line, is being reconstructed as a grand boulevard and gateway into Salt Lake City.



OVERVIEW OF PLANNED IMPROVEMENTS

The WFRC staff developed, refined, and tested three transportation system alternatives, along with a "no-build alternative. These system alternatives helped identified needed capacity improvements for the Wasatch Front Region's highways, arterial streets, and transit network. The alternatives also helped form the basis for the recommended transportation improvements found in the 2040 RTP. Once the preferred alternative was selected, as discussed in Chapter 5, the WFRC staff further refined recommended improvements to the region's transportation system by selecting those projects that best meet projected travel needs. This planning process focused on individual highway and transit projects, their type, length, width, class, phasing, technology, corridor alignment, station spacing, and other important characteristics.

In January 2011, the WFRC staff presented the draft 2040 RTP phased highway and transit projects lists, along with their corresponding maps, to the Regional Growth Committee and the Wasatch Front Regional Council for review and comment. Project lists and maps were also distributed to other elected officials, regional planners and engineers, and interested members of the general public. Briefings on the draft 2040 RTP projects were presented to the WFRC Transportation Coordination Committee and its Technical Advisory Committees, the Regional Growth Committee and its Technical Advisory Committees, the Salt Lake, Davis and Weber County Councils of Governments, and individual city planners and engineers. As a result of this effort, the WFRC staff received comments regarding the recommended capacity improvements for the highway and transit networks. In a number of cases, changes to the draft 2040 RTP projects list and maps were made to include facilities that needed to be part of the region's overall plan.

Highway Improvements

Programmed highway improvements in the 2040 RTP include a balance of freeway, highway, arterial and collector road projects. The projects add needed capacity through the construction of new facilities or the widening of existing roads. Two new freeways, the Mountain View Corridor and West Davis Corridor are proposed to serve the growing travel demands in the Region. The need for approximately 75 miles of additional capacity improvement on existing freeways, such as I-15, SR-201, I-215, I-80, and US-89 is also recognized and recommended.

The 2040 RTP includes new or widened arterial streets and freeway improvements identified as needed to serve the existing and developing areas of the Wasatch Front Region. Approximately 1,071 lane miles of capacity improvements are planned for the next 30 years. Highway facilities that will be constructed or improved include approximately 354 lane miles of freeway, 318 lane miles of principal arterials, 256 lane miles of minor arterials, and 143 lane miles of collector roads. Major projects in the 2040 RTP include the construction of the West Davis Corridor / North Legacy Corridor through Davis and Weber Counties, the widening of US Highway 89 in Davis County, portions of I-15 in Salt Lake, Davis, and Weber Counties, the Mountain View Corridor in Salt Lake County, and the reconstruction of I-80 from 1300 East to the Summit County Line. Due to financial constraints, not all of the new capacity needs recommend for construction by 2040 can be met by the 2040 RTP. By identifying expected highway revenue and expected construction and maintenance costs, the WFRC staff developed a list of new capacity highway projects for which funding will likely be available beginning in 2011 and continuing through 2040.

Transit Improvements

Major WFRC transit improvements recommended and proposed for funding by the 2040 RTP include an extensive Bus Rapid Transit (BRT 1 and 3) network, several streetcar lines, an upgrade of the existing Commuter Rail line and the extension of the North/South TRAX line to Utah County. In total, recommended improvements amount to approximately 161 additional miles of Bus Rapid Transit (BRT 3), 106 miles of Enhanced Bus (BRT I), 12 miles of additional Light Rail, 11 miles of Streetcar, and 6 miles of Commuter Rail reconstruction.

Additionally, it is recommended that local bus service be increased by at least 25 percent over the next 30 years, and four miles of corridor be preserved for a potential extension of Commuter Rail into Box Elder County, and Enhanced Bus (BRT 1) be upgraded to BRTIII. The proposed increase in

transit will translate into greater service coverage, more frequent service, and longer hours of operation. The 2040 RTP also identifies locations and funding for needed transit hubs, park-and ride lots, and calls for additional paratransit service.

Highway and Transit Project Phasing

In March of 2010, the RGC and the WFRC reviewed and approved specific evaluation criteria for the phasing of recommended projects. These criteria were used to evaluate and rank each project and help identify their proper phase in the RTP. The criteria for

highway projects included (1) vehicle hours of delay, (2) safety data, (3) economic development, (4) complete streets, (5) benefit cost, and (6) project preparation. In addition to much of the above, transit projects also took into consideration current ridership, forecasted ridership, and travel time reduction. Other important phasing considerations for both highway and transit projects included whether or not the project is part of the current 2011-2016 Transportation Improvement Program, the previous 2007-2030 Regional Transportation Plan, and input from local officials, UDOT and UTA representatives, and Technical Advisory Committee members. Finally, ranked highway and transit projects were placed into one of four different phases to coincide with the availability of anticipated financing and revenue sources.

- Phase 1 (2011-2020)
- Phase 2 (2021-2030)
- Phase 3 (2031-2040)
- Unfunded Needs or "Illustrative Projects"

During December 2010, the WFRC staff focused on further refining recommended highway and transit projects with input provided by local planners, engineers, elected officials, and the general publc. The 2040 RTP was developed within the constraints of financial feasibility. Thus, the list of highway and transit facility improvements contains only those projects that can be funded over the next 30 years. Reasonable assumptions were made concerning both future revenues for transportation



improvements and the estimated costs of programmed highway and transit facilities as discussed in Chapter 6, Financial Plan.

PROJECTS COMPLETED OR UNDER CONSTRUCTION

During the 4-years since the previous 2007 -2030 LRP Update was adopted, a number of highway projects have been completed or are currently underway. These projects include SR-201 from the Jordan River to 3200 West, Legacy Parkway through Davis County, portions of I-215, and I-15 from 10600 South to the Utah County Line. Highway improvement and new construction projects within the Wasatch Front Region that have been completed, deleted, modified, or are currently under construction are listed in Table 7-1.

Transit

In a similar manner to the highways projects listed above, the status of several of major transit projects recommended in the previous Regional Transportation Plan: 2007-2030 have changed. Of particular note, construction is complete on the Salt Lake to Weber County Commuter Rail and the Salt Lake Central lines, and underway on the Airport, West Valley, Mid-Jordan, and the Commuter Rail South lines. The first phase of the 3500 South BRT line construction was also completed. Table 7-2 lists the transit projects from the 2007-2030 RTP that are under construction, have been completed or have been deleted or significantly modified in the 2011-2040 Regional Transportation Plan.

TABLE 7-1
Highway Projects Completed, Deleted, Modified or Under Construction From the 2007 – 2030 RTP

| County | ID | Project | Descript | ion | Status |
|------------|------|---|---|---------------------------------------|--------------|
| SALT LAKE | AREA | PROJECTS FROM THE 2030 RTP - C | OMPLETED, DELETED, MODIFIED OR UNDER | CONSTRUCTION | |
| | | California Avenue | Widening – 4 to 6 Lanes | M. Arterial / 2.1 Miles / Local | |
| Salt Lake | 4 | I-215 to Bangerter Highway | ROW: 2006 – 110 ft. / 2030 – 110 ft. | Bike Class - 2 | Deleted |
| | | California Avenue | Widening – 4 to 6 Lanes | M. Arterial / 0.8 Miles / Local | |
| Salt Lake | 5 | Bangerter Hwy to 4800 West | ROW: 2006 – 110 ft. / 2030 – 110 ft. | Bike Class - 2 | Deleted |
| | | I-80 | Widening – 6 to 8 Lanes | Freeway / 1.8 Miles / UDOT | |
| Salt Lake | 7a | State Street to 1300 East | ROW: 2006 – 260 ft. / 2030 – 260 ft. | Bike Class - 0 | Completed |
| | 23 | I-80 Interchange East Bound | Upgrade – 1 to 2 Lanes | Freeway / 0.6 Miles / UDOT | |
| Salt Lake | 3 | @I-215 (West Side) | ROW: 2006 – 260 ft. / 2030 – 260 ft. | Bike Class - 0 | Completed |
| | | SR-201 | Widening – 4 to 6 Lanes | Freeway / 3.4 Miles / UDOT | |
| Salt Lake | 9 | 3200 W. Mountain View Corr. | ROW: 2006 – 300 ft. / 2030 – 300 ft. | Bike Class – 2,3 | Completed |
| | 23 | SR-201 | Widening – 4 Lanes | Freeway / 3.3 Miles / UDOT | Under |
| Salt Lake | 4 | SR-202 to I-80 | ROW: 2006 – 300 ft. / 2030 – 300 ft. | Bike Class – 0 / Transit Project | Construction |
| | 29 | Western East / West Study | Study | UDOT | Construction |
| Salt Lake | 5 | SR-201 to Utah County Line | Study | 0001 | Completed |
| | | 3500 South | Widening – 4 to 6 plus Transit Lanes | P. Arterial / 1.5 Miles / UDOT | |
| Salt Lake | 14 | 2700 West to 4000 West | ROW: 2006 – 100 ft. / 2030 – 106 ft. | Bike Class – 0 / Transit Project | Completed |
| | | 4500 South | Widening – 2 to 4 Lanes | P. Arterial / 2.7 Miles / UDOT | |
| Salt Lake | 18 | 2700 East to 2300 East | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class – 0 | Deleted |
| | 29 | 4500 South | Re-stripe – 2 to 4 Lanes | P. Arterial / 0.7 Miles / UDOT | |
| Salt Lake | 7 | I-215 to 2700 East | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class 2 | Deleted |
| | | 4500 South | Widening – 4 to 6 Lanes | P. Arterial / 0.7 Miles / UDOT | |
| Salt Lake | 19 | I-15 to State Street | ROW: 2006 – 150 ft. / 2030 – 150 ft. | Bike Class – 0 | Completed |
| | 23 | 5400 South | | M Arterial / 6.8 Miles / UDOOT | |
| Salt Lake | 9 | | Widening – 4 to 6 plus Transit Lanes ROW: 2006 – 86-110 ft. / 2030 – 110 ft. | Bike Class – 0.3 / Transit Project | Deleted |
| | 30 | I-15 to Bangerter Highway | | M. Arterial / 2.6 Miles / Local | |
| Salt Lake | 0 | 7000 South / 7200 South State Street to I-15 | Widening – 4 to 6 Lanes | · · · | Deleted |
| | U | | ROW: 2006 – 90 ft. / 2030 – 106 ft. | Bike Class – 2 | |
| Salt Lake | 27 | 7800 South | Widening – 2 to 4 Lanes | M. Arterial / 2.8 Miles / /UDOT/Local | Completed |
| | | Bangerter Hwy to New Bingham | ROW: 2006 – 66 ft. / 2030 – 116 ft. | Bike Class - 2 | |
| Salt Lake | 25 | New Bingham Highway | Widening – 2 to 4 Lanes | M. Arterial / 2.3 Miles / UDOT | Deleted |
| | | 5600 West to 9000 South | ROW: 2006 – 66 ft. / 2030 – 106 ft. | Bike Class – 2 | |
| Salt Lake | 24 | 10600 South/10400 South | Widening – 4 to 6 Lanes | M. Arterial / 2.2. Miles / UDOT | Completed |
| | 3 | I-15 to Redwood Road | ROW: 2006 – 106 ft. / 2030 – 106 ft. | Bike Class – 3.2 | |
| Salt Lake | 34 | 10400 South/10800 South | New Construction – 0 to 4 Lanes | M. Arterial / 5 Miles / Local | Completed |
| | | Bangerter Hwy to 4800 West | ROW: 2006 – 0 ft. / 2030 – 110 ft. | Bike Class – 2 | |
| Salt Lake | 37 | 11400 South | Widening – 4/2 to 6 Lanes | M. Arterial / 1 Miles / Local | Completed |
| | а | State Street to 700 West | ROW: 2006 – 50 ft. / 2030 – 106 ft. | Bike Class – 2 | |
| Salt Lake | 38 | 11400 South | Widening/New Const. – 2/0 to 4 Lanes | M. Arterial / 2.3 Miles / Local | Completed |
| | | 700 West to Redwood Road | ROW: 2006 – 20 ft. / 2030 – 106 ft. | Bike Class – 2 | |
| Salt Lake | 39 | 11400 South | Widening – 2 to 4 Lanes | M. Arterial / 2.4 Miles / Local | Completed |
| July Lunc | | Redwood Rd. to Bangerter Hwy | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class – 2 | oopreteu |
| Salt Lake | 40 | 11400 South | Widening – 2 to 4 Lanes | M. Arterial / 4.9 Miles / Local | Completed |
| Juil Luite | а | Bangerter Hwy to 4800 West | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class – 0 | oopreteu |
| Salt Lake | | 11400 South | New Construction – 0 to 4 Lanes | M. Arterial / 1 Miles / Local | Completed |
| | b | 4800 W. to Valdania St (5200 W) | ROW: 2006 – 0 ft. / 2030 – 110 ft. | Bike Class – 0 / Transit Project | 22,5.000 |
| Salt Lake | 43 | 12600 South | New Construction – 0 to 4 Lanes | P. Arterial / 3.5 Miles / Local | Completed |
| July Lunc | | 4800 West to 6000 West | ROW: 2006 – 0 ft. / 2030 – 106 ft. | Bike Class – 2 | Jopicteu |
| Salt Lake | 44 | MVC / Bangerter Hwy Connector | New Construction – 4 to 6 Lanes | Freeway / 0.9 Miles / UDOT | Deleted |
| Juit Lake | 7* | Mountain View to Bangerter | ROW: 2006 – 60 ft. / 2030 – 150 ft. | Bike Class – 0 / Transit Project | Deleteu |
| Salt Lake | 25 | 14400 South | New Construction – 0 to 4 Lanes | Collector / 2.1 Miles / Local | Completed |
| Jail Lake | 1 | 4800 West to 5600 West | ROW: 2006 – 0 ft. / 2030 – 106 ft. | Bike Class – 0 | Completed |
| Salt Lake | 84 | 8400 West | Widening – 2 to 4 Lanes | P. Arterial / 1.5 Miles / UDOT | Deleted |
| Jail Lake | 04 | SR-201 to 3500 South | ROW: 2006 – 66 ft. / 2030 – 106 ft. | Bike Class – 2 | Deleten |

TABLE 7-1 CONTINUED
Highway Projects Completed, Deleted, Modified or Under Construction From the 2007 – 2030 RTP

| County | ID | Project | Description | on | Status |
|-----------|---------|---|---|--|-----------|
| SALT LAKE | AREA | PROJECTS FROM THE 2030 RTP - CO | MPLETED, DELETED, MODIFIED OR UNDER (| CONSTRUCTION | |
| | 25 | 6400 West | New Construction – 0 to 2 Lanes | M. Arterial / 1 Miles / Local | |
| Salt Lake | 5b | 13000 South to 13400 South | ROW: 2006 – 0 ft. / 2030 – 80 ft. | Bike Class – 1 | Completed |
| | | 5600 West | Widening – 2 to 4 plus Transit Lanes | M. Arterial / 3.5 Miles / UDOT | |
| Salt Lake | 77 | 4400 South to 6200 South | ROW: 2006 – 66 ft. / 2030 – 106 ft. | Bike Class – 2.0 / Transit Project | Completed |
| | 25 | 5600 West | New Const. – 0 to 2 plus Transit Lanes | M. Arterial / 3.2 Miles / UDOT | |
| Salt Lake | 9 | 13400 South to 14400 South | ROW: 2006 – 0 ft. / 2030 – 86 ft. | Bike Class – 0 / Transit Project | Completed |
| | 26 | 4800 West | Widening – 2 to 4 Lanes | Collector / 1 Miles / Local | 6 1 |
| Salt Lake | 0 | California Avenue to SR-201 | ROW: 2006 – 50 ft. / 2030 – 86 ft. | Bike Class – 3 | Deleted |
| | 26 | 4800 West | Widening – 2 to 4 Lanes | Collector / 1.1 Miles / Local | |
| Salt Lake | 2 | Parkway Blvd (2700 S) to 3500 S. | ROW: 2006 – 86 ft. / 2030 – 86 ft. | Bike Class – 2 | Deleted |
| | 26 | 4800 West | New Construction – 0 to 4 Lanes | Collector / 3.5 Miles / Local | |
| Salt Lake | 3 | 9000 S. to Sky Drive | ROW: 2006 – 0 ft. / 2030 - 86 ft. | Bike Class - 2 | Completed |
| | | Gladiola (3400/3200 W) | New Construction – 0 to 4 Lanes | Collector / 1.2 Miles / Local | |
| Salt Lake | 75 | 500 South to California Avenue | ROW: 2006 – 0 ft. / 2030 – 84 ft. | Bike Class – 2 | Deleted |
| | 26 | 3200 West | Widening – 2 to 4 Lanes | Collector / 1.3 Miles / Local | |
| Salt Lake | 5 | Parkway Blvd to 3500 South | ROW: 2006 – 66 ft. / 2030 – 66 ft. | Bike Class – 2 | Deleted |
| | 54 | I-215 | Widening – 6 to 8 Lanes | Freeway / 4 Miles /UDOT | |
| Salt Lake | a | SR-201 to 4700 South | ROW: 2006 – 300 ft. / 2030 – 300 ft. | Bike Class – 0 | Completed |
| | 10 | Redwood Road | Widening – 2 to 4 Lanes | P. Arterial / 2.3 Miles / UDOT | |
| Salt Lake | 1a | Bangerter to Porter Rockwell Rd | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class – 2 | Completed |
| | 10 | Redwood Road | Widening – 2 to 4 Lanes | P. Arterial / 2.5 Miles / UDOT | |
| Salt Lake | 1b | Porter Rockwell to Utah Co. Line | ROW: 2006 – 86 ft. / 2030 – 106 ft. | Bike Class – 2 | Completed |
| | 10 | 900 West/Fine St. | Widening – 2 to 4 Lanes | Collector / 0.9 Miles / Local | |
| Salt Lake | 71 | 3300 South to 700 West | ROW: 2006 – 0 ft. / 2030 – 80 ft. | Bike Class – 2.0 | Deleted |
| | | Bingham Junction Boulevard. | New Construction – 0 to 4 Lanes | M. Arterial / 2.8 Miles / Local | |
| Salt Lake | 70 | 7000 South to 7800 South | ROW: 2006 – 0 ft. / 2030 – 106 ft. | Bike Class – 2 | Completed |
| | | I-15 | Widening – 6 to 6 plus HOV Lanes | Freeway / 1.1 Miles / UDOT | |
| Salt Lake | 88 | I-215 to Beck Street | ROW: 2006 – 200 ft. / 2030 – 200 ft. | Bike Class – 0 | Completed |
| | | I-15 | Widening – 6 to t plus HOV Lanes | Freeway / 2.9 Miles / UDOT | |
| Salt Lake | 50 | Beck Street to 600 North | ROW: 2006 – 200 ft. / 2030 – 200 ft. | Bike Class – 0 | Completed |
| | 29 | I-15 (Northbound) | Widening–3 plus HOV to 4 plus HOV Lanes | Freeway / UDOT | |
| Salt Lake | 29 | , , | | • • | Completed |
| | | @ 10600 Interchange | ROW: 2006 – 260 ft. / 2030 – 260 ft. | Bike Class – 0 | |
| Salt Lake | 36 | I-15 Interchange | New Construction | Freeway / UDOT Bike Class – 0 | Completed |
| | F0 | @ 11400 South | ROW: 2006 – 260 ft. / 2030 – 260 ft. | | |
| Salt Lake | 59 a | 700 East | Widening – 2 to 4 Lanes | P. Arterial / 2.9 Miles / UDOT | Completed |
| | a | Carnation Dr (10142 S) to 11400 S | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class – 2 P. Arterial / 3 Miles / UDOT | |
| Salt Lake | 61 | 900 East Van Winkle to Fort Union Blvd | Widening – 4 to 6 Lanes | | Deleted |
| | | Wasatch Boulevard | ROW: 2006 – 80 ft. / 2030 – 106 ft. | Bike Class – 2 P. Arterial / 2.2. Miles / UDOT | |
| Salt Lake | 68 | | Widening – 2 to 4 Lanes | | Deleted |
| | | 7000 S to N. Little Cottonwood | ROW: 2006 – 100 ft. / 2030 – 150 ft. | Bike Class – 2 / Transit Project | |
| Salt Lake | 69 | Wasatch Boulevard | Widening – 2 to 4 Lanes | Collector / 1.1 Miles / Local | Deleted |
| | 20 | N. Little Ctnwd to Little Ctnwd | ROW: 2006 – 60 ft. / 2030 – 80 ft. | Bike Class – 2 / Transit Project | |
| Davis | 30 | North Davis East / West Study | Study | UDOT | Completed |
| | 4 | Weber County Line to Syracuse Rd | Widening 2 to 4 Lance | M Artorial / 2 Miles / LIDOT | |
| Davis | 12 | 1800 North (Clinton) | Widening – 2 to 4 Lanes | M. Arterial / 3 Miles / UDOT | Deleted |
| | 9 | WDC to 5000 West | ROW: 2006 – 80 ft. / 2030 – 84 ft. | Bike Class – 3 | |
| Davis | 27 | Syracuse Road (SR-108) | Widening – 4 to 6 Lanes | M. Arterial / 2 Miles / UDOT | Deleted |
| | 2 | I-15 to Main Street (Clearfield) | ROW: 2006 – 106 ft. / 2030 – 106 ft. | Bike Class – 2,3 / Transit Project | |
| Davis | 13 | Syracuse Road (SR-108) | Widening – 2 to 4 Lanes | M. Arterial / 2 Miles / UDOT | Completed |
| - | 5 | 1000 West to 2000 West | ROW: 2006: - 66 ft. / 2030 – 106 ft. | Bike Class – 3 / Transit Project | 1 |
| Davis | 14 | 700 South / 900 South (Layton) | New Construction – 0 to 4 Lanes | M. Arterial / 3.1 Miles / Local | Completed |
| - 0.713 | 4 | I-15 to Flint Street (Layton) | ROW: 2006 – 0 ft. / 2030 – 84 ft. | Bike Class – 2 | Jopicted |

TABLE 7-1 CONTINUED Highway Projects Completed, Deleted, Modified or Under Construction From the 2007 – 2030 RTP

| County | ID | Project | Descripti | on | Status |
|-----------|---------|--|--|----------------------------------|------------|
| SALT LAKE | AREA | PROJECTS FROM THE 2030 RTP - CO | OMPLETED, DELETED, MODIFIED OR UNDER | CONSTRUCTION | |
| D. 1. | 90 | Parrish Lane (Centerville) | Widening – 2 to 4 Lanes | M. Arterial / 0.3 Miles / Local | |
| Davis | а | I-15 to 1250 West | ROW: 2006 – 100 ft. / 2030 – 100 ft. | Bike Class – 0 | Completed |
| Davis | 92 | 500 South | Widening – 2 to 4 Lanes | M. Arterial / 1.8 Miles / UDOT | Completed |
| Davis | а | I-15 to Redwood Road | ROW: 2006 – 66-80 ft. / 2030 – 106 ft. | Bike Class – 2 / Transit Project | Completed |
| Davis | 29 | North Legacy Connector Study | Study | P. Arterial / 2.5 Miles / UDOT | Underway |
| Davis | 4 | N Legacy Corridor to Legacy Pkwy | | Bike Class – 1 | Officerway |
| Davis | 15 | 2700 West (Layton) | New Construction – 0 – 4 Lanes | M. Arterial / 1.4 Miles / Local | Deleted |
| Davis | 6 | Layton Pkwy to N Legacy Corridor | ROW: 2006 – 0 ft. / 2030 – 106 ft. | Bike Class – 1 | Deleted |
| Davis | 30 | Sheep Road | Study | Collector / 3.1 Miles / Local | Deleted |
| Davis | 4 | Parrish Lane to Glovers Lane | | Bike Class – 0 | Deleted |
| Davis | 16 | I-15 | Widening – 6 to 6 plus HOV Lanes | Freeway / 7.5 Miles / UDOT | Completed |
| 541.0 | 9 | Hill Field Road (SR-232) to US-89 | ROW: 2006 – 240 ft. / 2030 – 240 ft. | Bike Class – 0 | Completed |
| Davis | 14 | I-15 Interchange | Upgrade | Freeway / UDOT | Completed |
| | 8 | @South Layton Interchange | ROW: 2006 – 200 ft. / 2030 – 200 ft. | Bike Class – 0 / Transit Project | |
| Davis | 15 | Main Street | Re-stripe – 2 to 4 Lanes | M. Arterial / 1.5 Miles / Local | Completed |
| | 0 | 400 West to 200 North | ROW: 2006 – 100 ft. / 2030 – 100 ft. | Bike Class – 3 / Transit Project | , |
| Davis | 15 | Fort Lane (Layton) | Widening – 2 to 4 Lanes | Collector / 1.6 Miles / Local | Completed |
| | 1 | Main St to Gordon Ave (1000 N.) | ROW: 2006 – 80 ft. / 2030 – 80 ft. | Bike Class – 0 | |
| Davis | 91 | Bountiful Boulevard. | New Construction – 0 to 2 Lanes | Collector / 3.1 Miles / Local | Deleted |
| | 20 | Eaglewood to Beck Street | ROW: 2006 – 0 ft. / 2030 – 72 ft. | Bike Class – 0 | |
| Weber | 30 6 | Western Weber E / W Study | Study | UDOT | Completed |
| | 18 | 1200 South to Davis County Line Hinckley Drive | New Construction – 0 to 4 Lanes | P. Arterial / 0.7 Miles / UDOT | |
| Weber | 6a | 1900 W (SR-126) to Midland Dr | ROW: 2006 – 0 ft. / 2030 – 110 ft. | Bike Class – 0 / Transit Project | Completed |
| | 18 | 5600 South Connection | New Construction – 0 to 2 Lanes | M. Arterial / 1.2 Miles / Local | |
| Weber | 9 | I-15 to South Weber Drive | ROW: 2006 – 0 ft. / 2030 – 66 ft. | Bike Class – 0 | Deleted |
| | 29 | North Legacy Corridor | New construction – 0 to 2 Lanes | P. Arterial / 8.5 Miles / UDOT | |
| Weber | 8 | 1200 South to I-15 | ROW: 2006 – 0 ft. / 2030 – 220 ft. | Bike Class – 1 | Deleted |
| | 17 | North Legacy Corridor | New Construction – 0 to 2 Lanes | P. Arterial / 6.5 Miles / UDOT | |
| Weber | 0a | 1200 South to 4000 South | ROW: 2006 – 0 ft. / 2030 – 220 ft. | Bike Class – 1 | Deleted |
| | 28 | 1100 West (Pleasant View) | New Construction – 0 to 2 Lanes | Collector / 1 Miles / Local | |
| Weber | 6 | Skyline Drive to 4000 North | ROW: 2006 – 0 ft. / 2030 – 60 ft. | Bike Class – 3 | Deleted |
| | 29 | 1100 West (Pleasant View) | New Construction – 0 to 2 Lanes | Collector / 0.6 Miles / Local | |
| Weber | 1 | Pleasant View Drive to US-89 | ROW: 2006 – 0 ft. / 2030 – 66 ft. | Bike Class – 3 | Deleted |
| | 20 | Riverdale Road (SR-26) | Widening – 4 to 5/6 Lanes | P. Arterial / 3.7 Miles / UDOT | |
| Weber | 4 | I-84 to Washington Boulevard. | ROW: 2006 – 99 ft. / 2030 – 120 ft. | Bike Class – 3 / Transit Project | Completed |
| | 20 | Wall Avenue | New Construction – 0 to 2 Lanes | Collector / 2.4 Miles / Local | |
| Weber | 1 | 2700 North to US-89 | ROW: 2006 – 0 ft. / 2030 – 66 ft. | Bike Class - 0 | Deleted |
| | 20 | Harrison Boulevard. | Widening – 4 to 6 plus Transit Lanes | P. Arterial / 4.8 Miles / UDOT | |
| Weber | 3 | 24 th Street to Country Hills | ROW: 2006 – 99 ft. / 2030 – 99 ft. | Bike Class – 3 / Transit Project | Deleted |

TABLE 7-2
Transit Projects Completed, Deleted, Modified or Under Construction From the 2007 – 2030 RTP

| County | ID | Project | | Description | Status |
|-----------|-------|---|---|---|-----------------|
| Salt Lake | SL20 | Bangerter Highway / 4000 West | Enhanced Bus | Bangerter Highway / 4000 West | Unfunded |
| Juit Luke | 3120 | Airport TRAX Line - Mid-Jordan TRAX Line | | Airport TRAX Line - Mid-Jordan TRAX Line | Phase |
| Salt Lake | SL16 | 4700 South Line (Taylorsville-Murray) 3900 S. TRAX Station – SLCC - Valley Fair | Bus Rapid Transit (BRT 3) / Enhanced Bus (BRT 1) | 4700 South Line (Taylorsville-Murray) 3900 S. TRAX Station – SLCC - Valley Fair | Modified |
| | | Mall | | Mall | |
| C-14 1 -1 | CL 24 | 1300 East (North) Line | Bus Rapid Transit (BRT 3) | 1300 East (North) Line | N 4 = 41:4: = 4 |
| Salt Lake | SLZI | University of Utah - Fort Union | | University of Utah - Fort Union | Modified |
| | | Southwest Downtown Line | Streetcar / Light-rail Transit | Southwest Downtown Line | |
| Salt Lake | CBD1 | 9 th South TRAX Station – Salt Lake | | 9 th South TRAX Station – Salt Lake | Unfunded |
| | | Intermodal Center | | Intermodal Center | |
| Salt Lake | CODS | FrontRunner (South) Line Salt Lake Commuter Rail Transit Station - | Commuter Rail Transit | FrontRunner (South) Line Salt Lake Commuter Rail Transit Station - | Under |
| Sait Lake | COR3 | Utah County Line | | Utah County Line | Construction |
| | | Airport Line | Light Rail Transit | Airport Line | |
| Salt Lake | COR1 | Energy Solutions Arena – Salt Lake | Light Nan Transit | Energy Solutions Arena – Salt Lake | Under |
| | | International Airport | | International Airport | Construction |
| Salt Lake | COD4 | Mid-Jordan Line | Light Rail Transit | Mid-Jordan Line | Under |
| Sait Lake | COR4 | 6400 South TRAX Station - Daybreak | | 6400 South TRAX Station - Daybreak | Construction |
| | | West Valley Line | Light Rail Transit | West Valley Line | Under |
| Salt Lake | COR5 | 2100 South TRAX Station – Valley Fair | | 2100 South TRAX Station – Valley Fair | Construction |
| | | Mall | | Mall | |
| | | Mountain View Park-and-Rides | Park-and-Rides | Mountain View Park-and-Rides | |
| Salt Lake | P&R1 | 3500 South, 5400 South, 7800 South, Herriman City, and Bangerter Highway / | | 3500 South, 5400 South, 7800 South, Herriman City, and Bangerter Highway / | Deleted |
| | | 3600 West | | 3600 West | |
| | | Hill AFB Transfer Center | Transfer Center | Hill AFB Transfer Center | |
| Davis | TC1 | SR-193 / University Avenue in Clearfield | | SR-193 / University Avenue in Clearfield | Modified |
| | | Bamburger Line (HAFB – Wall) | Corridor Preservation | Bamburger Line (HAFB – Wall) | |
| Weber | CP5b | West HAFB, Roy, East Ogden Airport – | | West HAFB, Roy, East Ogden Airport – | Modified |
| | | Wall Avenue | | Wall Avenue | |

Existing Plus Committed Projects

Projects on the 2040 RTP are implemented through the programming of federal, state, local, and other highway and transit funds as part of the Transportation Improvement Program (TIP). The TIP is a short-range, six year plan that directly matches funding sources with Phase 1 projects. During the TIP development process, projects from the current regional transportation plan are evaluated, along with projects from various management systems, such as pavement and congestion management systems. As part of the TIP process, the State Air Quality Implementation Plan (SIP) is reviewed for recommended Traffic Control Measures which need to be implemented.

Eligible projects are identified for each of the highway and transit funding categories. Projects are evaluated and priorities

are set within each funding source. The projects receiving the highest priority are identified in each category. These separate categories are then combined to form the TIP. The WFRC, in consultation with UDOT and UTA, is responsible for developing the Salt Lake and Ogden / Layton Urbanized Area Transportation Improvement Program.

The current 2011-2016 TIP is a compilation of projects from the various federal, state, and local funding programs for all the municipalities and counties in the urbanized portion of the Wasatch Front Region, as well as for the UDOT and UTA. Projects included in the TIP will implement the planned improvements in the 2040 RTP, help meet the short range needs of both Urbanized Areas, and provide for the maintenance of the existing transportation system.

HIGHWAY SYSTEM IMPROVEMENTS

The 2040 RTP includes both new or widened freeway and arterial streets throughout the Wasatch Front region. Selected major Salt Lake County east-west major facilities include the widening and new interchange improvements to SR-201, the widening of 700 South, California Avenue,I-80, 3300/3500 South, 4500/4700 South, 5400 South, 7000 South, 7800 South 9000 South, 10400/10600 South, 11400 South, 11800 South, 12600 South, 13400 South, and the construction of Porter Rockwell Boulevard. The north-south corridors in Salt Lake County include new construction or improvements to I-15 from 12300 South to the Utah County line, SR-111 (8400 West), 7200 West, the Mountain View Corridor, 5600 West, interchanges on Bangerter Highway, Redwood Road, Bingham Junction Boulevard, State Street, 700 East, 2000 East and Highland Drive, and Foothill Boulevard.

Selected highway improvements in Davis County include 1800 North (Clinton), the SR-193 Extension (Clearfield), interchange improvement along US-89, I-15 from Farmington to I-215 (North Salt Lake), I-15 from the Weber County Line to Hill Field Road, and the West Davis Corridor. Weber County freeway and arterial street improvements include 1200 South, 2550 South, 4000 South, 5500/5600 South, 24th Street, Skyline Drive (North Ogden and Pleasant View), Harrison Boulevard. (Ogden), Monroe Boulevard, SR-67 Extension (North Legacy Corridor), 1900 West, and 4700 West, and the widening of sections of I-15.

The region's two major metropolitan centers of Salt Lake City and Ogden City attract a growing number of work, shopping and entertainment related trips from Davis County. Travel between Salt Lake City and Ogden City is channeled through a geographically constricted area bordered by the Great Salt Lake on one side and the Wasatch Mountains on the other. Salt Lake, Davis and Weber Counties continue to experience considerable population growth and the need for improved north-south transportation capacity will become more apparent over the next 30 years. Upgrades of existing highways and the construction of new facilities will be needed to meet anticipated demand.

Highway Projects List

The 2040 RTP's Highway Project List provides details on which sections of corridors will require new construction and which sections of roadways will need capacity improvements or new construction by 2040. Each project description includes the type of improvement, number of lanes, current right-of-way width, proposed 2040 right-of-way width, functional classification, length of improvement, class of bicycle lane, sponsor for the improvement, and indicates if the project includes a provision for a transit way of some type. The 2040 RTP Highway Projects List is shown as Table 7-3. Each highway project is further described in Appendix O.

Highway Project and Phasing Maps

The 2040 RTP identifies highway improvement projects that increase capacity to meet travel demand through either adding new travel lanes to existing roads or the construction of new highways. These improvements projects are graphically illustrated as Map 7-1. Illustrative projects, shown as yellow lines on the map, represent proposed facilities that meet identified regional travel demand needs, but remain unfunded for the period of 2011-2040. The 2040 RTP would include these highway projects if adequate funding sources could be identified.

The recommended phasing of 2040 RTP highway improvements and new construction is shown as Map 7-2. Highway improvements fall into one of three categories. Highway improvement projects with an identified funding source that will best satisfy the Wasatch Front Region's immediate travel demand, are scheduled in Phase 1, or between the years 2011 and 2020. Phase 2 highway projects and improvements are those scheduled between 2021 and 2030. Finally, Phase 3 improvements are those which will be constructed between 2031 and 2040. Phase 1 highway improvements include projects listed on the current Wasatch Front Regional Council's Transportation Improvement Plan for 2011-2016. Phase 2 and Phase 3 projects also have identified funding sources. Non funded projects are included as part of the recommended phasing map.

TABLE 7-3 2040 RTP Highway Project List

| ID | Project | Descr | ription | Phase |
|--------|--|--|---|-------|
| SALT L | AKE COUNTY: EAST – WEST FACILITIES | | | |
| S-1 | Sports Complex Boulevard (2400 North) I-215 East Frontage Rd. to Redwood Rd. | New Construction: 0 to 2 lanes ROW: 2007 - 0 ft / 2040 - 66 ft | COL / 0.5 miles / Local Bike Class: None | 1 |
| S-2 | 700 South / 500 South 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 | California Avenue 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 | I-80 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 | I-80 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 | 2100 South I-15 to 1300 East | Operational | MA / 2.7 miles / Local Bike Class: 2 | 1 |
| S-7 | SR-201 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 and None | 3 |
| S-8 | SR-201 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 | SR-201 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 | Parkway Boulevard (2700 South) 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 | 3300 South / 3500 South I-215 (West) to Highland Drive | Operational | PA / 2.7 miles / UDOT Bike Class: 1, 2, and None | 1 |
| S-12 | 3500 South SR-111 Bypass to 7200 West | Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 100 ft | PA / 1.3 miles / Local Bike Class: 2 and 3 | 3 |
| S-13 | 3500 South 7200 West to Mountain View Corridor | Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 100 ft | PA / 1.7 miles / Local Bike Class: None | 2 |
| S-14 | 3500 South Mountain View Corridor to 4000 West | Widening: 2/4 to 6 lanes ROW: 2007 - 80 ft / 2040 - 100 ft | PA / 2.3 miles / UDOT Bike Class: None | 1 |
| S-15 | 4100 South 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 | 4700 South 6400 West to 4000 West | Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 110 ft | PA / 2.3 miles / Local Bike Class: 3 | 2 |
| S-17 | 4700 South 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 | 4500 South / 4700 South 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 | 4500 South 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 | 5400 South 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 | 5400 South 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 | 5400 South Mountain View Corridor to Bangerter 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 | 5400 South 5600 West to Bangerter Highway | Operational | MA / 2.3 miles / UDOT Bike Class: Priority 2 and 3 | 1 |
| S-24 | 5400 South Redwood Road to I-15 | Operational | MA / 2 miles / UDOT Bike Class: Priority 3 and None | 1 |
| S-25 | 6200 South 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 |

| ID | Project | Descri | ption | Phase |
|-------|--|--|--|-------|
| SALTI | AKE COUNTY: EAST – WEST FACILITIES | | F = - | |
| JALIL | 6200 South | Widening/New Construction: 2/0 to 4 | MA / 0.3 miles / Local | |
| S-27 | Mountain View Corridor to 5600 West | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: 2 | 1 |
| | 7000 South | Widening: 3 to 4 lanes | MA / 1.9 miles / Local | |
| S-28 | Bangerter Highway to Redwood Road | ROW: 2007 - 56 ft / 2040 - 99 ft | Bike Class: 2 | 2 |
| | 7000 South / 7200 South | Widening: 4 to 6 lanes | MA / 2 miles / UDOT | |
| S-29 | Redwood Road to Bingham Junction Boulevard | ROW: 2007 - 90 ft / 2040 - 110 ft | Bike Class: 1 and 2 | 3 |
| | 7000 South / 7200 South | Widening: 4 to 6 lanes | MA / 0.6 miles / UDOT | |
| S-30 | Bingham Junction Boulevard to I-15 | ROW: 2007 - 90 ft / 2040 - 110 ft | Bike Class: 1 | 1 |
| | Fort Union Boulevard | Operational | MA / 2.8 miles / Local | |
| S-31 | Union Park Boulevard to 3000 East | Operational | Bike Class: 2 | 1 |
| | 7800 South | Widening: 2 to 4 lanes | MA / 3.7 miles / Local | |
| S-32 | SR-111 to New Bingham Highway | ROW: 2007 - 66 ft / 2040 - 120 ft | Bike Class: Priority 2 | 1 |
| | 9000 South | New Construction: 0 to 4 lanes | PA / 1.7 miles / Local | |
| S-34 | SR-111 to 5600 West | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: 2 | 1 |
| | 9000 South | Widening: 4 to 6 lanes | PA / 2.5 miles / UDOT | |
| S-35 | 5600 West to Bangerter Highway | ROW: 2007 - 106 ft / 2040 - 123 ft | Bike Class: Priority 2 | 3 |
| | 9000 South | Widening: 4 to 6 lanes | PA / 4 miles / UDOT | |
| S-36 | Bangerter Highway to I-15 | ROW: 2007 - 106 ft / 2040 - 123 ft | Bike Class: 1 and 2 | 2 |
| | 10200 South | Widening: 2 to 4 lanes | COL / 2.6 miles / Local | |
| S-37 | SR-111 to Mountain View Corridor | ROW: 2007 - 82 ft / 2040 - 110 ft | Bike Class: 2 | 1 |
| | 10400 South / 10800 South | New Construction: 0 to 4 lanes | MA / 2 miles / Local | +- |
| S-38 | SR-111 to Mountain View Corridor | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: None | 2 |
| | 10400 South / 10800 South | New Construction: 0 to 4 lanes | MA / 1.2 miles / Local | |
| S-39 | Mountain View Corridor to 4800 West | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: 1 and None | 1 |
| | 10600 South / 10400 South | Operational | MA / 4.2 miles / UDOT | |
| S-40 | Bangerter Highway to I-15 | Operational | Bike Class: 2 and None | 1 |
| | 10600 South | Widening: 2 to 4 lanes | MA / 0.9 miles / Local | |
| S-41 | 1300 East to Highland Drive | ROW: 2007 - 86 ft / 2040 - 86 ft | Bike Class: 1 | 1 |
| | 11800 South | Widening: 2 to 4 lanes | MA / 2.4 miles / Local | |
| S-42 | SR-111 to 5600 West | ROW: 2007 - 66 ft / 2040 - 99 ft | Bike Class: Priority 2 | 2 |
| | 11400 South | Widening: 2 to 4 lanes | MA / 1 miles / Local | |
| S-43 | 11800 S. / 5600 W. to Valdania St. (5200 W.) | ROW: 2007 - 80 ft / 2040 - 110 ft | Bike Class: Priority 2 | 1 |
| | 11400 South | Widening: 2 to 4 lanes | MA / 1.2 miles / Local | |
| S-45 | 1300 East to Highland Drive | ROW: 2007 - 80 ft / 2040 - 99 ft | Bike Class: Priority 3 and None | 3 |
| | Herriman Parkway (12600 South) | New Construction: 0 to 4 lanes | PA / 1.5 miles / Local | |
| S-46 | 8000 West to 6000 West | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: 1 or 2 | 3 |
| | 12600 South | Widening: 4 to 6 lanes | PA / 1.6 miles / Local | |
| S-47 | Mountain View Corridor to Bangerter Highway | ROW: 2007 - 100 ft / 2040 - 100 ft | Bike Class: Priority 2 | 2 |
| | 12300 South / 12600 South | Widening: 4 to 6 lanes | PA / 2 miles / UDOT | |
| S-48 | Redwood Road to 700 East | ROW: 2007 - 100 ft / 2040 – 100 ft | Bike Class: Priority 2 | 2 |
| | Riverton Boulevard | New Construction: 0 to 4 lanes | COL / 0.6 miles / Local | |
| S-49 | 4570 West to 13400 South | ROW: 2007 - 0 ft / 2040 - 89 ft | Bike Class: None | 1 |
| | | | | |
| S-50 | 13400 South 8000 West to Mountain View Corridor | Widening/New Const.: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 100 ft | COL / 3 miles / Local Bike Class: 2, 3, and None | 3 |
| | | ' | | |
| S-51 | 13400 South | Widening: 4 to 6 lanes | COL / 1.7 miles / Local | 1 |
| | Mountain View Corridor to Bangerter Highway | ROW: 2007 - 66 ft / 2040 - 100 ft | Bike Class: 2 | |
| S-52 | Juniper Crest | New Construction: 0 to 6 lanes | MA / 1 miles / Local | 1 |
| | 4800 West to Mountain View Corridor | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: 2 | |
| S-53 | Juniper Crest / 14400 South | New Construction: 0 to 2 lanes | COL / 0.9 miles / Local | 1 |
| _ | Mountain View Corridor to 3600 West | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: Priority 2 and 3 | 1 - |

| ID | Project | Descri | ption | Phas |
|--------|--|--|--|------|
| SALT L | AKE COUNTY: EAST – WEST FACILITIES | | | |
| S-54 | Traverse Ridge Road 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 | Porter Rockwell Road 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 |
| SAITI | AKE COUNTY: NORTH – SOUTH FACILITIES | NOW. 2007 OTC/ 2040 107 TC | Bike class. Friority 1 and 2 | |
| JALI L | SR-111 Bypass | Widening/New Const.: 0/2 to 4 lanes | PA / 2.5 miles / UDOT | |
| S-56 | SR-201 to SR-111 | ROW: 2007 - 55 ft / 2040 - 150 ft | Bike Class: 3 and None | 3 |
| | SR-111 | Widening: 2 to 4 lanes | PA / 8.5 miles /Local-UDOT | |
| S-57 | 5400 South to 11800 South | ROW: 2007 - 106 ft / 2040 - 106 ft | Bike Class: Priority 2 | 2 |
| | 8000 West | New Construction: 0 to 4 lanes | COL / 1.8 miles / Local | |
| S-58 | 11800 South to 13400 South | ROW: 2007 - 0 ft / 2040 - 106 ft | Bike Class: None | 3 |
| | 7200 West | Widening: 2 to 4 lanes | MA / 2.5 miles / Local | |
| S-59 | SR-201 to 3500 South | ROW: 2007 - 66 ft / 2040 - 86 ft | Bike Class: 3 | 1 |
| | Mountain View Corridor | New Construction: 0 to 4 lanes | PA / 3 miles / UDOT | |
| S-61 | SR-201 to 4100 South | ROW: 2007 - 0 ft / 2040 - 328 ft | Bike Class: Priority 1 and None | 1 |
| | Mountain View Corridor | New Construction: 0 to 4 lanes | PA / 2.2 miles / UDOT | |
| S-62 | 4100 South to 5400 South | ROW: 2007 - 0 ft / 2040 - 328 ft | Bike Class: Priority 1 | 1 |
| | Mountain View Corridor | New Construction: 0 to 4 lanes | PA / 14.4 miles / UDOT | |
| S-63 | 5400 South to Redwood Road | ROW: 2007 - 0 ft / 2040 - 328 ft | Bike Class: Priority 1 and None | 1 |
| | Mountain View Corridor | New Construction: 0 to 4 lanes | PA / 2.9 miles / UDOT | |
| S-64 | Redwood Road to Utah County Line | ROW: 2007 - 0 ft / 2040 - 328 ft | Bike Class: None | 2 |
| | Mountain View Corridor | Widening & Interchanges: 4 to 6 lanes | FWY / 3 miles / UDOT | |
| S-66 | SR-201 to 4100 South | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: Priority 1 and None | : |
| | Mountain View Corridor | Widening & Interchanges: 4 to 6 lanes | FWY / 2.2 miles / UDOT | |
| S-67 | 4100 South to 5400 South | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: Priority 1 | |
| | Mountain View Corridor | Widening & Interchanges: 4 to 6 lanes | FWY / 4.5 miles / UDOT | |
| 5-68 | 5400 South to 9000 South | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: Priority 1 and None | |
| | Mountain View Corridor | Widening & Interchanges: 4 to 6 lanes | FWY / 1.5 miles / UDOT | |
| 5-69 | 9000 South to 10200 South | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: None | |
| 70 | Mountain View Corridor | New Construction & Ints: 0 to 6 lanes | FWY / 8.4 miles / UDOT | |
| 5-70 | 10200 South to Redwood Road | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: Priority 1 and None | |
| 71 | Mountain View Corridor | Widening & Interchanges: 4 to 6 lanes | FWY / 2.9 miles / UDOT | |
| 5-71 | Redwood Road to Utah County Line | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: None | |
| 5-72 | Mountain View Corridor | Widening: 6 to 6+HOV lanes | FWY / 22.5 miles / UDOT | |
| 5-72 | SR-201 to Utah County Line | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: Priority 1 and None | |
| S-73 | 5600 West | Widening: 2 to 4 lanes | MA / 3.1 miles / UDOT | |
| 5-73 | I-80 to SR-201 | ROW: 2007 - 86 ft / 2040 - 150 ft | Bike Class: Priority 2 | |
| S-74 | 5600 West | Operational | PA / 5 miles / Local-UDOT | |
| , , 4 | 2700 South to 6200 South | | Bike Class: 2 and None | |
| 5-75 | 5600 West | Widening/New Const.: 0/2 to 4 lanes | MA / 3.1 miles / Local | |
| ,,, | 6200 South to New Bingham Highway | ROW: 2007 - 0 ft / 2040 - 100 ft | Bike Class: 2 | |
| 5-76 | 5600 West | Operational | MA / 3.1 miles / Local | |
| . , 0 | 6200 South to New Bingham Highway | | Bike Class: 2 | |
| 5-77 | 5600 West | Widening: 2 to 4 lanes | COL / 1.5 miles / Local | |
| , | New Bingham Hwy to Old Bingham Hwy | ROW: 2007 - 66 ft / 2040 - 100 ft | Bike Class: Priority 2 | |
| 5-78 | 5600 West | New Construction: 0 to 4 lanes | COL / 1.7 miles / Local | |
| , , 0 | Old Bingham Highway to 10400 S. / 10800 S. | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: None | |
| S-79 | 5600 West | New Construction: 0 to 2 lanes | COL / 3.2 miles / Local | |
| .,, | 11800 South to 13100 South | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: 2 | |

| ID | Project | Descri | ption | Phase |
|--------|--|--|--|-------|
| SALT L | AKE COUNTY: NORTH – SOUTH FACILITIES | | | |
| S-80 | 5600 West Connection 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 | 4800 West 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 | 4800 West 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 | 4570 West 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 | 4200 West / Riverton Boulevard 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 | 4150 West 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 | 3600 West 13400 South to 14400 South | Widening: 2 to 4 lanes ROW: 2007 - 73 ft / 2040 - 86 ft | COL / 1.3 miles / Local Bike Class: Priority 3 | 3 |
| S-87 | 3200 West 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 | 3200 West 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 | I-215 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 | I-215 Frontage Road 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 | Redwood Road 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 | Redwood Road SR-201 to 4700 South | Operational | PA / 3.9 miles / UDOT Bike Class: 1 and None | 1 |
| S-93 | Redwood Road 9000 South to Bangerter Highway | Widening: 4 to 6 lanes ROW: 2007 - 66 ft / 2040 - 100 ft | PA / 6 miles / UDOT Bike Class: Priority 2 and None | 3 |
| S-94 | Redwood Road 9000 South to 11400 South | Operational | PA / 3 miles / UDOT Bike Class: Priority 2 and None | 1 |
| S-95 | Redwood Road 12600 South to Bangerter Highway | Widening: 2 to 4 lanes ROW: 2007 - 66 ft / 2040 - 100 ft | PA / 1.5 miles / UDOT Bike Class: Priority 2 | 1 |
| S-96 | Redwood Road Bangerter Highway to Porter Rockwell Road | Widening: 4 to 6 lanes ROW: 2007 - 100 ft / 2040 - 100 ft | PA / 2.7 miles / UDOT Bike Class: Priority 2 | 3 |
| S-97 | 1200 West 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 | Bingham Junction Boulevard 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 | Galena Park Boulevard 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 | Lone Peak Parkway 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 | Lone Peak Parkway 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 | I-15 Collectors 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 | 2 |
| S-104 | I-15 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 | I-15 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 |

| ID | Project | Desc | ription | Phase |
|--------|--|---|---|-------|
| SALT L | AKE COUNTY: NORTH – SOUTH FACILITIES | | | |
| S-106 | I-15 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 | 2 |
| S-107 | Cottonwood Street 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 | 2 |
| S-108 | State Street 600 South to I-215 | Operational | MA / 8.6 miles / UDOT Bike Class: 2 and None | 2 |
| S-109 | State Street I-215 to 12300 South | Operational | MA / 7.2 miles / UDOT Bike Class: None | 1 |
| S-110 | State Street 6200 South to 9000 South | Widening: 4 to 6 lanes ROW: 2007 - 100 ft / 2040 - 100 ft | MA / 3.3 miles / UDOT Bike Class: None | 1 |
| S-111 | 900 East 3300 South to 4500 South | Operational | COL / 1.7 miles / Local Bike Class: Priority 2 | 1 |
| S-112 | 900 East / 700 East 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 | 700 East 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 | Union Park Boulevard / 1300 East Fort Union Boulevard to 7800 South | Operational | MA / 1.2 miles / Local Bike Class: 1 and None | 1 |
| S-115 | Highland Drive Murray Holladay Blvd to Van Winkle Expwy | Operational | PA / 2 miles / Local Bike Class: None | 2 |
| S-116 | 2000 East 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 | Highland Drive 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 | Highland Drive 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 | Highland Drive 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 | Highland Drive Connection 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 | 500 South / Foothill Boulevard 1300 East to 2300 East | Operational | PA / 2.4 miles / UDOT Bike Class: 2 | 1 |
| S-122 | Foothill Boulevard 2300 East to I-80 | Widening: 4 to 6 lanes ROW: 2007 - 100 ft / 2040 - 100 ft | PA / 2.4 miles / UDOT Bike Class: 2, 3, and None | 3 |
| SALT L | AKE COUNTY: SPOT FACILITIES | | · | |
| S-123 | SR-201 Interchange @ I-80 | Upgrade | FWY / UDOT Bike Class: Priority 2 | 2 |
| S-124 | SR-201 Interchange @ SR-111 Bypass | New Construction | FWY / UDOT Bike Class: Priority 3 | 3 |
| S-125 | SR-201 Interchange @ 8400 West | New Construction | FWY / UDOT Bike Class: Priority 2 and 3 | 2 |
| S-126 | SR-201 Interchange @ 7200 West | New Construction | FWY / UDOT Bike Class: Priority 3 | 2 |
| S-127 | SR-201 Interchange @ I-215 | Upgrade | FWY / UDOT Bike Class: None | 3 |
| S-128 | SR-111 Rail Road Structure @ 4300 South | Widening: 2 to 4 lanes | PA / UDOT Bike Class: Priority 2 | 1 |
| S-130 | 5600 West Rail Road Crossing @ 750 South | New Construction: 2 to 4 lanes | PA / UDOT Bike Class: Priority 2 | 1 |

| ID | Project | Descri | iption | Phase |
|---------|--|---|---|-------|
| SALT LA | AKE COUNTY: SPOT FACILITIES | | | |
| S-131 | 4800 West Overpass @ SR-201 | New Construction: 0 to 2 lanes | COL / Local Bike Class: Priority 2 and 3 | 2 |
| S-133 | Bangerter Highway Interchange @ SR-201 | Upgrade | FWY / UDOT Bike Class: None | 3 |
| S-140 | Bangerter Highway Interchange @ 6200 South | New Construction | FWY / UDOT Bike Class: 2 | 3 |
| S-141 | Bangerter Highway Interchange @ 7000 South | New Construction | FWY / UDOT Bike Class: 2 | 3 |
| S-142 | Bangerter Highway Interchange @ 7800 South | New Construction | FWY / UDOT Bike Class: Priority 2 | 1 |
| S-143 | Bangerter Highway Interchange @ 9000 South | New Construction | FWY / UDOT Bike Class: 2 | 3 |
| S-144 | Bangerter Highway Interchange @ 9800 South | New Construction | FWY / UDOT Bike Class: Priority 2 | 3 |
| S-145 | Bangerter Highway Interchange @ 10400 South | New Construction | FWY / UDOT Bike Class: 2 | 3 |
| S-146 | Bangerter Highway Interchange @ 11400 South | New Construction | FWY / UDOT Bike Class: Priority 2 | 3 |
| S-147 | Bangerter Highway Interchange @ 12600 South | New Construction | FWY / UDOT Bike Class: Priority 2 | 3 |
| S-148 | Bangerter Highway Interchange @ 13400 South | New Construction | FWY / UDOT Bike Class: 2 and 3 | 2 |
| S-149 | Bangerter Highway Interchange @ 2700 West | New Construction | FWY / UDOT Bike Class: None | 3 |
| S-150 | Bangerter Highway Interchange @ Redwood Road | New Construction | FWY / UDOT Bike Class: Priority 2 | 3 |
| S-151 | Bangerter Highway Interchange @ 600 West | New Construction | FWY / UDOT Bike Class: None | 1 |
| S-152 | Bangerter Highway Interchange @ I-15 | Upgrade | FWY / UDOT Bike Class: None | 2 |
| S-154 | I-215 Interchange @ 5400 South | New Construction | FWY / UDOT Bike Class: Priority 3 | 3 |
| S-155 | I-215 Interchange @ Redwood Road (South) | Upgrade | FWY / UDOT Bike Class: None | 3 |
| S-156 | I-15 Interchange @ 100 South (HOV Ramps) | New Construction: 0 to 2 lanes | FWY / UDOT Bike Class: None | 3 |
| S-157 | I-15 Interchange @ I-215 (South) | Upgrade | FWY / UDOT Bike Class: None | 3 |
| S-158 | 13800 South Overpass @ I-15 | New Construction: 0 to 2 lanes | COL / Local Bike Class: Priority 2 | 3 |
| S-160 | I-15 Interchange @ 14600 South | Upgrade | FWY / UDOT Bike Class: Priority 2 | 2 |
| S-161 | I-80 Interchange @ I-215 / Foothill Drive | Upgrade | FWY UDOT Bike Class: Priority 1 and 3 | 2 |
| S-163 | Avalanche Snow Shed Little Cottonwood Cyn Rd. @ Whitepine Chutes | New Construction | MA UDOT Bike Class: 2 | 3 |
| DAVIS | COUNTY: EAST – WEST FACILITIES | | 1 | |
| D-1 | 1800 North West Davis Corridor to 2000 West | Widening: 2 to 4 lanes ROW: 2007 - 80 ft / 2040 - 100 ft | MA / 2 miles / UDOT Bike Class: Priority 2 | 2 |

| ID | Project | Descri | otion | Phase |
|-------|--|------------------------------------|-------------------------|-------|
| DAVIS | COUNTY: EAST – WEST FACILITIES | | | |
| | 1800 North | Widening: 2 to 4 lanes | MA / 2 miles / UDOT | |
| D-2 | 2000 West to SR-126 | ROW: 2007 - 66 ft / 2040 - 100 ft | Bike Class: Priority 2 | 1 |
| | SR-193 Extension | New Construction: 0 to 4 lanes | MA / 2.2 miles / UDOT | |
| D-3 | West Davis Corridor to 2000 West | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: Priority 2 | 2 |
| | SR-193 Extension | New Construction: 0 to 4 lanes | MA / 2.9 miles / UDOT | |
| D-4 | 2000 West to State Street | ROW: 2007 - 0 ft / 2040 - 110 ft | Bike Class: Priority 2 | 1 |
| - | SR-193 | Operational | MA / 5 miles / UDOT | |
| D-6 | I-15 to US-89 | | Bike Class: Priority 2 | 1 |
| | Syracuse Road (SR-127) | Widening: 2 to 4 lanes | MA / 1 miles / UDOT | |
| D-7 | West Davis Corridor to 2000 West | ROW: 2007 - 66 ft / 2040 - 110 ft | Bike Class: Priority 2 | 1 |
| | Antelope Drive | New Construction: 0 to 2 lanes | MA / 0.3 miles / Local | _ |
| D-8 | Oak Forest Drive (2500 East) to US-89 | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: Priority 2 | 1 |
| | Gordon Avenue (1000 North) | Widening: 2 to 4 lanes | COL / 0.7 miles / Local | _ |
| D-9 | Fairfield Road to 1600 East | ROW: 2007 - 66 ft / 2040 - 86 ft | Bike Class: None | 2 |
| 5.40 | Gordon Avenue (1000 North) | New Construction: 0 to 4 lanes | COL / 1.3 miles / Local | |
| D-10 | 1600 East to US-89 | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: None | 2 |
| | Hill Field Road Extension | Widening: 2 to 4 lanes | MA / 1.5 miles / Local | |
| D-11 | 3650 West (Layton) to 2200 West (Layton) | ROW: 2007 - 60 ft / 2040 - 110 ft | Bike Class: None | 3 |
| D 43 | Layton Parkway | New Construction: 0 to 4 lanes | MA / 2.6 miles / Local | _ |
| D-12 | West Davis Corridor to Flint Street | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: None | 1 |
| D 13 | 200 North (Kaysville) | Widening: 2 to 4 lanes | MA / 2.1 miles / Local | 2 |
| D-13 | West Davis Corridor to I-15 | ROW: 2007 - 60 ft / 2040 - 99 ft | Bike Class: Priority 2 | 3 |
| D 14 | 2600 South / 1100 North | Operational | MA / 1.4 miles / Local | 1 |
| D-14 | Redwood Road to I-15 | | Bike Class: Priority 2 | 1 |
| D-15 | Center Street | Operational | COL / 1.1 miles / Local | 1 |
| D-13 | Redwood Road to US-89 | | Bike Class: Priority 1 | 1 |
| DAVIS | COUNTY: NORTH – SOUTH FACILITIES | | | |
| D-16 | West Davis Corridor | New Construction: 0 to 4 lanes | FWY / 4.8 miles / UDOT | 2 |
| D-10 | Weber County Line to Syracuse Road | ROW: 2007 - 0 ft / 2040 - 320 ft | Bike Class: Priority 1 | 2 |
| D-17 | West Davis Corridor | New Construction: 0 to 4 lanes | FWY / 11.8 miles / UDOT | 1 |
| D-17 | Syracuse Road to I-15 / US-89 / Legacy Parkway | ROW: 2007 - 0 ft / 2040 - 320 ft | Bike Class: Priority 1 | 1 |
| D-18 | West Davis Corridor | Corridor Preservation | FWY / 4.8 miles / UDOT | 1 |
| D-10 | Weber County Line to Syracuse Road | ROW: 2007 - 0 ft / 2040 - 320 ft | Bike Class: Priority 1 | 1 |
| D-19 | 3000 West | New Construction: 0 to 2 lanes | COL / 0.5 miles / Local | 1 |
| D 13 | 6000 South (Weber County) to 2300 North | ROW: 2007 - 0 ft / 2040 - 75 ft | Bike Class: Priority 2 | _ |
| D-20 | 2000 West (SR-108) | Widening: 2 to 4 lanes | MA / 4.4 miles / UDOT | 1 |
| D 20 | Weber County Line to Syracuse Road (SR-108) | ROW: 2007 - 66 ft / 2040 - 110 ft | Bike Class: Priority 2 | - |
| D-21 | 2000 West | Widening: 2 to 4 lanes | COL / 1.5 miles / Local | 3 |
| | Syracuse Road (SR-108) to West Davis Corridor | ROW: 2007 - 66 ft / 2040 - 99 ft | Bike Class: Priority 2 | |
| D-22 | 3650 West (Layton) | New Construction: 0 to 2 lanes | COL / 0.7 miles / Local | 3 |
| | 700 North to Gentile Street | ROW: 2007 - 0 ft / 2040 - 66 ft | Bike Class: None | |
| D-23 | 2700 West (Layton) | New Construction: 0 to 4 lanes | COL / 1.8 miles / Local | 3 |
| | Gordon Avenue to Layton Parkway | ROW: 2007 - 0 ft / 2040 - 99 ft | Bike Class: None | |
| D-24 | Redwood Road | Widening: 2 to 4 lanes | MA / 1.7 miles / UDOT | 2 |
| | 500 South to 2600 South | ROW: 2007 - 100 ft / 2040 - 110 ft | Bike Class: Priority 2 | |
| D-25 | I-15 | Widening: 6 to 6+HOV lanes | FWY / 6.3 miles / UDOT | 1 |
| | Weber County Line to Hill Field Road (SR-232) | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: None | |
| D-26 | I-15 | Widening: 8 to 8+HOV lanes | FWY / 10.6 miles / UDOT | 1 |
| | US-89 (Farmington) to I-215 | ROW: 2007 - 328 ft / 2040 - 328 ft | Bike Class: None | 1 |

| ID | Project | Desc | cription | Phase |
|--------|-------------------------------------|------------------------------------|----------------------------------|----------|
| DAVIS | COUNTY: NORTH – SOUTH FACILITIES | | | |
| | US-89 | Widening: 4 to 6 lanes | FWY / 3.2 miles / UDOT | |
| D-28 | I-84 to Antelope Drive | ROW: 2007 - 120 ft / 2040 - 150 ft | Bike Class: Priority 2 | 2 |
| | US-89 | Widening: 4 to 6 lanes | FWY / 7.4 miles / UDOT | |
| D-29 | Antelope Drive to I-15 (Farmington) | ROW: 2007 - 120 ft / 2040 - 150 ft | Bike Class: Priority 2 and None | 3 |
| DAVIC | COUNTY: SPOT FACILITIES | NOV. 2007 120 117 2040 150 11 | BIRC Class. Friority 2 and Noric | |
| DAVIS | | Now Construction, 2 to 4 longs | MA / LIDOT | <u> </u> |
| D-30 | 1800 North Overpass | New Construction: 2 to 4 lanes | MA / UDOT | 1 |
| | @ 500 West Rail Road Crossing | | Bike Class: Priority 2 | |
| D-31 | I-15 Interchange | New Construction | FWY / UDOT | 1 |
| | @ 1800 North | | Bike Class: Priority 2 | |
| D-32 | I-15 Interchange | Upgrade | FWY / UDOT | 3 |
| | @ 650 North | | Bike Class: None | |
| D-33 | I-15 Interchange | Upgrade | FWY / UDOT | 3 |
| | @ Syracuse Road | | Bike Class: Priority 2 | |
| D-35 | I-15 Interchange | Upgrade | FWY / UDOT | 2 |
| - 33 | @ Hill Field Road | | Bike Class: None | |
| D-36 | I-15 Interchange | New Construction | FWY / UDOT | 1 |
| D 30 | @ Shepard Lane | | Bike Class: Priority 2 | |
| D-37 | I-15 Interchange | Upgrade | FWY / UDOT | 3 |
| D-37 | @ Parrish Lane | | Bike Class: Priority 2 | , |
| D-38 | I-15 Interchange | Upgrade | FWY / UDOT | 3 |
| D-30 | @ 400 North / 500 West | | Bike Class: Priority 2 and 3 | 3 |
| D-39 | I-15 Interchange | Upgrade | FWY / UDOT | 3 |
| D-39 | @ 500 South | | Bike Class: Priority 2 | 3 |
| 5 40 | I-15 Interchange | Upgrade | FWY / UDOT | |
| D-40 | @ 2600 South | | Bike Class: Priority 2 | 3 |
| | 2600 South / 1100 North | New Construction | MA / Local | _ |
| D-41 | @ 1150 West Rail Road Crossing | | Bike Class: Priority 2 | 2 |
| | Legacy Parkway Interchange | New Construction | FWY / UDOT | |
| D-42 | @ Center Street | | Bike Class: Priority 1 | 3 |
| | US-89 Interchange | New Construction | FWY / UDOT | |
| D-45 | @ Antelope Drive | | Bike Class: Priority 2 | 1 |
| | US-89 Interchange | New Construction | FWY / UDOT | |
| D-46 | @ Gordon Avenue | | Bike Class: Priority 2 | 2 |
| | US-89 Interchange | New Construction | FWY / UDOT | |
| D-47 | @ Oakhills Drive (SR-109) | | Bike Class: Priority 2 | 2 |
| | US-89 Interchange | New Construction | FWY / UDOT | |
| D-48 | @ 400 North (Fruit Heights) | | Bike Class: Priority 2 | 1 |
| | Nicholl's Road Overpass | New Construction: 0 to 2 lanes | COL / Local | |
| D-49 | @ US-89 | New Constituction. O to 2 lanes | Bike Class: None | 3 |
| ///EDE | R COUNTY: EAST – WEST FACILITIES | | Directions, None | |
| VVEDEI | | No. Construition On Albana | 601 / 2.6 11 / 1 1 | T |
| W-1 | Skyline Drive (North) | New Construction: 0 to 2 lanes | COL / 3.6 miles / Local | 1 |
| | US-89 to 450 East | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: Priority 3 | |
| W-2 | Skyline Drive (North) | New Construction: 0 to 2 lanes | COL / 3.1 miles / Local | 2 |
| | 450 East to 2600 North | ROW: 2007 - 0 ft / 2040 - 86 ft | Bike Class: Priority 3 | |
| W-3 | 1700 North | New Construction: 0 to 2 lanes | COL / 1.2 miles / Local | 3 |
| | US-89 to 400 East | ROW: 2007 - 0 ft / 2040 - 66 ft | Bike Class: 1 | |
| W-4 | Larsen Lane | Widening: 2 to 4 lanes | MA / 0.5 miles / Local | 3 |
| V V | US-89 / Wall Avenue to 400 East | ROW: 2007 - 60 ft / 2040 - 89 ft | Bike Class: None | |
| W-5 | Pioneer Road (400 North) | Re-stripe: 2 to 4 lanes | COL / 1 miles / Local | 1 |
| VV-3 | I-15 to 1200 West | ROW: 2007 - 110 ft / 2040 - 110 ft | Bike Class: Priority 2 | 1 1 |

| ID | Project | Desc | cription | Phase |
|-------|--|--|---|-------|
| WEBER | R COUNTY: EAST – WEST FACILITIES | | | |
| W-6 | 1200 South 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 | 1200 South 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 | 20th Street Wall Avenue to Harrison Boulevard | Operational | MA / 1.6 miles / Local Bike Class: None | 1 |
| W-9 | 21st Street Wall Avenue to Adams Avenue | Operational | COL / 0.6 miles / Local Bike Class: None | 1 |
| W-10 | 24th Street 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 | 2550 South 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 |
| W-12 | Country Hills Drive 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 | 4000 South (SR-37) SR-67 (North Legacy Corr.) to 1900 W. (SR-126) | Widening: 2 to 4 lanes ROW: 2007 - 86 ft / 2040 - 110 ft | MA / 3.9 miles / UDOT Bike Class: Priority 3 | 2 |
| W-14 | Midland Drive (SR-108) 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 | Riverdale Road (SR-26) 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 | 5600 South / 5500 South 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 | 5600 South 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 |
| WEBEF | R COUNTY: NORTH – SOUTH FACILITIES | · | , | I |
| W-19 | SR-67 (North Legacy Corridor) 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 | SR-67 (North Legacy Corridor) 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 | SR-67 (North Legacy Corridor) 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 | SR-67 (North Legacy Corridor) 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 | 4700 West 1200 South to 4000 South | Widening: 2 to 4 lanes ROW: 2007 - 82 ft / 2040 - 110 ft | MA / 3.8 miles / Local Bike Class: 1, 2, and None | 3 |
| W-24 | 4700 West 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 | 3500 West 1200 South to Midland Drive | Operational | COL / 4.6 miles / Local Bike Class: Priority 3 | 2 |
| W-26 | 3500 West (SR-108) 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 | 1900 West / 2000 West (SR-126) 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 | 1900 West (SR-126) 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 | I-15 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 | 3 |
| W-30 | I-15 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 |

TABLE 7-3 CONTINUED 2040 RTP Highway Project List

| ID | Project | Des | cription | Phase |
|-------|---|---|---|-------|
| WEBEF | R COUNTY: NORTH – SOUTH FACILITIES | | | |
| W-31 | 600 West Elberta Drive to 2600 North | Operational | COL / 0.9 miles / Local Bike Class: 3 | 2 |
| W-32 | Adams Avenue 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: None | 2 |
| W-33 | 450 East / 400 East 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 | Monroe Boulevard 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 | Harrison Boulevard 2600 North to 12th Street | Operational | PA / 3.8 miles / Local Bike Class: Priority 3 and None | 2 |
| W-36 | Harrison Boulevard 12th Street to Country Hills Drive | Operational | PA / 4.7 miles / UDOT Bike Class: Priority 2 and None | 1 |
| W-37 | Harrison Boulevard 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 and None | 3 |
| W-38 | US-89 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 | Skyline Drive 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 |
| WEBER | R COUNTY: SPOT FACILITIES | | | - |
| W-41 | I-15 Interchange @ 24th Street | Upgrade | FWY / UDOT Bike Class: Priority 3 | 2 |
| W-42 | I-15 Interchange @ Riverdale Road (SR-26) | Upgrade | FWY / UDOT Bike Class: None | 1 |
| W-43 | I-15 Interchange @ 5600 South | Upgrade | FWY / UDOT Bike Class: Priority 2 and 3 | 3 |
| W-44 | US-89 Interchange @ I-84 | Upgrade | FWY / UDOT Bike Class: Priority 2 | 3 |

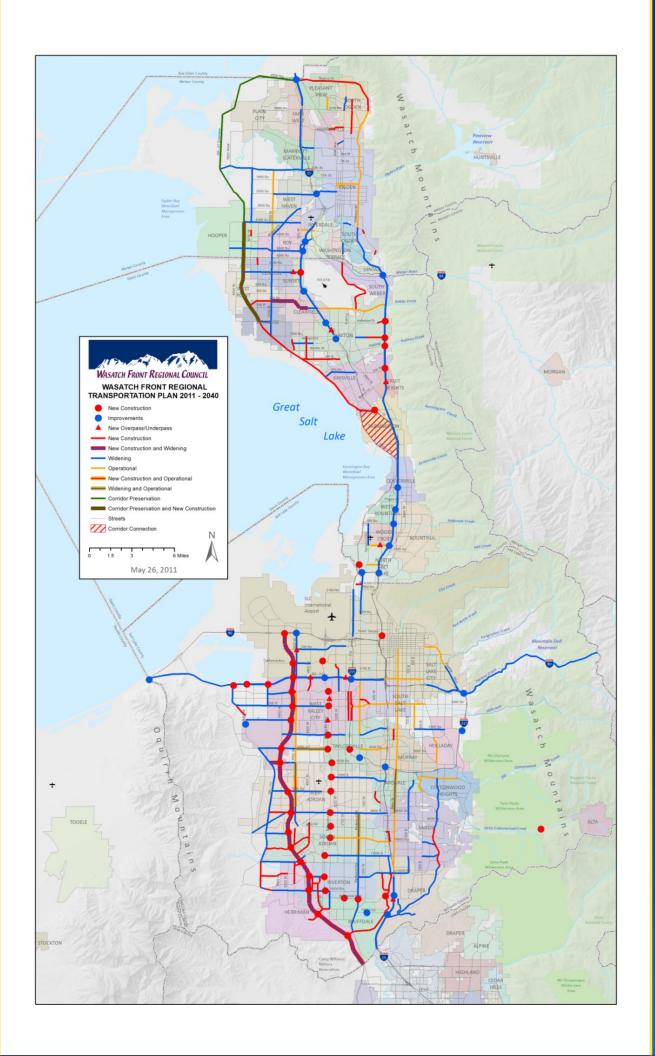
Future Right-of-way Map

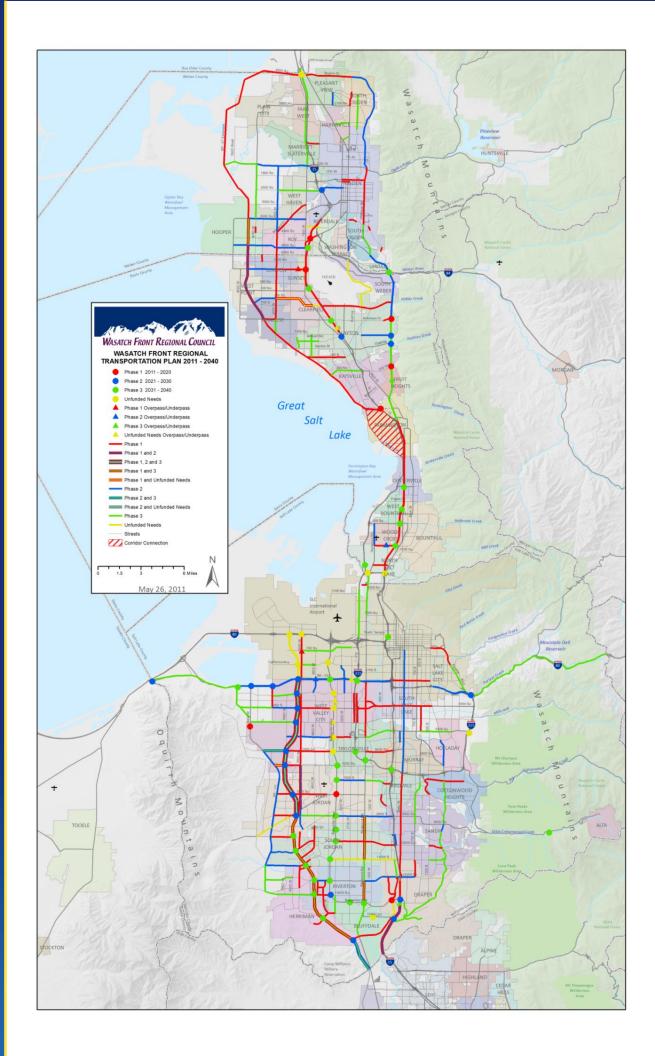
The 2040 RTP also identified a future right-of-way street and highway system that will serve the anticipated travel demand of the Wasatch Front Region beyond the year 2040. The comprehensive plans of individual municipalities and counties along the Wasatch Front were gathered and reviewed to obtain information concerning existing and future highway and street networks within their jurisdictional boundaries. This information was compiled and mapped by the WFRC staff and presented in graphical form. The 2040 RTP includes recommendations of future right-of-way widths for all existing and proposed freeway, principal arterials, minor arterials, and collector streets. Recommended right-of-way widths vary from community to community and are shown as a range. For example, principal arterials are identified as facilities that

will eventually be widened to widths of 126 to 150 feet. The Wasatch Front's future right-of-way information is presented on Map 7-3.

Highway Functional Classification Map

The 2040 RTP's "Wasatch Front Urban Area Future Functional Classification," shown as Map 7-4, graphically illustrates the Wasatch Front Region's (1) freeways, (2) principal arterials, (3) minor arterials, and (4) collector streets. Freeway systems are the largest traffic facilities built with complete control of access and high design speeds and provide the greatest mobility for regional traffic. Principal arterial streets serve the major centers of activity of a metropolitan area and the longest projected trips. Minor arterials interconnect with





and augment the urban principal arterial system and provide for trips of moderate length at a somewhat lower level of travel mobility than principal arterials. These facilities place more emphasis on land access to adjoining or nearby properties than freeways or major aterials, and offer movement within communities. However, ideally they should not penetrate identifiable neighborhoods. Finally, collector streets provide for both land access service and movement for local traffic within residential, commercial, and industrial areas. This particular road classification may penetrate neighborhoods distributing trips form arterial streets through developed areas to ultimate destinations. Conversely, collector roads can also be expected to collect traffic from local streets and channel it onto the arterial system. A more complete description of various highway and street functional classifications can be found in Appendix P.

TRANSIT SYSTEM IMPROVEMENTS

A variety of transit system improvements and accompanying types or technologies, are included in the 2040 RTP. Recommended system improvements and new construction will help extend service and increase transit use. These planned improvements to the Wasatch Front Region's transit system can be summarized in five general areas.

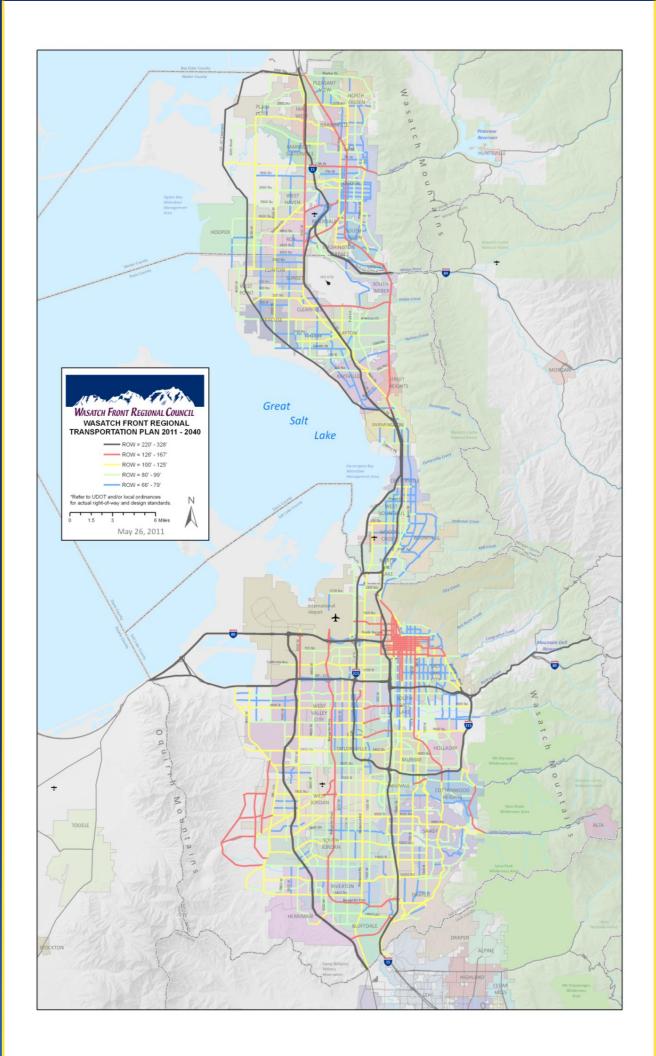
- BRT and rail transit improvements in the most heavily used bus corridors served by UTA
- Creation of a Bus Rapid Transit (BRT 3) and Enhanced Bus (BRT 1) network
- Rail capacity improvements in downtown Salt Lake City and in Weber County
- Extension of light rail to Utah County
- Continued growth of bus service

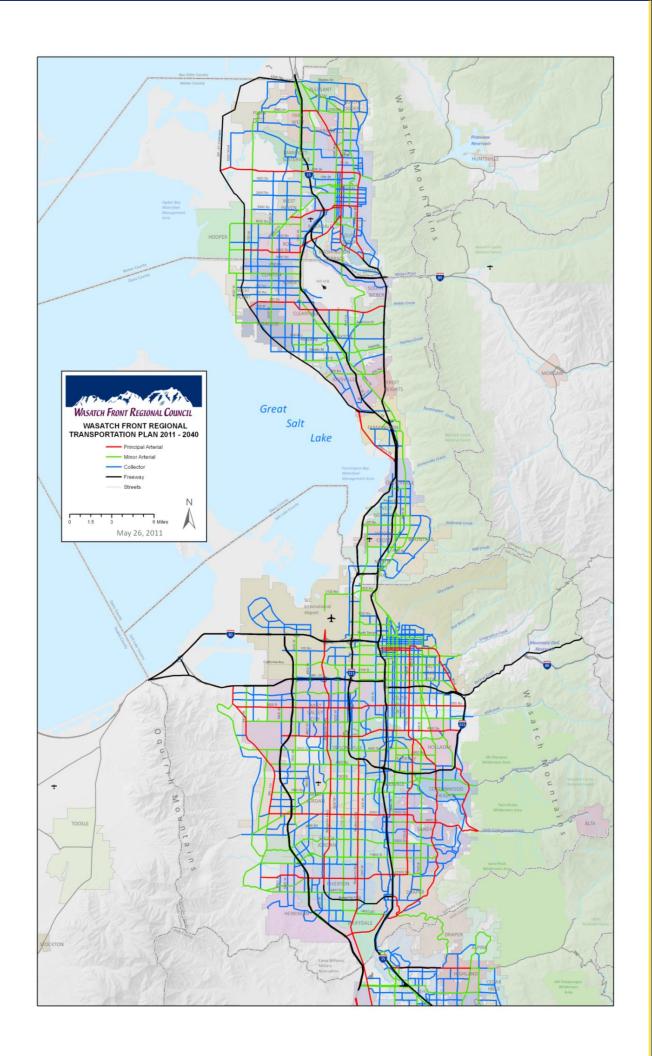
More specifically, the recommendations call first for transit improvements in the most heavily used bus corridors served by the UTA system. Among the targeted corridors for first phase improvements are services to Weber State University, Washington Boulevard, Davis County Main and State Streets (Route 470), the University of Utah/Research Park, State Street, Redwood Road, Sugarhouse, 3500 South, and Taylorsville-Murray. First and foremost among the improvements should be the addition of a full schedule of service, followed by the addition of capital services as finances permit.

Planned transit improvements, whether bus or rail, would include new specialized vehicles, enhanced transit stops, traffic signal priority, and exclusive lanes or queue jump lanes where feasible. These improvements are designed to add comfort, reliability, visibility, and speed to these routes increasing ridership, attracting economic development, and making services in these corridors more cost effective.

Next, it is proposed that feeder services and other corridors that show promise be developed to funnel ridership to the core rail and BRT routes. Where warranted, financially prudent, and physically feasible these routes should also be provided with full amenities, including new specialized vehicles, enhanced transit stops, traffic signal priority, and exclusive lanes or queue jump lanes. Generally, those corridors thought most likely to warrant exclusive lanes are shown in their ultimate incarnation as Bus Rapid Transit (BRT 3). Those thought less likely to warrant exclusive lanes are shown as Enhanced Bus (BRT 1). In many cases the construction of these improvements are built in stages as sufficient finances become available or in coordination with street projects. For example a project ultimately desired as BRT may first go through an incarnation as high frequency bus (not shown in the RTP maps) and Enhanced Bus (BRT 1) before exclusive lanes are built and they become Bus Rapid Transit (BRT 3). Care will need to be taken to build upon each successive stage of development.

Additionally, the RTP calls for capacity improvements on the existing rail transit network. More specifically, the rerouting of the University TRAX line and the reconstruction of the Ogden to Pleasant View portion of the FrontRunner Line are planned. The rerouting of the University TRAX Line would reduce the number of trains using the congested Main Street/ South Temple corridor through downtown to create a more direct route between Salt Lake Central. The reconstruction of the Ogden to Pleasant View segment of the FrontRunner Line would permit more trains to service this portion of the Line. The current northern segment of the FrontRunner service utilizes the Union Pacific freight tracks. Because it shares the tracks with freight service the Commuter Rail service is limited to only a few trips per day. More service will be warranted in the future and the RTP provides for construction of a new line to serve FrontRunner patrons adjacent to existing shared freight tracks.





Finally, The RTP calls for the extension of the north/south TRAX line south into northern Utah County. Northern Utah County is a high growth area. Its Metropolitan Planning Organization, the Mountainland Association of Governments, proposes that a TRAX line be constructed sometime between 2030 and 2040 to serve this high growth area.

In total, approximately 160 miles of Bus Rapid Transit

(BRT 3), 130 miles of Enhanced Bus (BRT 1), 12 miles of Light Rail Transit, 12 miles of Streetcar, nine independent park and ride lots, and four transit hubs will be constructed. Additionally, six miles of Commuter Rail will be reconstructed and eight miles of transit right of way will be preserved. The transit recommendations in the 2040 RTP are based upon the existing Wasatch Front's transit system; appropriately expanding community, regional, and inter-regional services,

FIGURE 7-1

Wasatch Front Urban Area Transit Plan Objectives for the 2040 RTP

Provide a full, high frequency transit service in high demand corridors as soon as practicable and provide capital improvements in these high demand corridors as funding becomes available. Achieve transit operational savings through strategic use of capital investments to streamline transit operations.

Create a network of rail, Bus Rapid Transit (BRT 3), and Enhanced Bus (BRT 1) transit corridors where service is of clearly superior quality based on convenient hours of operation, frequency of service, high level reliability, competitive travel time, comfort, a good safety record, and aesthetic urban design.

Connect regional activity centers in support of the Wasatch Choice for 2040.

Minimize congestion delay upon the rail, Bus Rapid Transit (BRT 3) and Enhanced Bus (BRT 1) network through the extensive use of Traffic Signal Priority and the use of transit lanes at major intersection approaches or continuous exclusive lanes.

Provide for maximum transit system interoperability, avoiding forced transfers.

Establish fixed transit corridors so local governments can prepare for a major transit investment by preserving rights-of-way, communities can focus on transit oriented, economic development efforts commensurate with the anticipated transit investment.

Coordinate transit and roadway projects to minimize construction costs and community disturbance.

By 2030, expand local bus service by 25 percent

Preserve the rail operations capacity of the Main Street/South Temple TRAX line in downtown Salt Lake City

Expand FrontRunner operations capacity between Ogden City and Pleasant View.

Extend TRAX operations to Utah County

Grow local bus service by 25 percent by 2030

Maintain the financial health of UTA and its partners.

Continue to improve access to the bus and rail transit system for persons with disabilities. Also, provide expanded paratransit service for those who cannot access regular transit service.

as well as providing the transit hubs necessary to narrow the convenience gap between transit and the private auto. Figure 7-1 identifies the transit plan objectives for the 2040 RTP.

Transit Project Modes

Various forms of transit are planned in the 2040 RTP. For planning purposes, each type of transit has a specific definition, package of amenities, and costs. However, in practice, both rail and Bus Rapid Transit offer a broad continuum of characteristics and each individual project will be tailored to fit the individual circumstances. This section outlines broad definitions of each transit technology type. The specific amenities that were assumed to be part of the various forms of transit technologies are listed in the Financial Chapter.

Streetcar

- ½ mile station spacing
- Dedicated platforms and shelters, real-time vehicle arrival notification, ticket vending machines, potential for parkand-ride lots near key stations
- Electric rail based vehicles
- 10-15 minute headways
- Potential traffic signal priority and/or queue jumping lanes at major traffic signals
- \$30-40 million cost per mile

Enhanced Bus (BRT 1)

- ½ mile
- Dedicated platforms and shelters, real-time vehicle arrival notification, ticket vending machines, potential for parkand-ride lots near key stations
- Branded Bus
- 15-30 minute headways
- Potential traffic signal priority and/or queue jumping lanes at major traffic signals
- \$2-4 million cost per mile

Bus Rapid Transit (BRT 2)

- ½ to 1 mile station spacing
- Dedicated platforms and shelters, real-time vehicle arrival notification, ticket vending machines, potential for parkand-ride lots near key stations
- Specialized Vehicles
- 10-20 minute headways
- Potential for roadway improvements including exclusive-

- shared HOV lanes, peak hour shoulder lanes, traffic signal prioritization, potential queue jumping lane at major traffic signals
- \$7-10 million cost per mile

Bus Rapid Transit (BRT 3)

- ½ to 1 mile station spacing
- Center rail-style platforms and shelters, real-time vehicle arrival notification, ticket vending machines, potential for park-and-ride lots near key stations
- Branded buses
- 10-20 minute headways
- Fully dedicated, center running, transit only right-ofway for bus operations, traffic signal prioritization/ coordination
- \$10-30 million cost per mile

Light Rail Transit (LRT)

- 1 mile station spacing
- Dedicated platforms and shelters, real-time vehicle arrival notification, ticket vending machines, park-and-ride at most stations
- Electric rail based vehicles
- 10-15 minute headways
- Traffic Signal Priority and exclusive lanes with potential gated crossings
- \$40-70 million cost per mile

Commuter Rail

- 5 mile station spacing
- Dedicated platforms and shelters, real-time vehicle arrival notification, ticket vending machines, park-and-ride at most stations
- Diesel rail vehicles which can operate with freight rail
- 20-60 minute headways
- exclusive lanes or freight shared track with gated crossings
- \$10-30 million cost per mile

The 2040 RTP recommends a variety of transit services providing different types of travel choices in much the same way as freeways, arterials, collectors, and local streets serve different types of travel choices for the automobile traveler. However, more critical to the user of transit than for the

automobile traveler are efficient transitions from one system to another. Smooth transitions are facilitated in transit through intermodal centers, transit hubs, and intercept park-and-ride lots. When fully implemented, transit riders will be able to identify specific facilities where they can make quick and easy transfers from one type of transit mode, such as commuter rail, to another. Transit hubs, intermodal centers, and park-and-ride lots allow for greater flexibility of destination and increased convenience to system patrons. The RTP recommends the construction of transit hubs, transfer centers, and regional park-and-rides facilities not associated with a major investment line.

Transit Hubs

Transit hubs are specifically designed to connect regional and inter-regional transit services with passengers originating from areas with lower trip densities but with collector and local transit services. Transit hubs provide passengers with scheduled transfers to express or limited stop transit modes not otherwise directly available to them. Unlike park-and-ride lots or other transit connections, local buses serving each hub would be scheduled to depart when all of the scheduled buses have arrived. Logical places for transit hubs are commuter rail stations, light rail stations, large employment centers, and major commercial nodes. Potential transit hub locations in the Wasatch Front Region include each of the FrontRunner commuter rail stations as well as the South and West Hill Air Force Base Transfer Centers, the Airport East Transfer Center, and the Fort Union transit hub. The purpose of these Centers is described in more detail in Appendix J.

Transit Park and Ride System

A number of park-and-ride lots are currently in use throughout the Wasatch Front Region. The Utah Transit Authority's current park-and-ride lots allow transit riders to park their automobiles and commute to their destination. Nearly all of the FrontRunner and TRAX stations are provided with park-and-ride facilities and UTA has shared use agreements with several lot owners including the Church of Jesus Christ of Latter-day Saints which owns many lots not in use during the work week. Additional park-and-ride lots, will need to be identified, contracted for, or constructed as opportunity arises. Most park-and-ride lots are generally not regionally significant and need not be identified in the Regional Transportation Plan. However, additional park-and-ride lots

should be sought out along major investment corridors and expanded as needed. This is especially true in outlying areas where densities do not justify regular transit route coverage. Such locations include the outer fringes of the developing urban area and smaller, distant towns. General locations for three park-and-ride lots have been identified in the 2040 RTP. These include Ogden Valley near the entrance to Ogden Canyon and in southeast Salt Lake County near the mouths of Big and Little Cottonwood Canyons. The two proposed Salt Lake County park-and-ride lots would be separate and apart from the lots that currently serve the winter sports industry in the two Cottonwood Canyons.

Typical Cross Sections

A typical cross section for transit facilities with exclusive rights-of-way would be about 30 feet of right-of-way width between stations flaring out to about 44 feet of right-of-way width at stations. Station structures would be 8 feet in width. An additional 11-foot wide lane to the curb side of each station would allow for both through and right hand turning vehicular traffic flow. This type of transit station and lane configuration would accommodate a BRT, light-rail line or a streetcar line. For a BRTII line, this width of right-of-way would accommodate two 11.5-foot transit lanes and allow 8 feet for curbs, gutter and landscaping as shown in Figures 7-2 and 7-3. For a streetcar or light-rail transit line, about 30 feet of right-of-way width would accommodate two rail lanes, curbs and space for the electrical catenary poles with two feet to spare as shown in Figures 7-4.

Transit Projects Lists and Maps

The 2011-2040 RTP Transit Project List is separated into three phases. A single transit line may be found in more than one RTP phase, as the project may be built in phases. The project header provides the name of the transit line, the number of phases or stages in which the line is constructed and the general corridor the line is to serve. Underneath the header is information about each segment of the placeholder project alignment. The information includes the "needed mode", "funded mode", and the extent of the alignment segment. The needed and funded mode represents the type and level of transit investment that is desired and funded in that phase of the 2040 RTP. Map 7-5 through Map 7-8 show the 2011-2040 transit capital projects funded through the end of each phase. Map 7-8 also shows those line segments that remain unfunded

in part or in whole when compared to the needed modes. The RTP phases are Phase 1, 2011-2020, Phase 2, 2021-2030, Phase 3, 2031-2040, and the Unfunded Phase in which projects that have no identified funding are placed. The 2040 RTP Transit Projects List is shown as Table 7-4. Each transit project is further described in Appendix Q. The in-street right-of-way width required for these projects outside of a station area are included as part of Map 7-3, the Wasatch Front Urban Area Future Right-Of-Way.

Although not specifically identified in the 2040 RTP project list or maps, the regional transportation plan calls for a full schedule, high frequency bus to initiated as part of each line, in conjunction with capital improvements anywhere on that line. UTA proposes that the number of local bus service miles increased by at least 25 percent by 2030, and that paratransit services be held at current levels. The levels of local and paratransit services are not defined by the WFRC's regional transportation plan, but rather are determined by the UTA Board of Directors.

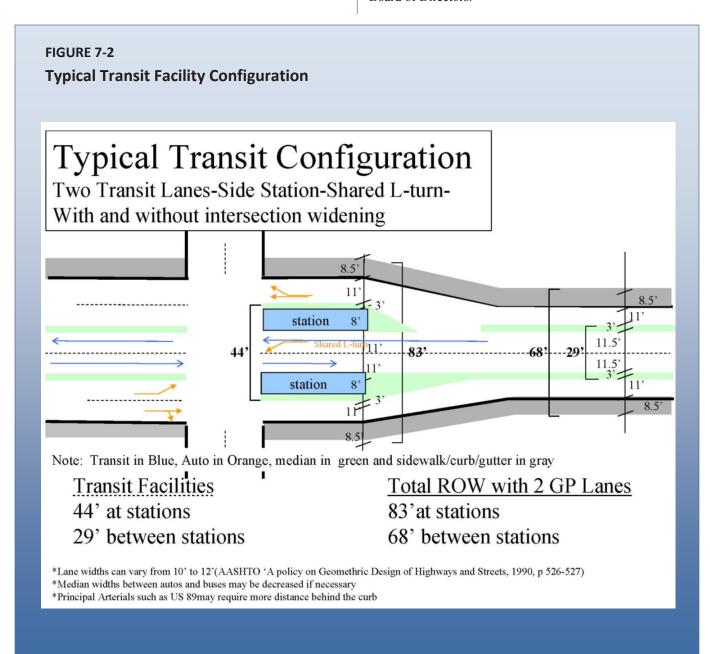


FIGURE 7-3
BRT Transit Facility, Vancouver, British Columbia



FIGURE 7-4

Typical Minor Arterial With In-Street Light Rail Cross Section

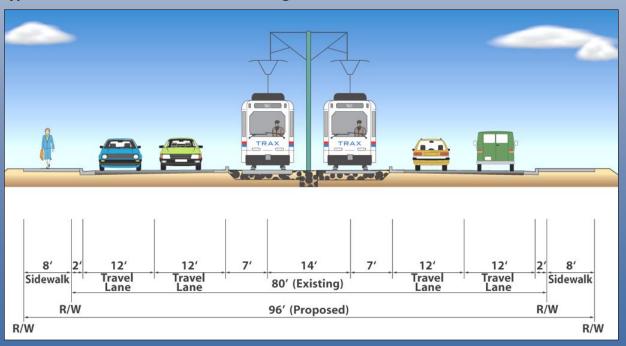


TABLE 7-4 2040 RTP Transit Project List

| PRO | JECT | LOCATION | | | | |
|---|--|--|--------------------------------|--|--|--|
| Needed Mode | Funded Mode | From | То | | | |
| | РНА | SE 1 | | | | |
| NORTH OGDEN – SALT LAKE CORRID | OR (NORTH): FIRST OF THREE PHASES | <u> </u> | | | | |
| | North Ogden - Ogden Intermodal Center - Ogden CBD - Newgate Mall - Riverdale - Clearfield - Hill Air Force Base - Layton FrontRunner Station - | | | | | |
| Bus Rapid Transit 3 | Corridor Preservation | 4400 S. (Roy) | Davis County Line | | | |
| Bus Rapid Transit 3 | Corridor Preservation | Davis County Line | 651 N./SR-126 | | | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | HAFB West Gate | 200 N./SR-126 | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 200 N./SR-126 | Clearfield FrontRunner | | | |
| NORTH OGDEN – SALT LAKE CORRID | OR (SOUTH DAVIS): FIRST OF TWO PI | HASES | | | | |
| Farmington FrontRunner Station - Ce | enterville - Bountiful - Woods Cross – N | NS L - Downtown SLC | | | | |
| Rail/Bus Rapid Transit | Enhanced Bus (BRT 1) | 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 | | | |
| OGDEN – WEBER STATE UNIVERSITY | STREETCAR: FIRST OF TWO PHASES | | | | | |
| Ogden Intermodal Center - Ogden - S | South Ogden - Weber State University | - McKay Dee Hospital | | | | |
| Streetcar | Enhanced Bus (BRT 1) | Ogden Intermodal Center | Washington/27th St | | | |
| Streetcar | Bus Rapid Transit 3 | Washington/27th St | Washington/36th St | | | |
| Streetcar | Enhanced Bus (BRT 1) | Washington/36th St | Harrison Boulevard/Edvalson | | | |
| Streetcar | Bus Rapid Transit 3 | Harrison Blvd/Edvalson Ave | McKay-Dee Hospital | | | |
| WEST WEBER – WEST DAVIS ENHAN | CED BUS (BRT 1) | | | | | |
| 3 | , | rontRunner Station - West Haven - Clir | nton - West Point - Syracuse - | | | |
| Clearfield - Hill Airforce Base - Layton | Enhanced Bus (BRT 1) | 3500 W./Midland Dr | Davis County Line | | | |
| Enhanced Bus (BRT 1) | , , | · | Davis County Line | | | |
| Enhanced Bus (BRT 1) OGDEN VALLEY PARK AND RIDE | Enhanced Bus (BRT 1) | Weber County Line | 2000 W./Antelope Dr | | | |
| Near Pineview Dam | | | | | | |
| Park-and -Ride | Park-and-ride | Near Pineview Dam | | | | |
| FALCON HILL – HILL AFB WEST TRAN | | Near Pilleview Daili | | | | |
| Falcon Hill - Hill AFB West Gate | 311 CLIVIER | | | | | |
| | Trongit Hub | Now Hill AFR West Cata | | | | |
| Transit Hub | Transit Hub RIVE CORRIDOR: FIRST OF THREE PH. | New Hill AFB West Gate | | | | |
| | | search Park - Parley's Canyon - Intersto | ate 215 - Cottonwood Cornorate | | | |
| Center - Big Cottonwood Canyon - Lin | | rearen rank Taney's earlyon meerste | ate 213 Cottonwood Corporate | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Salt Lake Central | Medical Dr./ Research Rd | | | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Medical Dr./ Research Rd | New Rd at Wakara Way | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | New Rd at Wakara Way | Arapeen Dr/Chipeta Way | | | |
| PARK CITY CORRIDOR | | | | | | |
| Salt Lake Central - 200 South - University of Utah - Medical Center - Foothill - Interstate 80 - Summit County Line | | | | | | |
| Enhanced Bus (BRT 1) | Operations only | Salt Lake Central | Summit County Line | | | |
| STATE STREET BUS RAPID TRANSIT: | FIRST OF THREE PHASES | | · | | | |
| Salt Lake Central - Capitol – South Sa FrontRunner Station | Salt Lake Central - Capitol - South Salt Lake - Millcreek - Murray FrontRunner Station - Midvale - Sandy/South Jordan FrontRunner Station - Draper | | | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 200 S./State St | State St/Winchester St | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | State St/Winchester St | 9000 S. | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 9000 S. | Draper FrontRunner | | | |
| DUS NAPIU ITAIISIL 3 | Linialiceu Dus (DKT 1) | 3000 3. | Diapei Fiontkumer | | | |

| PROJECT | | LOCATION | | |
|---|---|--|--|--|
| Needed Mode | Funded Mode | From | То | |
| REDWOOD ROAD BUS RAPID TRANS | SIT: FIRST OF THREE PHASES | | | |
| Downtown Salt Lake - Salt Lake Cen FrontRunner Station | tral - Interstate 80 - Airport East Hub - | - West Valley - Taylorsville - West Jord | dan - South Jordan - Riverton - Draper | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | N. Temple/Redwood Rd | SR-201 | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | SR-201 | 4700 S. | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 4700 S. | 9000 S. | |
| Bus Rapid Transit 3 | Corridor Preservation | 9000 S. | 12600 S. | |
| Bus Rapid Transit 3 | Corridor Preservation | 12600 S./Redwood Rd | 12300 S./Pony Express | |
| DRAPER LINE TRAX EXTENSION (NO | RTH) | | | |
| 10000 South TRAX Station - 12600 S | outh TRAX Station | | | |
| Light Rail | Light Rail | 10000 S. TRAX Station | 12600 S. TRAX | |
| 5600 WEST CORRIDOR: FIRST OF TV | VO PHASES | | | |
| Downtown Salt Lake - Salt Lake Cen Station | tral - Interstate 80 - Airport East Hub - | International Center - West Valley - k | 'earns - West Jordan - Daybreak | |
| Rail/Bus Rapid Transit 3 | Corridor Preservation | Salt Lake International Airport | 5600 W./2700 S. | |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | 5600 W./2700 S. | 5600 W./6200 S. | |
| Rail/Bus Rapid Transit 3 | Corridor Preservation | 5600 W./6200 S. | 11800 S. | |
| 200 SOUTH STREETCAR AND BUS RA | APID TRANSIT | | | |
| Salt Lake Central - Downtown Salt L | ake – Harmons Grocery | | | |
| Streetcar/BRT | Streetcar/Enhanced Bus | 600 W./200 S. | 200 S./200 East | |
| SUGARHOUSE STREETCAR: FIRST PI | HASE | | | |
| Sugarhouse - South Salt Lake — Nort | h/South TRAX Line | | | |
| Streetcar | Streetcar | 2100 S. TRAX | Highland Dr/Sugarmont | |
| 3900 / 3500 SOUTH CORRIDOR: FIR | ST OF THREE PHASES | | | |
| East Millcreek - Holladay - Millcreek | - South Salt Lake - West Valley West E | Bench | | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 3500 S./3600 W. | 3500 W./6000 W. | |
| TAYLORSVILLE MURRAY CORRIDOR | (CENTRAL SEGMENT): FIRST OF TWO | PHASES | | |
| Downtown Murray - Murray FrontR | unner Station - Sorensen Research Par | k - SLCC Redwood Campus | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Box Elder St/4800 S. | SLCC Redwood Campus | |
| TAYLORSVILLE MURRAY CORRIDOR | (WEST VALLEY EXTENSION): FIRST OF | TWO PHASES | | |
| Salt Lake Community College Redwo | ood Campus - American Express - West | Valley Intermodal Center | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 4500 S./Redwood Rd | W. Valley Intermodal Ctr | |
| WEST BENCH CORRIDOR PRESERVA | TION (11400 SOUTH) | | | |
| Daybreak – 8400 West | | | | |
| Corridor Preservation | Corridor Preservation | Daybreak S. Station | 11400 S./8400 W. | |
| | | | | |
| | | | | |
| | • | | <u> </u> | |

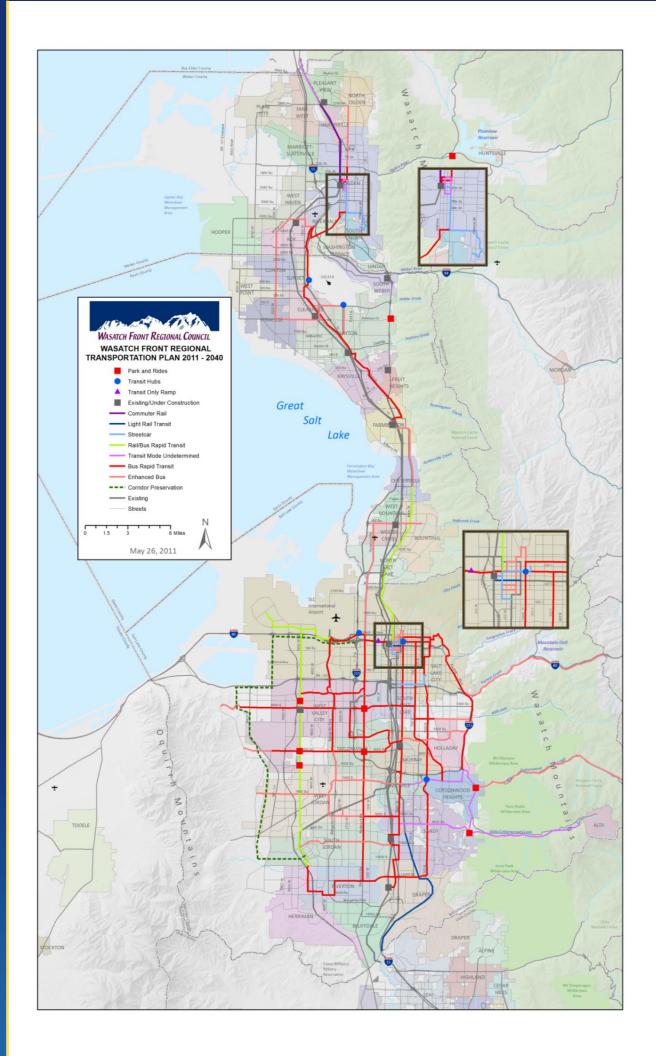
| PROJECT | | LOC | LOCATION | |
|--|---------------------------------------|--|---|--|
| Needed Mode | Funded Mode | From | То | |
| | | PHASE 2 | | |
| OGDEN – PLEASANT VIEW COM | IMUTER RAIL IMPROVEMENTS | | | |
| Downtown Ogden - Pleasant Vie | | | | |
| Commuter Rail | Commuter Rail | Ogden Intermodal Center | Pleasant View FrontRunner | |
| | RSITY STREETCAR: SECOND OF TWO P | | Treasure treat treatment | |
| Ogden Intermodal Center - Ogd | en - South Ogden - Weber State Unive | rsity - McKay Dee Hospital | | |
| 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 | |
| | RRIDOR (NORTH): SECOND OF THREE | <u> </u> | | |
| North Salt Lake - Salt Lake Centre Enhanced Bus (BRT 1) Bus Rapid Transit 3 NORTH OGDEN - SALT LAKE CO | • | | 12th St/Washington Boulevard Ogden Intermodal Ctr 4400 S./UP-HAFB ROW Davis County Line HAFB West Gate Clearfield FrontRunner Farmington FrontRunner Parrish Lane/Main St 3800 S. Bountiful/US-89 Salt Lake County Line | |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | Salt Lake County Line | Salt Lake Intermodal Center | |
| HILL AFB SOUTH TRANSIT CENTI | · · | Jail Lake County Line | Sait Lake Intermodal Center | |
| Hill AFB South Gate | | | | |
| Transit Hub | Transit Hub | | | |
| ANTELOPE DRIVE PARK AND RIE | | | | |
| Antelope Dr/US-89 | | | | |
| Park-and –Ride | Park-and-Ride | | | |
| NORTH REDWOOD ENHANCED | BUS (BRT 1): FIRST OF TWO PHASES | • | ' | |
| East Bountiful - West Bountiful - | - Woods Cross FrontRunner Station - N | I. Salt Lake - North Temple - Downtown S | alt Lake | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 500 S./Orchard Dr | 500 S./Redwood Rd | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 500 S./Redwood Rd | 2600 S. Redwood Rd | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 2600 S. Redwood Rd | Salt Lake County Line | |
| SLC – FOOTHILL DRIVE – WASAT | TCH DRIVE CORRIDOR: SECOND OF TH | IREE PHASES | · · | |
| Salt Lake Central - Salt Lake City Center - Big Cottonwood Canyoi | * * | - Research Park - Parley's Canyon - Inters | state 215 - Cottonwood Corporate | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Salt Lake Central | 200 S./200 East | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 200 East/200 S. | Medical Dr./Research Rd | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | New Rd/Wakara Way | Arapeen Dr/Chipeta Way | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Arapeen Dr/Chipeta Way | I-80/I-215/Foothill Dr | |

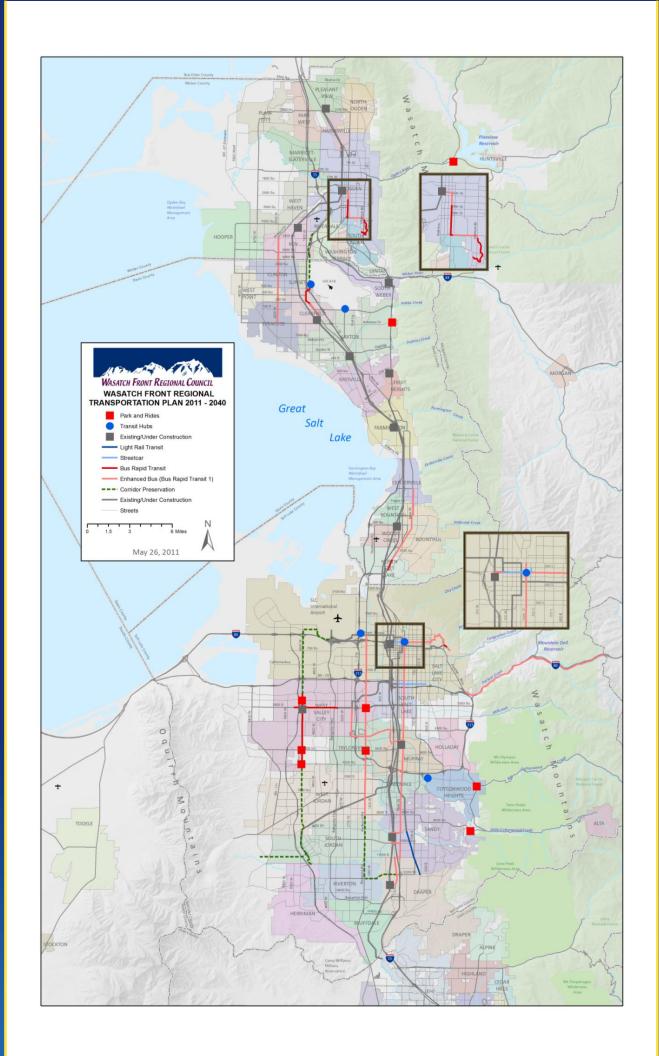
| | PROJECT | LO | CATION |
|--|--|---|---|
| Needed Mode | Funded Mode | From | То |
| STATE STREET BUS RAPID TRANS | SIT: SECOND OF THREE PHASES | | |
| Salt Lake Central - Capitol - Sou FrontRunner Station | th Salt Lake - Millcreek - Murray Fro | ontRunner Station - Midvale - Sandy/Sout | th Jordan FrontRunner Station - Draper |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 200 S./300 W. | 600 S./State St |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 600 S./State St | Interstate 80 |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Interstate 80 | Winchester St |
| REDWOOD ROAD BUS RAPID TR | ANSIT: SECOND OF TWO PHASES | | · |
| Downtown Salt Lake - Salt Lake FrontRunner Station | Central - Interstate 80 - Airport East | Hub - West Valley - Taylorsville - West Joi | rdan - South Jordan - Riverton - Draper |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | SR-201 | 5400 S. |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 5400 S. | 9000 S. |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 9000 S. | 12600 S. |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 12600 S./Redwood Rd | 12300 S./Pony Express Rd |
| UNIVERSITY TRAX LINE TO SALT | LAKE CENTRAL TRAX CONNECTION | | |
| Medical Center - University of U | tah - Salt Lake Downtown West - Sal | t Lake Central | |
| Light Rail | Light Rail | 400 S./Main St | Salt Lake Central |
| 3900 / 3500 SOUTH CORRIDOR: | THIRD OF FOUR PHASES | | |
| East Millcreek - Holladay - Millcr | reek - South Salt Lake - West Valley V | Vest Bench | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 3500 W./6000 W. | 3500 S./9200 W. |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Millcreek TRAX | 3900 S./Highland Dr |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 3900 S./Highland Dr | 3900 S./Wasatch Dr |
| TAYLORSVILLE MURRAY CORRID | OOR (HOLLADAY EXTENSION) | | |
| Downtown Murray - Holladay - N | Wasatch Drive | | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | Box Elder St/4800 S. | 3900 S./Wasatch Dr |
| TAYLORSVILLE MURRAY CORRID | OOR (CENTRAL SEGMENT): SECOND | OF TWO PHASES | |
| Downtown Murray - Murray Fro | ntRunner Station - Sorensen Researc | ch Park - SLCC Redwood Campus | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Box Elder St/4800 S. | Murray-Taylorsville Rd/500 W. |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Murray-Taylorsville Rd/500 W. | Murray-Taylorsville/Redwood |
| TAYLORSVILLE MURRAY CORRID | OOR (WEST VALLEY EXTENSION): SEC | COND OF TWO PHASES | |
| Salt Lake Community College Re | dwood Campus - American Express - | West Valley Intermodal Center | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 4500 S./Redwood Rd | 4400 S./Constitution |
| 5400 SOUTH CORRIDOR: FIRST | OF TWO PHASES | | |
| Murray FrontRunner Station - To | aylorsville - Kearns - USANA Amphith | eater - West Bench | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Murray Boulevard/Vine St | 5400 S./6400 W. |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 5400 S./6400 W. | 5400 S./7200 W. |
| 7000 SOUTH / 7800 SOUTH ENH | ANCED BUS (BRT 1): FIRST OF TWO | PHASES | |
| Murray FrontRunner Station - Bi | ngham Junction - Jordan Landing - V | Vest Bench | |
| Enhanced Bus (BRT 1) | Corridor Preservation | State St/7200 S. | Redwood Rd/7000 S. |
| Enhanced Bus (BRT 1) | Corridor Preservation | Redwood Rd/7000 S. | Bangerter Highway/7000 S. |
| 12300 / 12600 SOUTH BUS RAPI | D TRANSIT: FIRST OF THREE PHASES | | |
| Draper TRAX Station - Draper Fr | ontRunner Station - Riverton - Herrin | nan - Daybreak TRAX Station | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Daybreak S. TRAX | Redwood Rd/12600 S. |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 700 East | Draper TRAX |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 700 East | Pony Express Rd |
| Bus Rapid Transit 3 | Corridor Preservation | 700 East | Pony Express Rd |

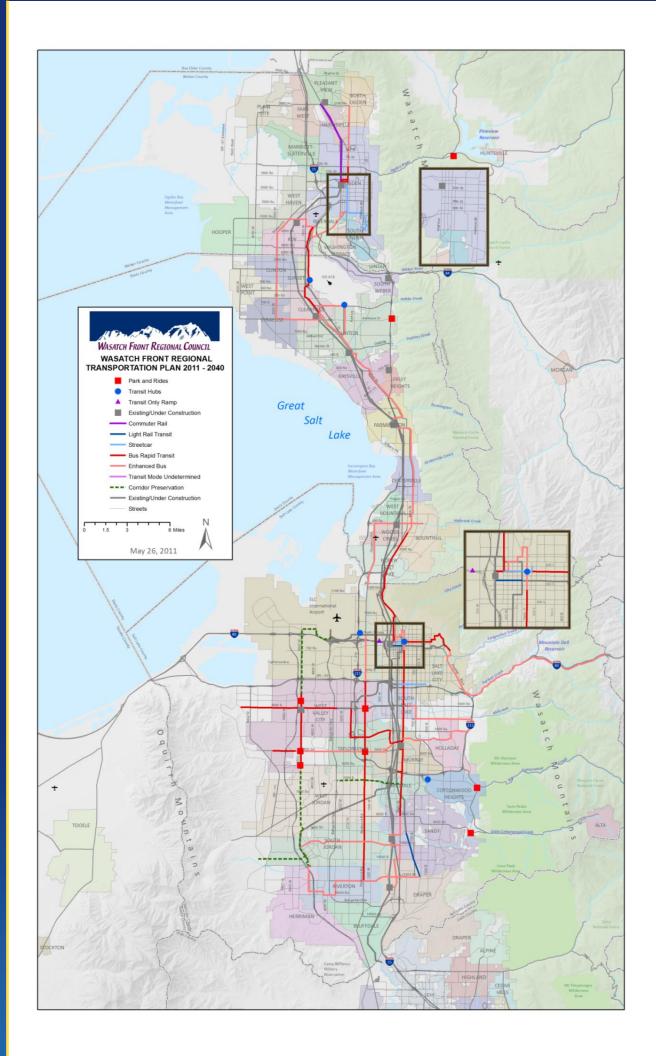
| Pi | ROJECT | LOCATION | |
|--|---------------------------------------|---|---------------------------------------|
| Needed Mode | Funded Mode | From | То |
| SALT LAKE DOWNTOWN BUS TRA | NSIT CENTER | | |
| 200 South ./ State Street | | | |
| Transit Hub | Transit Hub | 200 S./State St | |
| EAST AIRPORT TRANSIT HUB | | 250 51, 51416 51 | |
| 1950 West Redwood Road Airpoi | rt TRAX Line Station | | |
| Transit Hub | Transit Hub | 1950 W. Redwood Rd | |
| INTERSTATE-80 TRANSIT ONLY FR | | 1930 W. Redwood Rd | |
| About 900 West / Interstate 80 | LLVVAT RAIVIF3 | | |
| ` | To a to Oak Brown | N | To a land to a land |
| Transit Only Ramps | Transit Only Ramps | Near 900 W. and 200 S. | Transit Only Ramps |
| | Pł | IASE 3 | |
| PLEASANT VIEW – BRIGHAM CITY | COMMUTER RAIL | | |
| Downtown Ogden - Box Elder Cou | nty Line | | |
| Mode Undetermined | Corridor Preservation | Pleasant View FrontRunner | Box Elder County Line |
| WEST WEBER / WEST DAVIS ENHA | ANCED BUS (BRT 1): SECOND OF TWO | PHASES | |
| Ogden Intermodal Center - Ogden Clearfield - Hill Air Force Base - La | | FrontRunner Station - West Haven - Cli | nton - West Point - Syracuse - |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 4400 S./UP-HAFB Rail Line | 3500 W./Midland Dr |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 2000 W./Antelope Dr | Hill Field Rd/Main St. |
| OGDEN DOWNTOWN STREETCAR | CIRCULATOR | | |
| Ogden Intermodal Center - Downt | own Ogden | | |
| Mode Undetermined | Streetcar | 25th/Washington | 20th/Lincoln |
| Mode Undetermined | Streetcar | 20th/Lincoln | 20th/Washington |
| Mode Undetermined | Streetcar | 20th/Washington | 23rd/Washington |
| NORTH OGDEN – SALT LAKE CORF | RIDOR (NORTH): THIRD OF THREE PHA | | , , , |
| 5 5 | e Base - Layton FrontRunner Station - | Riverdale - Roy FrontRunner Station - V Farmington FrontRunner Station - Cente | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Washington Boulevard/36th St | 4400 S./UP-HAFB ROW |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Clearfield FrontRunner | Farmington FrontRunner |
| • | JS (BRT 1): SECOND OF TWO PHASES | Cicameta Frontitaline | Turrington Frontitumer |
| | • • | rth Salt Lake - North Temple - Downtow | n Salt Lake |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | Davis County Line | N. Temple/Redwood Rd |
| , , , , | H DRIVE CORRIDOR: THIRD OF THREE | | N. Temple/Redwood Rd |
| | - University of Utah - Medical Center | - Research Park - Parley's Canyon - In | terstate 215 - Cottonwood Corporate |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Arapeen Dr/Chipeta Way | I-80/I-215/Foothill Dr. |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | I-215 Ramp/3300 S. | I-215 Ramp/3900 S. |
| Mode Undetermined | Bus Rapid Transit 3 | 6200 S./Interstate 215 | Little Cottonwood Canyon |
| 1300 EAST (NORTH) BUS RAPID TH | <u> </u> | 0200 01/ Interstate 220 | |
| • • • | | v - Murray - Fort Union - Cottonwood He | eights – Midvale - Fashion Place West |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | 1300 East/200 S. | Ft Union Boulevard/Union Park |
| 1300 EAST (SOUTH) BUS RAPID TR | ` ' | | · · · · · · · · · · · · · · · · · · · |
| · · · · · · · · · · · · · · · · · · · | | le - Fort Union - Cottonwood Heights - S | andy – Draper |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Ft Union Boulevard/Union Park Av | 1000 East Pioneer Rd |

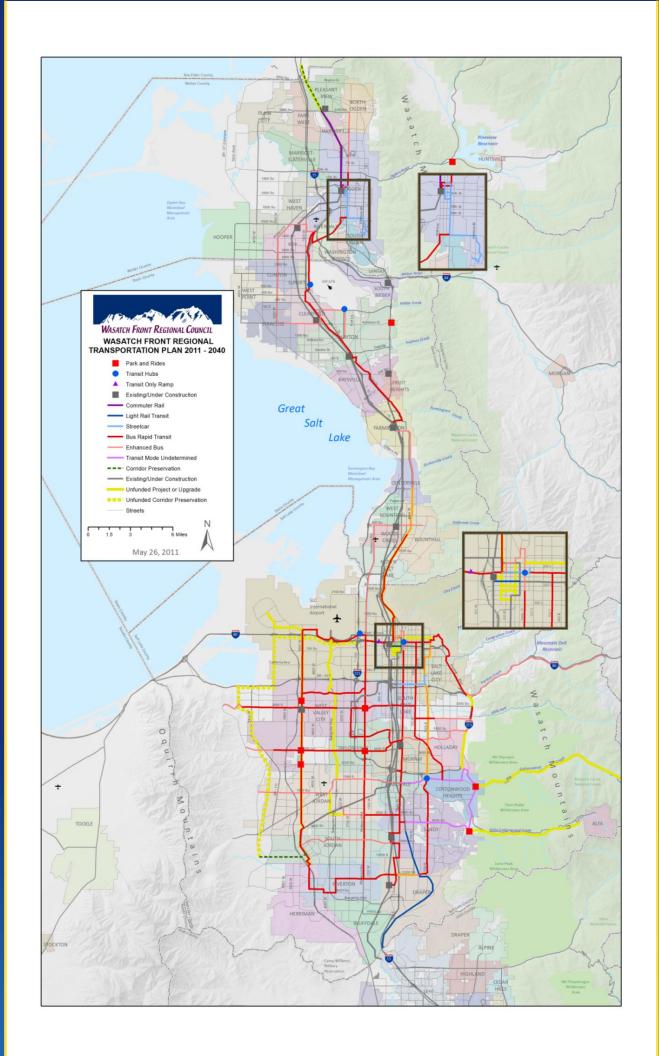
| PRC | DJECT | LOCATION | |
|---|---|---|---------------------------------------|
| Needed Mode | Funded Mode | From | То |
| 700 EAST BUS RAPID TRANSIT | | | |
| Salt Lake Central – South Salt lake - | Millcreek - Murray - Holladay - Cotton | wood Heights - Fort Union | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 200 S./200 East | Highland/Ft Union Boulevard |
| STATE STREET BUS RAPID TRANSIT: | THIRD OF THREE PHASES | | |
| Salt Lake Central - Capitol - South So FrontRunner Station | ılt Lake - Millcreek - Murray FrontRunı | ner Station - Midvale - Sandy/South Jo | rdan FrontRunner Station - Draper |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 9000 S. | Draper FrontRunner |
| DRAPER LINE TRAX EXTENSION (SOI | | 3000 G . | Draper Frontianner |
| • | Millcreek - Murray FrontRunner Statio | n - Midvale - Sandy - Draper - Utah Co | ounty Line |
| Light Rail | Light Rail | Draper TRAX | 14600 S./Interstate 15 |
| Light Rail | Light Rail | 14600 S./Interstate 15 | Utah County Line |
| REDWOOD ROAD BUS RAPID TRANS | | 1 1000 01, Interstate 15 | Julius Country Line |
| Downtown Salt Lake - Salt Lake Cen FrontRunner Station | tral - Interstate 80 - Airport East Hub - | West Valley - Taylorsville - West Jordo | an - South Jordan - Riverton - Draper |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 200 S./600 W. | Transit Ramp to I-80 |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | I-80/Redwood Rd | East Airport Hub |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | I-80/Redwood Rd | SR-201/Redwood Rd |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 12600 S./Redwood Rd | 12300S/Pony Exp Rd |
| 5600 WEST CORRIDOR: SECOND OF | TWO PHASES | | |
| Downtown Salt Lake - Salt Lake Cen Station | tral - Interstate 80 - Airport East Hub - | International Center - West Valley - K | earns - West Jordan - Daybreak |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | East Airport Hub | N. Temple/I-80 |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | I-80/Wright Brothers Dr | 2700 S./5600 W. |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | 6200 S./5600 W. | 11800 S. |
| SUGARHOUSE STREETCAR (WESTMI | NSTER SEGMENT) | | |
| Westminster College - Sugarhouse – | South Salt Lake – North/South TRAX | ine | |
| Streetcar | Streetcar | Highland Dr/Sugarmont Dr | 1700 S./1100 East |
| PARKWAY BOULEVARD BUS RAPID | TRANSIT | | |
| Downtown Salt Lake - Salt Lake Cen | tral - Interstate 80 - Airport East Hub - | Decker Lake - Lake Park - West Valley | City – Kearns |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Redwood Rd/Parkway Boulevard | 5600 W./Parkway Boulevard |
| 3900 / 3500 SOUTH CORRIDOR: FO | URTH OF FOUR PHASES | | |
| East Millcreek - Holladay - Millcreek | - South Salt Lake - West Valley West E | Bench | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 9200 W./3500 S. | Little Valley |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 3500 S./Constitution Boulevard | 3500 S./Redwood Rd |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 3500 S./Redwood Rd | Millcreek TRAX |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Millcreek TRAX | 3900 S./Highland Dr |
| 5400 SOUTH CORRIDOR: SECOND C | F TWO PHASES | | |
| Murray FrontRunner Station - Taylo | rsville - Kearns - USANA Amphitheater | - West Bench | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Murray Boulevard/Vine St | 7200 W. |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 7200 W. | 8400 W. |
| FORT UNION BOULEVARD CORRIDO | R | | |
| Big Cottonwood Canyon - Cottonwo | od Corporate Center - Fort Union - Mic | dvale - Fashion Place West TRAX Statio | on |
| Mode Undetermined | Bus Rapid Transit 3 | State St/Fort Union Boulevard | Little Cottonwood Canyon |

| PROJECT | | LOC | LOCATION | |
|----------------------------------|--------------------------------------|---------------------------------|---------------------------|--|
| Needed Mode | Funded Mode | From | То | |
| 7000 SOUTH / 7800 SOUTH ENHA | ANCED BUS (BRT 1): SECOND OF TW | O PHASES | | |
| Murray FrontRunner Station - Bir | ngham Junction - Jordan Landing - W | /est Bench | | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | State St/7200 S. | Redwood Rd/7000 S. | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | Redwood Rd/7000 S. | Bangerter Highway/7000 S. | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | Bangerter Highway/7000 S. | 8400 W./7800 S. | |
| 9000 SOUTH WEST SIDE CORRIDO | OR | | | |
| Sandy/South Jordan FrontRunner | Station - Mid-Jordan TRAX Station | | | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 9000 S./State St | 9000 S./Redwood Rd | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | 9000 S./Redwood Rd | Mid-Jordan TRAX | |
| 9400 SOUTH CORRIDOR | | | | |
| Mouth of Little Cottonwood Cany | von - Sandy - Sandy/South Jordan Fro | ontRunner Station | | |
| Mode Undetermined | Bus Rapid Transit 3 | 9400 S./State St | Little Cottonwood Canyon | |
| 10200 / 10400 SOUTH ENHANCE | | | | |
| South Jordan FrontRunner Station | | | | |
| Enhanced Bus (BRT 1) | Enhanced Bus (BRT 1) | Jordan Gateway/S Jordan Parkway | Daybreak North TRAX | |
| 12300 / 12600 SOUTH BUS RAPID | TRANSIT: THIRD OF THREE PHASES | | | |
| Draper TRAX Station - Draper Fro | ntRunner Station - Riverton - Herrim | nan - Daybreak TRAX Station | | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | Daybreak S. TRAX | Redwood Rd/12600 S. | |
| Bus Rapid Transit 3 | Bus Rapid Transit 3 | 700 East | Draper TRAX | |
| 3500 SOUTH REDWOOD ROAD PA | ARK AND RIDE | | | |
| 3500 South/Redwood Rd | | | | |
| Park- and-Ride | Park-and-Ride | 3500 S./Redwood Rd | | |
| 5400 SOUTH REDWOOD ROAD PA | ARK AND RIDE | | | |
| 5400 South/Redwood Rd | | | | |
| Park- and-Ride | Park-and-Ride | 5400 S./Redwood Rd | | |
| 3100 SOUTH / 5600 WEST PARK / | AND RIDE | · · | | |
| 3100 South/5600 West | | | | |
| Park-and-Ride | Park-and-Ride | 3100 S./5600 W. | | |
| 6200 SOUTH / 5600 WEST PARK / | | · · · · · | | |
| 6200 South/5600 West | | | | |
| Park-and-Ride | Park-and-Ride | 6200 S./5600 W. | | |
| 5400 SOUTH / 5600 WEST PARK / | AND RIDE | | | |
| 5400 South/5600 West | | | | |
| Park-and-Ride | Park-and-Ride | 5400 S./5600 W. | | |
| FORT UNION TRANSIT CENTER | | · · · | | |
| Union Park Avenue/Fort Union Bo | oulevard | | | |
| Transit Hub | Transit Hub | Union Park Ave/Ft Union Blvd | | |
| LITTLE COTTONWOOD CANYON I | | -, | | |
| Wasatch Boulevard - Mouth of Li | | | | |
| Park-and-Ride | Park-and -Ride | Little Cottonwood Canyon | | |
| BIG COTTONWOOD CANYON PAI | | ,, | | |
| Wasatch Boulevard - Mouth of Bi | | | | |
| Park-and-Ride | Park-and-Ride | Big Cottonwood Canyon | | |









OTHER TRANSIT SYSTEM IMPROVEMENTS

Wasatch Front Mobility Management Project

The Human Service Transportation Coordination Presidential Executive Order (13330 - 24 FEB 04) recognized the critical role of transportation in providing access to employment, medical and health care, education, and other community services and amenities. It is noted that the development, implementation, and maintenance of responsive, comprehensive, coordinated community transportation systems is essential for persons with disabilities, persons with low incomes, and older adults who rely on transportation to fully participate in their communities. Persons with disabilities, persons with low incomes and older adults are collectively referred to as the Transportation Disadvantaged.

Federal transit law, as amended by SAFETEA-LU, requires that projects funded from the Elderly Individuals and Individuals with Disabilities (Section 5310), Job Access and Reverse Commute (JARC, Section 5316), and New Freedom (Section 5317) programs be derived from a locally developed, coordinated public transit-human services transportation plan ("coordinated plan"). A coordinated plan should maximize the programs' collective coverage by minimizing duplication of services. Further, a coordinated plan should be developed through a process that includes representatives of public, private and non-profit transportation and human services providers, and participation by the public. Federal transit law further states that Sections 5311 and 5307 also require coordination with transportation assistance under other Federal programs.

The WFRC partnered with MAG and UTA in 2009 to develop a coordinated plan that included the entire UTA service area (Davis, Morgan, Salt Lake, Tooele, Utah, and Weber counties, and the southern portion of Box Elder County). The coordinated plan was titled the "Wasatch Front Mobility Management Project." The purpose of the Mobility Management Project was to improve mobility for the transportation disadvantaged and to meet the requirements for a locally developed coordinated public transit-human services transportation plan. The planning process included extensive public outreach and collaboration with coordination planning partners including transportation providers, passengers and advocates, human service providers, and representatives from local/regional governments. In collaboration with



the planning partners, existing transportation resources and consumer origins/destinations were identified through interviews, planning sessions, focus groups, and a service provider survey.

Through detailed study, analysis, and collaboration, the unmet needs for the region were identified as availability and accessibility of services, access to Information, extended service hours, expanded geographic coverage, expanded capacity, expanded client/program eligibility, expanded trip purpose, affordable services, funding gaps, centralized collaboration, efficient operations, and consistent service quality. As a result of the Coordinated Plan, the Wasatch Regional Coordination Council for Community Transportation (RCC) was created in 2010 to foster, organize, and guide local and regional coordination efforts that directly or indirectly improve access and mobility for seniors, persons with disabilities and/or persons with low income throughout Davis, Morgan, Salt Lake, Tooele, and Weber counties.

The WFRC hired a mobility manager in 2010 to provide staff to the RCC, to help implement the Coordinated Plan, to provide ongoing mobility management services for the region, and to collaborate with statewide coordination efforts through participation in the Utah United We Ride Workgroup and the

Utah Urban Rural Specialized Transportation Association (URSTA). United We Ride defines Mobility management as an innovative approach for managing and delivering coordinated transportation services to the transportation disadvantaged. Changes in demographics, shifts in land use patterns, and the creation of new and different job markets require new approaches for providing transportation services, particularly for customers with special needs. Mobility management focuses on meeting the needs of individual customers through the selection of the appropriate mode of travel a wide range of transportation options and service providers. It also focuses on coordinating these services and providers in order to achieve a more efficient transportation service delivery system as designed by public policy makers and the taxpayers who underwrite the cost of service delivery.

The RCC is developing coordinated transportation programs to address the strategies identified and prioritized in the Coordinated Plan. These strategies include:

- development of regional/local coordinating councils
- sharing resources and support services through interagency agreements
- providing mobility management outreach, operational support, and training
- centralized resource directory
- improved traveler information
- a travel voucher program
- taxi rider subsidy
- eliminating environmental barriers
- a volunteer service structure
- job access strategies including late-night vanpools
- accessible taxi services
- a trip planner for riders
- real-time transit information
- use of ITS technologies to improve coordination
- co-sponsoring local transportation services
- broker transportation operations

The Coordinated Plan and the full report of the Wasatch Front Mobility Management Project are included in Appendix R. The Coordinated Plan was adopted by the Wasatch Regional Coordination Council for Community Transportation (RCC) on 8 September 2010.

Route Deviation Flex Routes

UTA's route deviation flex route service, called "The Lift," has been designed and implemented to help meet transportation service gaps in lower density areas. The system allows bus drivers, upon request, to deviate from the published route by up to ¾ mile, upon request, to provide curb-side pick-up or drop-off service. UTA currently operates The Lift in American Fork/Alpine, Brigham City, Draper, Grantsville, Herriman, Riverton, Sandy, Syracuse/Hooper, and Tooele City. The Lift is available to all UTA passengers and provides paratransit riders with an additional transportation option. Building on the successes of existing routes, UTA will continue to expand The Lift to help meet transportation service gaps.

Paratransit System

For eligible riders who have a transportation disability that prevents them from making some or all of their trips on UTA's fixed route buses and TRAX light rail services, the UTA offers a comparable, curb-to-curb paratransit service which in the Salt Lake Area is referred to as Flextrans. This service is compliant with provisions found in the American with Disabilities Act of 1990 (ADA) and is provided as part of UTA's efforts to meet the requirements of this Act.

Paratransit service must be reserved at least one day in advance. The service can be provided using either rampequipped minibuses, lift-equipped vans, a 15-passenger van or by a taxi service that has been scheduled through UTA's paratransit office. Paratransit service operates in the same areas and during the same days and hours as local all-day fixed route bus and TRAX light rail services. The service can be used for any trip purpose. All of UTA's existing vehicles and facilities are ADA accessible. All future vehicles and facilities will also be ADA accessible. UTA's paratransit system will expand in parallel with the transit system improvements defined by the 2040 RTP, creating broader coverage for persons with disabilities.

UNFUNDED PROJECTS

Recognizing that a financially constrained plan will not address all new capacity needs, SAFTEA-LU allows for illustrative or non-funded projects and facilities to be identified in regional transportation plan documents. These programmed highway and transit projects will be added to the funded list if

TABLE 7-5 2040 RTP Unfunded Highway Project List

| ID | Project | Descri | iption | Phase |
|---------------|--|---|-------------------------|----------|
| SALT LA | KE COUNTY, EAST – WEST FACILITIES | | | |
| | 6200 South | Widening: 4 to 6 lanes | MA / 0.3 miles / Local | |
| S-26 | SR-111 to Mountain View Corridor | ROW: 2007 - 0 ft. / 2040 - 110 ft | Bike Class: 1 and 2 | Unfunde |
| | New Bingham Highway | Widening: 2 to 4 lanes | MA / 2.9 miles / UDOT | |
| S-33 | 10200 South to 9000 South | ROW: 2007 - 66 ft. / 2040 - 110 ft | Bike Class: None | Unfunde |
| | 11400 South | Widening: 4 to 6 lanes | MA / 4.7 miles / UDOT | |
| S-44 | Bangerter Highway to I-15 | ROW: 2007 - 106 ft. / 2040 - 123 ft | Bike Class: Priority 2 | Unfunde |
| SALT LA | KE COUNTY, NORTH – SOUTH FACILITIE | · . | , | |
| | Mountain View Corridor | New Construction: 0 to 4 lanes | PA / 3.3 miles / UDOT | |
| S-60 | I-80 to SR-201 | ROW: 2007 – 0 ft / 2040 – 328 ft | Bike Class: None | Unfunde |
| | Mountain View Corridor | Widening and interchanges: 4 to 6 lanes | FWY / 3.3 miles / UDOT | |
| S-65 | I-80 to SR 201 | ROW: 2007 – 328 ft / 2040 – 328 ft | Bike Class: None | Unfunde |
| | 600 West | New Construction: 0 to 2 lanes | COL / 1.4 miles / Local | |
| S-102 | Bangerter Highway to 14600 South | ROW: 2007 – 0 ft / 2040 – 70 ft | Bike Class: None | Unfunde |
| SAITIA | KE COUNTY, SPOT FACILITIES | 1.011.2007 010,720.00 70.10 | Sinc Glassi Frenc | |
| JALI LA | I-80 Interchange | Upgrade | FWY / UDOT | |
| S-129 | @ 5600 West | Opgrade | Bike Class: Priority 2 | Unfunde |
| | Bangerter Highway Interchange | New Construction | FWY / UDOT | |
| S-132 | @ California Avenue | New Construction | Bike Class: Priority 2 | Unfunde |
| | Bangerter Highway Interchange | New Construction | FWY / UDOT | |
| S-134 | @ Lake Park Boulevard (2700 South) | New Construction | Bike Class: 1 | Unfunde |
| | , | New Construction: 4 to 6 lanes | FWY / UDOT | |
| S-135 | Bangerter Highway Interchange @ 3100 South | New Construction: 4 to 6 lanes | | Unfunde |
| | | Now Construction, 4 to Clanes | Bike Class: 3 | |
| S-136 | Bangerter Highway Interchange | New Construction: 4 to 6 lanes | FWY / UDOT | Unfunde |
| | @ 3500 South | No. Controller AtriChara | Bike Class: None | |
| S-137 | Bangerter Highway Interchange | New Construction: 4 to 6 lanes | FWY / UDOT | Unfunde |
| | @ 4100 South | No. Controller AtriChara | Bike Class: Priority 2 | |
| S-138 | Bangerter Highway Interchange | New Construction: 4 to 6 lanes | FWY / UDOT | Unfunde |
| | @ 4700 South | | Bike Class: 3 | |
| S-139 | Bangerter Highway Interchange | New Construction: 4 to 6 lanes | FWY / UDOT | Unfunde |
| | @ 5400 South | | Bike Class: Priority 3 | |
| S-153 | 2700 West Overpass | New Construction: 0 to 2 lanes | COL / Local | Unfunde |
| | @ SR-201 | | Bike Class: Priority 2 | |
| S-159 | 14600 South Rail Road Structure | Upgrade: 1 to 2 lanes | MA / UDOT | Unfunde |
| | @ D&RGW | | Bike Class: Priority 2 | |
| S-162 | I-215 Interchange | Upgrade | FWY / UDOT | Unfunde |
| | @ 4500 South (East) | | Bike Class: 2 | |
| DAVIS C | COUNTY, EAST – WEST FACILITIES | | | |
| D-5 | SR-193 Extension | Widening: 4 to 6 lanes | MA / 3.4 miles / UDOT | Unfunde |
| | 2000 West to I-15 | ROW: 2007 – 0 ft / 2040 – 120 ft | Bike Class: Priority 2 | |
| DAVIS C | COUNTY, NORTH – SOUTH FACILITIES | | | |
| D-27 | Fairfield Road Extension | New Construction: 0 to 2 lanes | MA / 2.4 miles / Local | Unfunde |
| D-27 | I-84 to SR-193 | ROW: 2007 – 0 ft / 2040 – 66 ft | Bike Class: 2 and None | Official |
| DAVIS C | COUNTY, SPOT FACILITIES | | | |
| D 0. | 1200 North Overpass (Layton) | New Construction: 0 to 4 lanes | COL / Local | |
| D-34 | @ I-15 | | Bike Class: None | Unfunde |
| | I-215 Interchange | Upgrade | FWY / UDOT | |
| D-43 | @ Legacy Parkway | | Bike Class: Priority 1 | Unfunde |
| | I-215 Interchange | Upgrade | FWY / UDOT | _ |
| D-44 | | | Bike Class: None | Unfunde |

TABLE 7-5 CONTINUED 2040 RTP Unfunded Highway Project List

| ID | Project | Project Description | | Phase | |
|-------------------------------|---|---------------------|-------------------------|----------|--|
| WEBER (| COUNTY, EAST – WEST FACILITIES | | | | |
| W-15 | 4400 South | Operational | COL / 0.7 miles / Local | Unfunded | |
| M-12 | 1900 W. (SR-126) to Cozy Dale Dr. (1300 W.) | | Bike Class: Priority 3 | Ontunded | |
| WEBER COUNTY, SPOT FACILITIES | | | | | |
| W-40 | I-15 Interchange | Upgrade | FWY / UDOT | Unfunded | |
| vv-40 | @ US-89 (Pleasant View) | | Bike Class: Priority 2 | omunaea | |

TABLE 7-6
2040 RTP Unfunded Transit Project List

| | PROJECT LOCATION | | | CATION |
|---|--|------------------------------|-------------------------------------|-----------------------------------|
| Needed Mode | Funded Mode | Unfunded Mode | From | То |
| PLEASANT VIEW – BRIGHA | AM CITY COMMUTER RAIL | | | |
| Downtown Ogden - Box El | der County Line | | | |
| Mode Undetermined | Corridor Preservation | Commuter Rail | Pleasant View FrontRunner | Box Elder County Line |
| NORTH OGDEN - SALT LA | KE CORRIDOR (SOUTH DAV | ris) | | |
| Centerville - Bountiful - W | oods Cross – North Salt Lak | ce - Salt Lake Central - Dov | vntown Salt Lake City | |
| Rail/Bus Rapid Transit 3 | Enhanced Bus | Streetcar | Parrish Lane/Main St | 1500 S./Main St |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | Streetcar | 1500 S./Main St | 3800 S. Bountiful/US-89 |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | Streetcar | US-89/Eagleridge Dr | Salt Lake County Line |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | Streetcar | Salt Lake County Line | Salt Lake Intermodal Ctr |
| SLC – FOOTHILL DRIVE – V | VASATCH DRIVE CORRIDOR | ₹ | | |
| | ke City - University of Utah Canyon - Little Cottonwood | | h Park - Parley's Canyon - Intersta | ate 215 - Cottonwood Corporate |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Bus Rapid Transit 3 | I-80/ I-215/Foothill Dr. | I-215 Ramp/3300 S. |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Bus Rapid Transit 3 | I-215 Ramp/3900 S. | 6200 S./I-215 |
| 1300 EAST (NORTH) BUS F | RAPID TRANSIT | | | |
| Medical Center - Universit TRAX Station | y of Utah - Sugar House - N | Лillcreek - Holladay - Murr | ay - Fort Union - Cottonwood Heig | ghts – Midvale - Fashion Place We |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Bus Rapid Transit 3 | 1300 East/200 South | 1300 East/Fort Union |
| STATE STREET BUS RAPID | TRANSIT | | | |
| Salt Lake Central - Capitol FrontRunner Station | - South Salt Lake - Millcree | k - Murray FrontRunner S | tation - Midvale - Sandy/South Jor | dan FrontRunner Station - Drapei |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Bus Rapid Transit 3 | 200 S./State St | 600 S./State |
| BANGERTER HIGHWAY CO | DRRIDOR | | | |
| Downtown Salt Lake - Salt West Jordan - Mid-Jordan | | 0 - Salt Lake International | Airport - Lake Park - West Valley - | Taylorsville - Jordan Landing - |
| Bus Rapid Transit 3 | None | Bus Rapid Transit 3 | I-80/Bangerter Hwy | Bangerter Hwy/5400 S. |
| Enhanced Bus (BRT 1) | None | Enhanced Bus (BRT 1) | Bangerter Hwy/5400 S. | Mid-Jordan TRAX Line |

TABLE 7-6 CONTINUED 2040 RTP Unfunded Transit Project List

| PROJECT LOCATION | | | ATION | | | |
|--|-------------------------------|-------------------------------|------------------------------------|---------------------------------|--|--|
| Needed Mode | Funded Mode | Unfunded Mode | From | То | | |
| 5600 WEST CORRIDOR | | | | | | |
| Downtown Salt Lake – Sa Station | lt Lake Central – Interstate | 80 – Airport East Hub – In | ternational Center – West Valley – | Kearns – West Jordan – Daybreal | | |
| Rail/Bus Rapid Transit 3 | Bus Rapid Transit 3 | Light-rail | Salt Lake International Airport | 11800 South | | |
| NORTHWEST QUADRANT | CORRIDOR | | | | | |
| Downtown Salt Lake - Sal | t Lake Central - Interstate 8 | 80 - Airport East Hub - Inter | national Center - N.W. Quadrant | | | |
| Rail/Bus Rapid Transit 3 | None | Bus Rapid Transit 3 | 5600 W./Amelia Earhart | N.W. Quadrant | | |
| DOWNTOWN SALT LAKE | CITY BRANDED BUS | | | | | |
| 200 West, 400 South, 500 | South | | | | | |
| Enhanced Bus (BRT 1) | None | Enhanced Bus (BRT 1) | Various Locations | Various Locations | | |
| SOUTHWEST DOWNTOW | N SLC STREETCAR (GRANA | RY LINE) | | | | |
| Granary District - Salt Lak | e Central | | | | | |
| Streetcar | None | Streetcar | 800 S./400 W. | Salt Lake Central | | |
| BIG COTTONWOOD CANY | ON CORRIDOR | | | | | |
| Mouth of Big Cottonwood | l Canyon | | | | | |
| LITTLE COTTONWOOD CA | NYON CORRIDOR | | | | | |
| Mouth of Little Cottonwo | od Canyon – Alta | | | | | |
| Undetermined | None | Bus Rapid Transit 3 | Mouth of Canyon | Governors Bypass Rd | | |
| WEST BENCH CORRIDOR | PRESERVATION (NORTH O | F 11400 SOUTH) | | | | |
| East Airport Transit Hub – Northwest Quadrant - Little Valley – Daybreak | | | | | | |
| Corridor Preservation | None | Corridor Preservation | 11400 S./Daybreak | Airport East Transit Hub | | |
| 12300 / 12600 SOUTH BU | S RAPID TRANSIT | | | | | |
| Draper TRAX Station - Dro | per FrontRunner Station - | Riverton - Herriman - Dayb | reak TRAX Station | | | |
| Bus Rapid Transit 3 | Enhanced Bus (BRT 1) | Bus Rapid Transit 3 | Pony Express Rd | 700 East | | |

viable funding sources can be identified. Illustrative highway and transit projects for the 2040 RTP are shown in Tables 7-5 and 7-6, and on Maps 7-2 and 7-8 respectively.

It should be noted that there are two ways that a transit project can be unfunded: the mode can be unfunded and the project can be unfunded. If the mode is unfunded then the project alignment continues to be funded for a future type of major transit investment but at a level less than is warranted. An example of this is the proposed 12300/12600 South project. A Bus Rapid Transit (BRT3) is desired for the line segment between Pony Express Road and 700 East. However, insufficient funding was found to build a Bus Rapid Transit (BRT3) line. Instead, an Enhanced Bus (BRT 1) line was funded in the plan. If the project is unfunded, then no major transit investment is anticipated for that area.

TRANSIT COST ESTIMATES

In addition to highway and transit system improvements, the 2040 RTP also encourages the further development of other transportation modes for moving people throughout the Wasatch Front Region. Other transportation modes, such as bicycle and pedestrian travel, are an integral part of the 2040 RTP recommendations. The seamless interfacing of other modes with highway and transit services will be a key element of the future transportation system.

Residents are more likely to walk in areas with sidewalks. Unfortunately, much work has yet to be done to equip streets with adequate facilities for pedestrians, bicyclists, or transit users. The WFRC is working to create a continuous network of sidewalks that are wide enough for pedestrians to share with

bikes, to accommodate transit users or their way to stations or stops, and that are accessible to those in wheelchairs. Also of concern are streets that are too wide to be safely crossed.

These "alternative modes" of transportation have the potential to yield large congestion and air quality benefits. Given that much of the mobile source pollution we experience comes from the first few minutes of vehicular travel when catalytic converters are not fully functioning, it follows that shifting short trips to walking and biking could significantly improve air quality.

Although specific design decisions about the cross section of streets and highways are made during project development, broad decisions such as right-of-way width, functional classification, and the desirability of bikeways and transit lanes can be made early in the planning process. Deciding which of the elements to include and selecting the appropriate dimensions within these ranges should reflect the needs of the Region and be in line with relevant federal guidelines. The most appropriate design of a public right-of-way balances the mobility needs of the people using the facility (motorists, pedestrians, bicyclists, or transit) with the physical constraints of the corridor within which the facility is located.

Highways should operate as truly multimodal transportation facilities, particularly in large urban areas. Accommodating public transit and other high-occupancy vehicles (HOVs) is an important consideration. Management of the local public transit operator should be consulted during the planning stage, if possible, so that public transportation can be accommodated by the design from the beginning.

The 2040 Regional Bicycle Plan was developed cooperatively for each County (Weber, Davis, and Salt Lake) by city and county planners, engineers, parks and recreation departments, planning commissions, and local bicycle advisory committees and groups. The Regional Bicycle Plan incorporates many individual community plans and identifies facilities for bicycle travel within street rights-of-way (ROW). It also acknowledges separate paths or trails that will need to be considered when designs for street and other improvements are constructed. Bicycle facilities are primarily local in nature. However, the WFRC coordinates between communities to ensure continuity and where other Regional needs exist. The

2040 Regional Bicycle
Plan identifies an
integrated regional
network of bicycle
routes from Herriman
City in southern
Salt Lake County to
Pleasant View City
in northern Weber
County.

Many existing and new collector and arterial streets have been identified as bicycle routes where highway "shoulders" are, or are planned to be, wide enough to accommodate bicycle travel. The routes in



the Plan are intended to serve major activity centers, such as Salt Lake City's Central Business District, the University of Utah, Weber State University, the Salt Lake Community College's several campuses, major employment centers, transit stations, and, on a more local level, numerous public schools. Legally defined as vehicles, bicycles are allowed on all streets except where specifically prohibited, such as urban interstate highways and some high speed principal arterials (Bangerter Highway). Therefore, all streets, other than those types described above, should be designed to accommodate the bicycle mode of travel where possible. Also, the Regional Bicycle Plan identifies other bicycle trails or paths that have their own ROW.

The 2040 Regional Bicycle Plan identifies several specific facility improvements. Class I bicycle facilities provide for bicycle travel on a ROW completely separated from the travel lanes and shoulders of any street or highway. Class I facilities may be paved or unpaved, could have steep grades, and can be shared with pedestrians. Class II bicycle facilities provide a striped and signed lane for one-way bike travel on a street, usually one with a wider shoulder to accommodate the bicycle lane. Finally, Class III bicycle facilities provide a "sign only" for designated bicycle travel on a roadway shared with motor

vehicles. It is recommended that the AASHTO Guide for the Development of Bicycle Facilities, 1999, be referenced when designing a bicycle path or trail. An updated AASHTO Guide for the Development of Bicycle Facilities should be available in 2011. A draft version is available for review. The 2040 Regional Bicycle Plan is shown as Map 7-9.

The Regional Bicycle / Trails Planning Committee, made up of representatives from the Utah Department of Transportation (UDOT), the Utah Transit Authority (UTA), the Mountainland Association of Governments (MAG), Salt Lake County, Davis County, Weber County, and the Wasatch Front Regional Council (WFRC), developed criteria to prioritize routes. The first criterion calls for coordinating bicycle routes to fixed guideway transit stations. The second criterion call for spacing routes between two and three miles. The third criterion involves identifying routes that spanned the Counties both in an east / west and north / south direction. Each County planning group identified priority routes in conjunction with their respective bicycle and trails committees and in coordination with UDOT, UTA, and the WFRC staff. The 2040 RTP includes both a bicycle master plan and a priority routes plan which is shown as Map 7-9. The WFRC recognizes that the 2040 RTP will be revisited in four years, although updates may take place sooner. The WFRC recommends that interest individuals refer to the County websites for updates to these master plans and priority routes maps. The updated Salt Lake County map can be found at www.slco.org, an updated Davis County map can be found at www.daviscountyutah.gov, and an updated Weber County map can be found at www.co.weber.ut.us.

As with bicycle facilities, pedestrian facilities, primarily sidewalks, are also local in nature. Pedestrians should be accommodated by providing sidewalks on all local, collector and arterial streets. Where neighborhood pedestrian travel patterns have been or could be disrupted by busy arterial streets, expressways, and freeways, grade separated pedestrian walkways and/or other facilities should be considered. Pedestrian facilities should be designed with safety in mind, especially for facilities that are heavily used by both pedestrian and vehicular traffic.

Program Policies

As the result of previous bicycle planning efforts, policies were recommended to help with establishing priorities. These

policies provide a basis for describing the role of bicycle facilities and trails in the 2040 RTP. As part of the 2040 RTP, these policies were recently reviewed to determine their relevance, considering current and projected needs and conditions. The bicycle and trails policies are as follows:

- Bicycle paths and pedestrian facilities will be included in the Transportation Plan;
- Regional planning should focus on a continuous regional system of trails, bikeways or paths, bicycle routes and lanes;
- Wherever possible, projects must be consistent with local trails plans, general plans, and AASHTO design guidelines, whenever possible. Planning and project funding should recognize as a primary goal safety for pedestrians, bicyclists, and motorists;
- Projects will be prioritized and implementation phased over the period of the 2040 RTP based on need, safety, funding, and other considerations. Projects will be coordinated with local governments, the WFRC, UTA, and UDOT;
- Major activity centers, such as shopping centers, office and industrial employment centers, transportation centers, parks, community centers and libraries, and schools and universities, should be accessible to bicyclists and pedestrian from surrounding residential areas;
- Sidewalks providing pedestrian access to transit vehicles should be available along all transit routes within the urbanized area;
- Barrier crossings (rivers, railroads, expressways, freeways, etc.) within urbanized areas should have provisions for both bicycle lanes and pedestrian sidewalks;
- Priority consideration within the "congested corridors" should be given to implementing bicycle and pedestrian projects and programs that most clearly increase the potential benefits from these facilities and activities and that combine well with related congestion management strategies;
- Priority consideration for bicycle and pedestrian facilities should also be directed to areas of the Wasatch Front Region experiencing the early stages of urbanization in order to ensure that adequate provisions for non-motorized travel are incorporated in the transportation system as facilities are constructed or upgraded;
- The public should become better informed of the

- beneficial effects and personal well-being resulting from non-motorized travel;
- Provisions for bicycle and pedestrian travel will be incorporated into congestion management programs where feasible and appropriate; and
- The reasons and concerns members of the public expressed for lack of interest in using non-motorized modes, such as safety, traffic, barriers, lack of facilities, and other concerns, should be addressed in order to encourage higher usage of these modes.

Specific pedestrian facilities were not identified as part of the 2040 RTP. However, general pedestrian friendly land use and development policy recommendations for pedestrian facilities and amenities are being proposed as a guide for local governments within the Wasatch Front Region to consider as transportation facilities are planned and implemented. These policy recommendations are oriented towards local government officials who control the regulation of land use and development for their communities. Local governments are encouraged to follow pedestrian friendly urban design, site planning and subdivision design principles in evaluating new development proposals, and to incorporate pedestrian facilities in existing developments wherever practicable. Neighborhood pedestrian access can be enhanced by creating trails, connecting cul-de-sacs with walkways, and providing other pedestrian facilities.

Statewide and Pedestrian Bicycle Plan

In February of 2001, UDOT adopted the Statewide Pedestrian and Bicycle Plan, as an element of the Statewide Long Range Transportation Plan. This plan was prepared in compliance with the federal guidelines of TEA-21 enacted in 1998, and subsequently supported by SAFETEA-LU in 2005. The latter Act requires state transportation agencies to develop transportation plans and programs which will provide for the development of transportation facilities, including pedestrian and bicycle facilities, for all areas of Utah. The purpose of the Statewide Plan is to "provide a framework to guide UDOT and other public agencies in developing opportunities for walking and bicycling as clean, safe, convenient, cost-effective, and efficient modes of transportation."

Recommendation

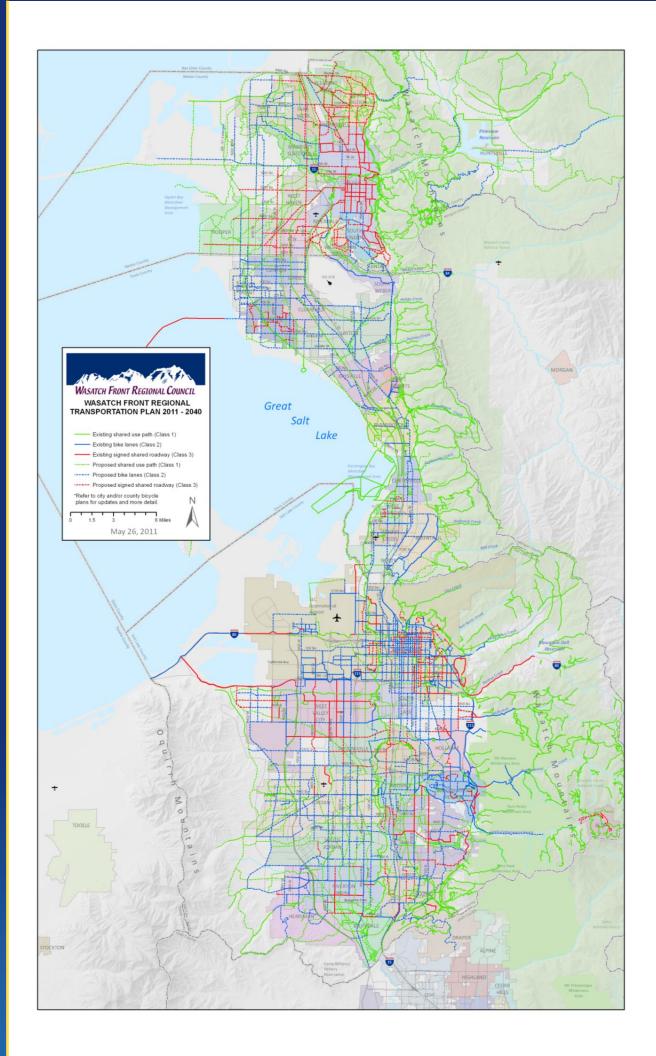
The Statewide Pedestrian and Bicycle Plan includes

recommendations regarding assessment of needs, project planning and implementation. The recommendations are as follows:

- Pedestrian Inventory UDOT should compile and maintain
 a comprehensive inventory to assess pedestrian planning
 needs. "The inventory should include existing facilities,
 areas with sidewalk discontinuity, and areas needing
 new sidewalks, rehabilitation or replacement of existing
 sidewalks, or retrofitting for greater accessibility;"
- Bicycle Inventory A highway bicycling suitability characteristics map has been developed for touring cyclists who use rural highways. The map serves as the beginning point for a detailed inventory of needed improvements for safe bicycling on Utah highways." Bicycle facility needs, or deficiencies of various kinds, are the focus of the inventory. The recommendation to inventory bicycling conditions resulted in development of a Bicycle Suitability Map that identifies shoulder width on state routes, rest areas statewide, and provides links to other travel and traffic data maps. A restrictions map was also developed that identifies the locations on urban interstate highways and principal arterials, such as the Bangerter Highway, where bicyclists and pedestrians are prohibited; and

Funding - Adequate funding is a key factor for successful implementation of pedestrian and bicycle projects. Traditionally, pedestrian and bicycle improvements have been required to compete with other projects that may have a higher priority. In many instances, whenever there is a widening, reconstruction, or some other street improvement, provisions for pedestrian and bicycle facilities are considered and funded as a part of the street improvement. In other instances, the project may only be a pedestrian and/or a bicycle facility. All federal funding programs created under SAFETEA-LU include pedestrian and bicycle facilities as eligible activities. Also, the Utah State Legislature appropriates funds for pedestrian and bicycle facilities through the Centennial Non-motorized Paths and Trail Crossings Program and the Safe Sidewalk Program.

UDOT Policy Issues for Design, Construction, Maintenance, and Operations: During the development of the Statewide Pedestrian and Bicycle Plan, a number of issues were identified to serve as the basis



for further discussions relative to policy development within UDOT. These policy issues are currently being evaluated for possible adoption as policies by UDOT, or for use in developing standard procedures for planning, identification of facility needs, project concept development, environmental review, design, construction, and maintenance of state transportation facilities. These policies are intended to provide "guidance for ensuring the development of a viable pedestrian and bicycle transportation system."

The Statewide Pedestrian and Bicycle Plan provides some guidance relative to projects in which local governments and UDOT have a mutual interest, as noted in the statement below:

Projects should consider potential impacts to pedestrian and bicycle connections shown in approved local and regional master plans and evaluate reasonable accommodations that can be incorporated into the project, where the master plan has:

- considered options and feasibility;
- included consultation with UDOT in the planning process; and
- demonstrated a financial commitment to construct local walkways and bikeways connecting the requested project.

Requested accommodations beyond the reasonable scope of a state transportation project may be incorporated with funding participation by the local agency.

The Statewide Pedestrian and Bicycle Plan provides specific design, construction, maintenance, and operations guidance relative to the following categories: (A) Walkways, (B) Bikeways, (C) Combined Pedestrian/Bicycle Shared Use Paths, (D) Multi-use Trails and Equestrian Use of Trails and Shared Use Paths, (E) Designation of Bikeways and Bicycle Suitability Evaluation, (F) Bicycle and Pedestrian Travel on Interstate Freeways and other Controlled-Access Highways, (G) Railroad Crossings, (H) Construction Zones, (I) Destination Facilities and Support Services, (J) Snow Removal, and (K) In-line Skaters.

TRANSPORTATION SYSTEM IMPROVEMENTS

Transportation System Management and Transportation Demand Management

The Congestion Management Process involves an evaluation of Transportation System Management and Transportation Demand Management strategies as potential mitigation to congestion instead of increasing highway capacity. Corridors have been identified where TSM and TDM strategies can delay the need for new capacity. Where these strategies cannot meet the travel demand, new capacity recommendations are made (page 160). TSM and TDM strategies are also recommended for incorporation into new capacity projects in order to maximize the effectiveness of the new capacity as well as to minimize the need for even more highways.

A comparison of level of service with and without implementing TSM and TDM strategies have been made in the travel demand model to identify any roadways where these strategies could be applied to delay the need for new highway capacity. These facilities are listed in Table 7-7. The objective was to improve LOS from "E" or "F" to "D" or better by applying TSM and TDM. Instances where this could be accomplished were limited. Rather than successive links in a corridor showing improvement, TSM and TDM benefits as measured by the model tend to be in isolated segments. This is not to suggest TSM and TDM should be ignored. On the contrary, there are real benefits to be gained and the costs in most cases are marginal, but there is a need to be realistic with expectations about the resulting improvements in transportation system performance. Rapid growth along the Wasatch Front makes it difficult for highway capacity to keep up with demand by pursuing TSM and TDM alone.

The modeling only included those TSM and TDM strategies that are readily quantifiable. The modeled TSM strategies include signal coordination, ramp metering, incident management, the use of other intelligent transportation systems, and access management. Strategies that were not modeled are traditional intersection and interchange improvements, as well as more innovative approaches, such as single point urban interchanges and continuous flow intersections. Application of all of these strategies is recommended where appropriate system-wide. For the new



capacity projects in the RTP, TSM strategies are provided in writing during concept development as specific project improvements.

Modeled TDM strategies include ridesharing, vanpools, public transit service in its various modes; plus flextime, telecommuting, and growth management. Other TDM strategies recommended for use throughout the Region include park-and-ride facilities, HOV lanes, car sharing, and adding pedestrian and bicycle facilities. Much of the new capacity identified in the RTP is needed to address peak period demand. At other times this additional capacity is underused. Managing peak period demand can be a cost effective solution to address the imbalanced use of the transportation system.

Intelligent Transportation Systems

As discussed briefly on page 69, valuable tools to preserve capacity of highway and transit facilities involve the usage of intelligent transportation systems (ITS). These tools include technologies such as ramp metering, incident management, signal coordination, automated transit vehicle location, and passenger counting. As demand for transportation facilities continues to outpace the ability to provide them, it becomes more and more critical to implement ITS strategies. Additionally, in order to responsibly operate facilities that are

constructed and maximize their usefulness, it is essential to plan for ITS. This section will review benefits of current ITS technologies, discuss potential future technology, and provide recommendations for implementing ITS strategies.

As indicated in Table 7-8, significant savings have been achieved by implementation of CommuterLink, Utah's major example of ITS. The delay reduction benefits value the time saved conservatively at about \$12 per hour. The accident reduction benefits are based on Federal Highway Administration estimates. Incident Management Teams (IMT) in the Salt Lake and Ogden-Layton Urbanized Areas are able to reduce incident blockages by 15 to 35 minutes, with time savings generally increasing with the severity of the accident. Dynamic Message Signs (DMS) help alert drivers to traffic accidents as well as construction and inclement weather conditions. Traffic lights at freeway on-ramps improve the traffic flow on the freeways during peak periods.

While continuous green traffic lights are not possible, significant delay reduction results from coordinating and updating signal timings. Closed-circuit television cameras are also part of CommuterLink and support each of the other ITS components by facilitating real-time responses to changing conditions. In addition to the delay and safety benefits, annual savings in fuel consumption, vehicle stops, and pollutant emissions total about \$35 million. The overall benefit to cost ratio is over 17:1, which translates to a very cost-effective investment.

The benefits cited above are from the ITS system in Salt Lake County. Proportional benefits are already accruing in Davis, Utah, and Weber Counties where ITS has more recently been deployed and the system is not as mature. In all of these counties, local government, UTA, and UDOT have worked cooperatively so that CommuterLink is a seamless, integrated statewide system. The systems described above benefit not only private vehicles but also bus riders. There are also intelligent transportation systems that even more directly benefit transit system users. Automated Vehicle Location (AVL), smart card systems, and other communications improvements are among ITS applications designed specifically for the transit system. Studies have demonstrated 10 to 90 percent improvements in on-time schedule performance resulting from implementing AVL. Significant decreases in fare evasion and revenue

TABLE 7-7
TSM and TDM Strategy Recommendations to Delay New Capacity Additions

| RECOMMENDED TSM PROJECTS | | | | | | |
|----------------------------------|---------------------------|-----------------------|-------------|--|--|--|
| Route | From | То | Improvement | | | |
| SALT LAKE AREA | | | | | | |
| 2100 South | I-15 | 1300 East | Operational | | | |
| 3300 South / 3500 South | I-215 (West) | Highland Drive | Operational | | | |
| 5400 South | 5600 West | Bangerter Highway | Operational | | | |
| 5400 South | Redwood Road | I-15 | Operational | | | |
| Fort Union Boulevard | Union Park Boulevard | 3000 East | Operational | | | |
| 10600 South / 10400 South | Bangerter Highway | I-15 | Operational | | | |
| 5600 West | 2700 South | 6200 South | Operational | | | |
| 5600 West | 6200 South | New Bingham Highway | Operational | | | |
| Redwood Road | SR-201 | 4700 South | Operational | | | |
| Redwood Road | 9000 South | 11400 South | Operational | | | |
| State Street | 600 South | I-215 | Operational | | | |
| State Street | I-215 | 12300 South | Operational | | | |
| 900 East | 3300 South | 4500 South | Operational | | | |
| Union Park Boulevard / 1300 East | Fort Union Boulevard | 7800 South | Operational | | | |
| Highland Drive | Murray Holladay Boulevard | Van Winkle Expressway | Operational | | | |
| 500 South / Foothill Drive | 1300 East | 2300 East | Operational | | | |
| OGDEN – LAYTON AREA | | | | | | |
| SR-193 | I-15 | US-89 | Operational | | | |
| 2600 South / 1100 North | Redwood Road | I-15 | Operational | | | |
| Center Street | Redwood Road | US-89 | Operational | | | |
| 20th Street | Wall Avenue | Harrison Boulevard | Operational | | | |
| 21st Street | Wall Avenue | Adams Avenue | Operational | | | |
| 3500 West | 1200 South | Midland Drive | Operational | | | |
| 600 West | Elberta Drive | 2600 North | Operational | | | |
| Harrison Boulevard | 2600 North | 12th Street | Operational | | | |
| Harrison Boulevard | 12th Street | Country Hills Drive | Operational | | | |

TABLE 7-8 ITS "Commuter Link" Cost Saving Benefits

| COMMUTER LINK COMPONENT | ANNUAL DELAY BENEFIT | ANNUAL SAFETY BENEFIT | ANNUAL ENVIRONMENTAL BENEFIT | | |
|--------------------------------------|----------------------|-----------------------|------------------------------|--|--|
| Incident Management Team | \$7,400,000 | \$700,000 | \$0 | | |
| Dynamic Message Signs | \$2,900,000 | \$0 | \$0 | | |
| Ramp Metering | \$5,800,000 | \$3,300,000 | \$0 | | |
| Signal Coordination | \$100,000,000 | \$23,300,000 | \$0 | | |
| Sub Total | \$116,100,000 | \$27,300,000 | \$35,000,000 | | |
| TOTAL | | \$178,400,000 | | | |
| Source: UDOT; values are approximate | | | | | |

increases results from the use of smart card systems. These and other transit ITS improvements lead to increases in ridership by making transit more efficient and convenient.

Another benefit not quantified above is the ability of ITS to provide travel information via means other than dynamic message signs. For example, even before leaving for a trip, a traveler can learn about congestion levels, transit travel times, road conditions, or construction activity through the CommuterLink website, via cell phone alerts, or by calling 511. Individual travel times can thus be reduced by obtaining travel information through these various technologies.

Turning attention to technologies becoming available for broader implementation in the near future, the federal government is expected to decide in the next few years whether to make a commitment to support "Vehicle Infrastructure Integration" (VII). This public-private initiative would provide roadside and in-vehicle technology to enable drivers to receive route guidance needed to avoid congestion. In addition, their vehicles would be equipped with crash avoidance systems. Some of these technologies are currently available on a limited basis. Within a decade or so, wide spread use of these technologies could render some existing ITS technologies, such as dynamic message signs, obsolete.

Given that intelligent transportation systems are very costeffective and essential to reducing both recurring and nonrecurring congestion, thus making both transit and highway systems more reliable, it is recommended that more funding be provided to achieve the following objectives:

- Upgrade equipment and increase numbers of trained personnel to sustain and improve maintenance and operation of ITS along the Wasatch Front;
- Include the potential for Vehicle Infrastructure Integration in ITS project plans and designs;
- Continue steady, sustainable expansion of ITS, such as;
 - Connecting more signals and CCTVs to CommuterLink
 - Equipping more buses and trains with AVL
 - Improving accessibility of real-time and historical travel information, and
 - Increasing freeway management abilities in proportion to traffic growth.

Enhancements

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Efficiency Act for the 21st Century (TEA-21) both included a requirement that 10 percent of federal surface Transportation Program funding be dedicated to Transportation Enhancements (TE) activities. This program continued with enactment of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005. This legislation stresses mobility and protection of the environment, community preservation, sustainability and livability.

Enhancement projects provide opportunities to improve the transportation experience throughout local communities. Transportation Enhancement projects and activities are a means of creatively and sensitively integrating surface transportation facilities into the communities. Projects may provide a means of further protecting the environment as well as a more aesthetic, pleasant and improved interface between the community transportation system and residents located adjacent to transportation facilities.

Federal Transportation Enhancement funds are to be used for transportation-related capital improvement projects that enhance the quality of life, in or around transportation facilities. Projects must be over and above required mitigation of normal transportation projects, and the project must be directly related to the transportation system. The projects should have a quality-of-life benefit while providing the greatest benefit to the greatest number of people. Projects must accomplish one or more of the following.

Provision of facilities for pedestrians and bicycles

New or reconstructed sidewalks, walkways, or curb ramps; wide paved shoulders for non-motorized use, bike lane striping, bike parking, and bus racks; construction or major rehabilitation of off-road shared use paths (non-motorized transportation trails); trailside and trailhead facilities for shared use paths; and bridges or underpasses for pedestrian, bicyclists or other trail users.

Provision of safety and educational activities for pedestrians and bicyclists

Educational activities to encourage safe walking and bicycling.

Acquisition of scenic easements and scenic or historic sites

Acquisition of scenic land easements, vistas, and landscapes; acquisition of buildings in historic districts or historic properties, including historic battlefields.

Scenic or historic highway programs (including tourist and welcome center facilities)

For projects related to scenic or historic highway programs: Construction of turnouts, overlooks, and viewing areas; construction of visitor and welcome centers; designation signs and markers.

Landscaping and other scenic beautification

Landscaping, street furniture, lighting, public art, and gateways along highways, streets, historic highways, trails, and waterfronts.

• Historic preservation

Preservation of buildings in historic districts; restoration and reuse of historic buildings for transportation-related purposes.

Rehabilitation and operation of historic transportation buildings, structures, or facilities

Restoration of historic railroad depots, bus stations, ferry terminals and piers, and lighthouses; rehabilitation of rail trestles, tunnels, and bridges; restoration of historic canals, canal towpaths, and historic canal bridges.

Preservation of abandoned railway corridors

Acquiring railroad rights-of-way; planning, designing, and constructing multiuse trails; developing rail-with-trail projects (including the conversion and use of the corridor for pedestrian or bicycle trails).

Inventory, control, and removal of outdoor advertising

Billboard inventories and removal of illegal and nonconforming billboards. Inventory control may include, but not be limited to, data collection, acquisition and maintenance of digital aerial photography, video scan imaging, logging of data, developing and maintaining an inventory and control database, and hiring of outside legal counsel.

Archaeological planning and research

Research, preservation planning, and interpretation of archaeological artifacts; curation for artifacts related to surface transportation and artifacts recovered from locations within or along surface transportation corridors.

• Environmental mitigation

Address water pollution due to highway runoff; or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity. For existing highway runoff: soil erosion controls, detention and sediment basins, and river clean-ups. Wildlife underpasses or other measures to reduce vehicle caused wildlife mortality and/or to maintain wildlife habitat connectivity.

• Establishment of transportation museums

Construction of new transportation museums; additions to existing museums for a transportation section; conversion of railroad stations or historic properties to museums with transportation themes.

Approximately \$2.5 million in federal funds will be available annually for locally sponsored projects to enhance Utah's transportation system. The Transportation Enhancements Program is a reimbursement program and the actual dollar amount will be dependent upon congressional and state appropriations. UDOT collects and administers all funds.

The Wasatch Front Regional Council has indicated its strong interest in including transportation enhancements as part of the 2040 RTP by serving on the Enhancement Advisory Committee (EAC) and by encouraging eligible agencies or organizations to actively pursue federal transportation enhancement funding. The WFRC will continue to encourage diverse modes of travel, increase awareness of community benefits that can be obtained through transportation investment, strengthen partnership between state and local governments, and promote citizen involvement in transportation decisions. The WFRC recommends that enhancement funding be primarily used for bike and pedestrian facilities, and landscaping around transportation related projects.

Pavement Management

The existing street and highway system is a critical asset to the communities of the Wasatch Front Region and must be maintained in a serviceable condition. Failure to do so results in significant additional private vehicle maintenance costs to the traveling public and can compromise safety. A pavement management system is defined as a set of tools or methods that assist decision makers in finding cost effective strategies for maintaining the state roadway system in serviceable condition. The detailed structure of a pavement management system is separated into two levels: (1) system or network; (2) and project levels.

Network level management (administrative) decisions affect the programs for the entire roadway system. The management system considers the needs of the network as a whole and provides information for a Region-wide program of new construction, maintenance, and rehabilitation. The goal of the network level is to optimize the use of funds over the entire system. The managers at this level compare the benefits and costs for several alternative programs and then identify the program/budget that will have the greatest benefit/cost ratio over the analysis period. Project level pavement management makes technical decisions for specific projects. At this level, detailed consideration is given to alternative design, construction, maintenance and rehabilitation activities for specific projects. This is accomplished by comparing benefit / cost ratios of several design alternatives, and selecting the alternative that provides the desired benefits for the least total cost over the projected life of the project. Since system level analysis provides targets for maintenance, rehabilitation, reconstruction treatments, and costs, it is necessary for the project level management system to provide additional information before designs are finalized.

Pavement maintenance is a planned program of treating pavement to maximize its overall useful life. A renewed emphasis on pavement preservation calls for privates industries and federal, state and local agencies to work together to provide highway users with an increased level of quality and cost-effectiveness. Pavement preservation takes the maintenance process one step further by carefully prioritizing and coordination maintenance activities to extend the life of a pavement. It includes preventive maintenance, corrective maintenance, and both minor and major rehabilitation. Figure

7-5 shows the relationship between the costs and benefits of a pavement preservation program. Figure 7-6 demonstrates the strategies of a pavement preservation program and the relationship between the serviceability over time of a section of pavement utilizing a preservation program.

All pavements require some form of maintenance due to the effects of traffic and the environment on the exposed materials. Applying a surface treatment to a pavement under light to moderate distress can greatly increase the life of that pavement. Active pavement preservation program benefits will include the following benefits

- The extension of the life of the pavement;
- Lower costs over time Studies have shown that for every additional dollar spent on preventive maintenance treatments, up to \$4, \$6, or even \$10 may be saved, if more drastic rehabilitation is required at a later date due to delays;
- More predictable costs If regular treatments are scheduled and pavements maintained, planners will be better able to predict and budget future expenditures;
- Better utilization of resources Planning and regularly scheduling treatments allows better use of resources, including the efficient scheduling of contractors and equipment;
- Fewer premature pavement failures Many premature pavement failures are caused by pavement damage that goes untreated, such as water seeping into open cracks;
- Better pavement conditions Regularly scheduled monitoring and pavement treatments keep pavements in better overall condition than random or insufficient maintenance; and
- Reduced user delays and user costs The more extensive damage a pavement has been subjected to, the longer drivers will be delayed due to repair or reconstruction.
 Pavements that are in good condition reduce daily "wear and tear" on vehicles.

The Wasatch Front Regional Council, in cooperation with the Utah Department of Transportation and its member local governments, have estimated funding amounts to maintain the existing pavement system. The WFRC will continue to work with UDOT and local agencies to identify a process to obtain the most accurate information (pavement, safety/ crash, access, etc.) available to make the best use of the limited amount of

FIGURE 7-5
Pavement Preservation Program Cost Benefit

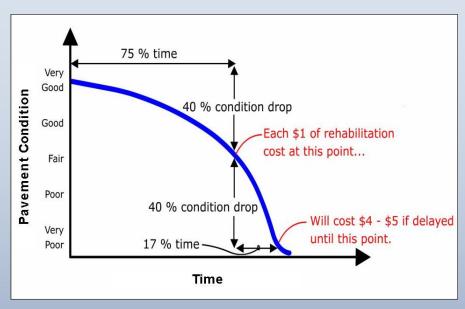
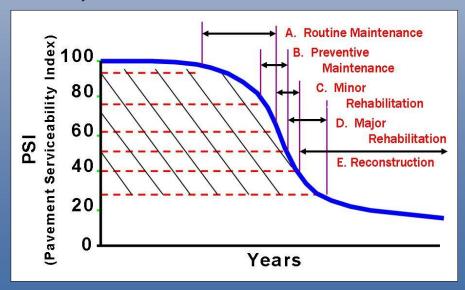


FIGURE 7-6
Pavement Serviceability Index



available funding. The pavement data will be used by the WFRC to identify and evaluate projects for urban Surface Transportation Program (STP) funding. The next step will be to determine what data is available and the type of future data that collection is necessary as to ensure a useful process.

Access Management

Roads serve two primary purposes. The first is to provide mobility. The second is to provide access. Mobility is defined as the efficient movement of people and goods. Access is moving people and goods to specific properties. Access management is a comprehensive approach to the regulation of driveways, medians, median openings, traffic signals, and freeway interchanges. The goal of access management is to limit and separate traffic conflict points. By reducing conflict, managers can increase the levels of safety and traffic operations.

With fewer new arterial roadways being constructed, the need for effective systems management strategies is greater than ever before. Improving access management is particularly attractive to planners as it offers a variety of benefits to a broad range of stakeholders. By managing roadway access, government agencies can increase public safety, extend the life of major roadways, reduce traffic congestion, support alternative transportation modes, and even improve the appearance and quality of the urban environment. Without adequate access management, the function and character of major roadway corridors can deteriorate rapidly. Failure to manage access is associated with the following adverse social, economic, and environmental impacts.

- An increase in vehicular crashes
- More collisions involving pedestrians and cyclists
- Accelerated reduction in roadway efficiency
- Unsightly commercial strip development
- Degradation of scenic landscapes
- More "cut-through" traffic in residential areas, due to overburdened arterials
- Homes and businesses adversely impacted by a continuous cycle of widening roads
- Increased commute times, fuel consumption, and vehicular emissions as numerous driveways and traffic signals intensify congestion and delays along major roads

Not only are these adverse impacts costly for government agencies and the public, but they also negatively impact businesses located in corridors with poor access management. Closely spaced and poorly designed driveways make it more difficult for customers to safely enter and exit businesses. Access to corner businesses may be blocked by queuing traffic. Customers begin to patronize businesses with safer, more convenient access and avoid businesses in areas with poor access design. Gradually the older developed areas begin to deteriorate, in part due to access and aesthetic problems, and investment moves to newer and better managed corridors.

After access problems have been created, they are difficult to solve. Reconstructing an arterial roadway is costly and disruptive to the public and abutting homes and businesses. Shallow property depth, multiple owners, and rights-of-way limitations common to older corridors generally preclude effective redesign of access and site circulation. In som e cases, new arterial or bypass roads must be constructed to replace functionally obsolescent roadways and the process begins again in a new location. Better access management can help stop this cycle of functional obsolescence, thereby protecting both public and private investment in major roadway corridors.

REGIONAL FREIGHT MOVEMENT

The efficient movement of freight is a critical component of a healthy economy and a key indicator of a well-planned transportation system. As a crossroads area for several modes of transportation, the Wasatch Front Region plays a major role in the movement of freight across the United States. Each year, approximately 96.4 million tons of freight valued at \$42.3 billion is shipped from Utah via all modes of freight transportation. Conversely, a total of 87.7 million tons of freight arrives in Utah annually with a value of \$54.4 billion. This makes for a yearly total of 184.1 billion tons of freight shipped to and from Utah valued at \$96.7 billion. Trucks account for almost 70 percent of the Region's freight tonnage, with railroads hauling approximately 25 percent. Pipelines move about 4 percent of the remainder. Air cargo, including parcel and courier service, accounts for less than one percent of the total freight volume moved to and from Utah. Map 7-10 shows the location of major freight terminals and railroad lines in the Wasatch Front Region.

Trucking

The trucking industry is the dominant mover of regional freight. This dominance is the result of the State's highway system, the CANAMEX Corridor, and the many freight distribution centers found at the crossroads of three Interstate highways in the northern Wasatch Front Region. Truck transportation works in conjunction with railroads, pipelines and air freight to provide efficient multi-modal transportation to Utah shippers. The Wasatch Front region is impacted by the following conditions.

- 100 percent of air cargo shipments to and from the Salt Lake City International Airport enter and leave the airport by truck. Trucking gives high-speed air cargo and next-day parcel shipments the flexibility to reach markets across the state.
- Each day 160,000 barrels of crude oil and 42,000 barrels of finished product (gasoline, diesel, etc.) arrive via pipelines at the Wasatch Front Region's five oil refineries. Of this daily total of 202,000 barrels, 95,000 barrels leaves the oil facilities in the North Salt Lake and Woods Cross area by truck each day. This amounts to about 500 truckloads of petroleum products being transported daily on Utah's highways.
- 100 percent of the 400 to 600 intermodal containers and "piggyback" trailers which arrive and depart daily by train at the Union Pacific Railroad's Beck Street Intermodal Facility in Salt Lake City are transported by truck to and from their points of origin and destinations in Utah. Union Pacific provides the "long haul" service while trucks provide the door-to-door pick-up and delivery service.
- Nearly 80 percent of all Utah communities depend exclusively on truck transportation to supply their goods.
- In 2001, 44 million tons, or 72.3 percent of all manufactured freight was transported to and from Utah by truck.
- In 2000, trucking and truck-related warehousing employed 61,844 people in Utah: this employment accounts for one out of every 17 jobs in the state.
- In 2000, the trucking industry activity contributed 4.5percent to the State Gross Product.
- Truck usage accounted for 2.6 billion miles on Utah's public roads in 2000. This figure amounts to about 12 percent of all roadway use in the State.

Recommendations

Trucking industry representatives are quick to point out that roads designed primarily for automobile traffic will rarely be adequate for moving freight by truck. However, highways designed to move freight safely and efficiently will successfully meet the needs of motorists. Representatives of the trucking industry have identified the following specific design, recommendations to facilitate the movement of freight through the Wasatch Front Region.

- Install advanced warning for signal changes on US Highway 89 between I-15 and I-84.
- Upgrade interchanges on I-15 in North Salt Lake, Bountiful, and Woods Cross to better accommodate truck traffic.
- Install a traffic signal at Redwood Road and North Pointe Drive to better accommodate truck traffic.
- Widen 5600 West to five lanes between SR-201 and I-80.
- Reconfigure the right turn radii at California Avenue and I-215.
- Lengthen merge / acceleration lanes on I-84 eastbound to I-80 westbound.
- Construct additional truck parking and staging areas in Salt Lake City's Westside industrial parks.

Railroad

Since the completion of America's first transcontinental railroad at Promontory, Utah, on May 10, 1869, railroads have played a major role in the transportation of freight in Utah and along the Wasatch Front. By 1909, when the last major segment of the nation's east/west rail infrastructure was completed, the Western Pacific and Rio Grande Railroad line between Salt Lake City and San Francisco, Utah was firmly established as the logistical "Crossroads of the West." Although still an important rail center in the 21st Century, the Wasatch Front's overall position as the west's premier rail crossroads has been greatly diminished by changes in the rail industry including the mergers of Western America's once-numerous railroad companies into two large systems. The continuing impact of this transition in Utah's rail industry on the state's economy and transportation systems is considerable.

An almost complete lack of rail competition is the most serious problem facing Utah rail service and those who depend on it. The railroad industry's inability to meet its own capital



needs is a nation-wide challenge affecting rail service. As a result of these, and other rail-service-related issues, a number of key Utah industries have been diverting an increasing amount of their freight traffic away from rail and onto trucks. This rail-induced increase in truck traffic is beginning to impact a number of key highway segments across the state. The advantages of railroad transportation are fuel efficiency, labor costs, privately owned and maintained infrastructure, a good safety record, and relatively low cost, especially for bulk commodities. The Wasatch Front Region has been and will continue to be impacted by the following railroad related factors.

- The average freight train carries 6,000 tons. Assuming an average carrying capacity of 35 tons for trucks, it would take 171 trucks to equal one standard freight train.
- Unit trains (i.e. one commodity trains, that are not broken up to be switched en route), which are common in Utah, can carry up to 12,000 tons of coal, not counting the weight of the cars and locomotives. The largest coal truck on Utah highways has a total carrying capacity of 43 tons; therefore it would take 279 of those oversize coal haulers to equal one unit train

Pipelines

Pipelines work in conjunction with trucking and railroad tank car service and have a major positive impact on Utah's economy. Pipelines primarily carry liquid commodities such as crude oil and refined petroleum products. These products include gasoline, diesel, and jet fuel. Solid materials, such as phosphate, can be mixed with water and also transported via slurry pipelines. Like the railroads, the pipeline industry owns, operates, and maintains its own infrastructure, with no state or federal involvement in the construction and maintenance thereof. However, they are subject to regulations regarding safety, environmental protection, etc. Important issues relative to the pipeline industry in the Wasatch Front region are as follows.

Crude oil pipelines converge in the Wasatch Front Region and supply five oil local petroleum refineries from oil fields as far distance as Alberta, Canada.

Major source of production are from fields in Colorado, Wyoming, Montana, and eastern Utah.

- Finished petroleum products also link Wasatch Front energy facilities with refineries as far away as Wyoming and Montana.
- Refined fuel products leave the Wasatch Front refineries via a pipeline extending northwest through Idaho and Oregon, terminating in Spokane, Washington. A second pipeline is nearing completion between Salt Lake City and Las Vegas.
- Pipelines, working with railroad tank car service, eliminate the need for nearly 2,100 trucks that would otherwise be traveling daily on some of Utah's busiest highways. The pipelines support the state's industrial economy and tax base.

Air Freight

Air cargo is the smallest component of the freight transportation system serving the Wasatch Front Region. The Salt Lake City International Airport (SLCIA) is a major hub for Delta Airlines. Service is also provided by nine other scheduled airlines as well as three air freight/cargo carriers. In calendar year 2001, a combined total of 238,798 tons of mail and cargo enplaned and deplaned at the SLCIA.

There are two terminals designated for air cargo. One is nearly co-located with the US Post Office at the southern end of the SLC International Airport. The north terminal is accessed

via Interstate 215, while the main cargo and mail terminal at the south end of the airport is accessed via Interstate 80. The primary users of these facilities are United Parcel Service at the north terminal. Federal Express and the United States Postal Service maintain operations at the south terminal. Air freight/parcel traffic to and from the SLCIA is concentrated during the Monday to Friday work week, with far less traffic on weekends and holidays.

Air freight's primary advantage is speed. Therein lies the reason why Salt Lake City, with its abundant room for terminal expansion, is not a far larger air freight center. Most of the major air freight/air parcels distribution facilities are in the Central or Eastern Time Zones because most parcel movements are between the major cities in the eastern third of the nation. FedEx shipments must travel to and from their distribution center in Memphis, Tennessee each night, while UPS operates out of a hub in Louisville, Kentucky. Salt Lake City is in the wrong time zone to be attractive to air freight/air parcel shippers desirous of centralizing their operations close to major markets.

- UPS averages 30 trucks per day to and from their SLC Airport facility via Exit 25 on I-215
- Federal Express and the United States Postal Service, together, average 110 trucks to and from the SLC International Airport via Exit 115 on Interstate I-80
- Daily truck traffic to and from the Salt Lake City International Airport averages 140 trips each weekday.

Intermodal Freight Connectivity

The transferring of different types of commodities from one transportation mode to another is an important activity of the Wasatch Front Region's freight movement system. Known as "break-of-bulk" points, these locations are where goods are transferred from one type of carrier to another, such as trailers loaded off flat cars to be pulled by trucks to their final destinations. The efficient intermodal connectivity of freight within the Wasatch Front Region will continue to increase in importance throughout the period of time considered in the RTP (2011-2040). Suggested improvements to freight connectivity facilities are expressed in the following recommendations.

Recommendations

• Increase highway capacity on 5600 West serving the

- Union Pacific Intermodal Facility located between SR-201 and I-80.
- Improve highway access to all Wasatch Front oil refineries and the Pioneer Pipeline terminal for both standard and long combination (LCV) oil tank trucks.
- Improve access off 900 West in South Salt Lake City to the Union Pacific automobile transload facility at Roper Yard.

METROPOLITAN AIRPORTS SYSTEM

The Salt Lake City Metropolitan Airports System covers approximately 14,200 square miles, encompassing eight counties, approximately 18 percent of the land area, and 82 percent of the State's population. The system is composed of 13 airports that are home to 83 percent of the active pilots and 74 percent of the State's General Aviation airplanes. This section of the RTP provides recommendations for both the Wasatch Front Regional Aviation System (WFRAS) as a whole, and for individual airports within the WFRAS. Within the context of the 2040 RTP process, this section documents aviation related policy and regulatory recommendations for compatible development.

Compatible Development

The primary responsibility for integrating airport considerations into the local land use planning process rests with local land use planning agencies and local governments. Coordination across multiple jurisdictions to achieve airport land use compatibility is vital for successful protection and promotion of compatible development surrounding the regions airports.

As airports grow, aircraft operations increase in frequency, and the types of operations diversify. Airports grow and develop in response to increases in demand for aviation facilities and services. Airports expand to the limits of their historic boundaries, so there is less distance between aviation uses and adjacent development. At the same time, the metropolitan area has continued to grow and demand for land has resulted in previously rural uses being converted into urban level of development, so that an airport previously located near farm fields may suddenly be adjacent to a housing development or other incompatible use.

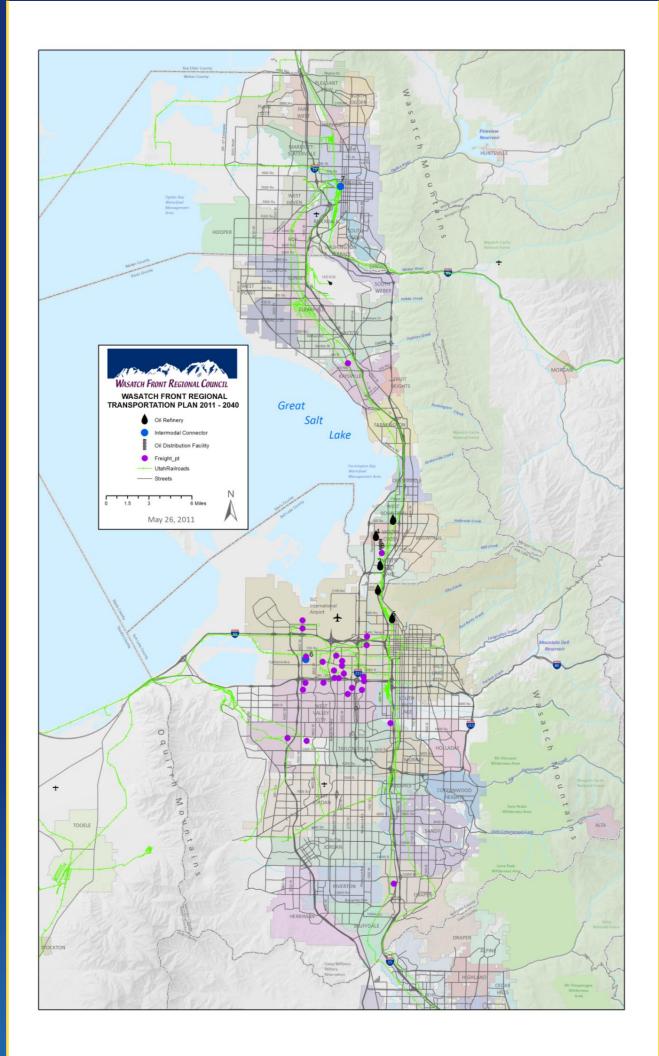
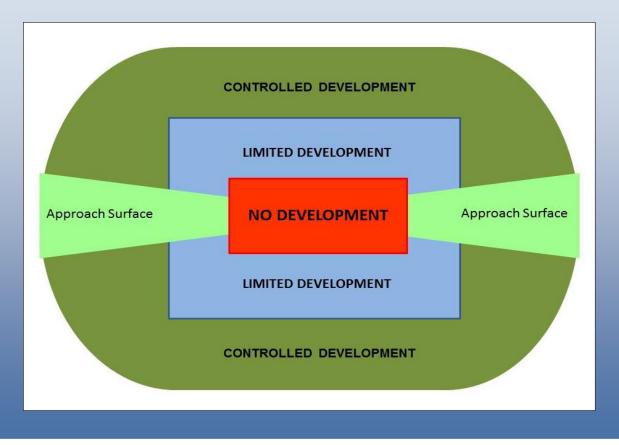


FIGURE 7-7
Airport General Planning Diagram



Planning and development authority for airports in the region is distributed between a large variety of participants, ranging from rural county governments to the Department of Defense. Most airports are publicly owned and operated by a local city or county who have the authority over local land use and control of the types of development possible. Notable exceptions include Bountiful Skypark and Hill Air Force Base. Both Tooele and South Valley Regional are extraterritorial parcels owned by the Salt Lake City Department of Airports. As a result, establishing compatible land uses can be a complicated inter-jurisdictional process. It is recommended that airport sponsors and entities with landuse control around airports engage in cooperative aviation planning as part of the general regional planning process.

In the "Compatible Land Use Planning Guide Utah for Airports", a planning template was developed to aid identification of sensitive lands near the airport. The 'General Planning Diagram' from that report has been reproduced here as Figure 7-7.

The 'Approach Surface', depicted in light green, is the FAA Part 77 approach surface, an imaginary ramp that designates the slope aircraft follow when approaching or departing the runway. The 'No Development' area, depicted in red, extends to the end of the runway protection zone (RPZ) and is the width of the Approach Surface at its intersection with the horizontal surface. The 'Limited Development' area, depicted in blue, extends either 3,200 feet, 5,300 feet, or 7,700 feet depending on approach type, beyond the end of the runway. The width is the length of the airports longest runway. The 'Controlled Development' area, depicted in dark green, is the area inside the FAR Part 77 Horizontal Surface for each airport. It extends 5000 feet from small airports or 10,000 feet from large airports.



Further detail regarding the geometry for each zone can be found in the "Compatible Land Use Planning Guide Utah for Airports" prepared by the Wasatch Front Regional Council. Maps for each airport in the region based these zones are presented in Appendix S.

Compatible Land Use

Ideally, airports should have fee simple ownership of all areas in the 'No Development' zone, However at many airports in the region this not possible or practical. In these cases airports rely on local zoning ordinances to provide protection from incompatible development.

While zoning is the least effective way to ensure airport compatible land use, it is also the least expensive. When zoning for airport compatible land use, best practices include the use of a specific 'Airport Overlay' zone as well as changing the underlying zoning to an airport compatible use. When developing airport compatible zoning, the potential for airport expansion should also be considered. The most severe land use conflicts emerge between airports and incompatible uses when airport facilities are expanded.

It is strongly recommended that airport compatible zoning be established within the 'Limited Development' area, with a focus on providing airport compatible land uses—either uses affiliated with the airport, or uses not sensitive to airport noise. Residential uses should be avoided within this zone, with a strong preference to limiting the number and size of structures developed in the area along the extended runway center-line.

The area represented by the 'Controlled Development' overlay exceeds that which can reasonably regulated to be aviation compatible, and is provided largely as an indication of the relative extent of an airports traffic pattern airspace. In addition, FAA regulations strictly limits the development of structures over 150' tall in this area, such as cell phone towers or wind-mills.

Individual Airport Recommendations Summary

To ease coordination with other transportation planning activities, the existing conditions, planned improvements, and projected outlook has been summarized for each airport in the WFRAS below. Each individual airports entry begins with a short

description of the airport. This includes the location, owner, and basic facility description. Current aviation activities are described, including estimates of based aircraft and aircraft operations. Planned and recommended improvements have been summarized. Each airport has then been assessed in terms of surface transportation access, future ability to grow/expand, land use compatibility, and general outlook. Changes in aviation uses have been predicted.

Salt Lake City International Airport

An international commercial service airport, Salt Lake City International Airport (SLCIA) is located approximately five miles west of downtown Salt Lake City near the intersection of I-215 and I-80. SLCIA is owned by Salt Lake City and is operated by the Salt Lake City Department of Airports. It has two four runways—two used primarily for air carrier operations, one used primarily for GA operations, and an infrequently used crosswind runway. The SLCIA serves the commercial air services needs of the majority of Utah and portions of the surrounding states of Nevada, Idaho, Wyoming, and Colorado. SLCIA also serves as an air cargo hub and accommodates a significant number of General Aviation business aircraft operations. It also has substantial business GA activity.

According the FAA 5010 data, as of 2010 SLCIA has about 366 based aircraft, of which 250 are single engine aircraft, 55 multi-engine aircraft, 46 jets, and 15 helicopters. In 2009 there were 383,838 operations, about half of which were air carrier operations. There were only 8,468 local GA operations, compared to 58,352 itinerant GA operations.

Airport surface access is easy and efficient for a large hub airport. SLCIA is served by I-80 for commercial flights and by I-215 for general aviation activities. Transit service to the airport is being improved with the extension of light rail to the airport along North Temple and I-80, this project is anticipated to be complete in early 2013. UTA currently provides bus service to SLCIA with two commuter buses to Tooele and Grantsville (453 & 454), an hourly bus to Salt Lake City Intermodal Center (Route 550) and an hourly bus to the planned West Valley Inter modal center (Route 236).

At present, cargo facilities at the SLCIA exist on both the north and south ends of the airport. Access for air cargo facilities on the south is via the same access points as air passengers. Access to the air cargo facilities on the north is via I-215 and 2200 North. All future expansion of cargo facilities at the SLCIA is planned for the north end of the airport, and roadway access to this area of the airport is excellent. The majority of air cargo passing through the airport does not have a local origin or destination and is transferred from aircraft to aircraft. As a result increases in air cargo volume have a limited impact on the surface transportation system.

SLCIA's ability to grow and expand to meet future demand remains good. Future growth will be fueled by continued growth of the regions local population, tourism, and its role as a regional and international hub for Delta airlines.

Ogden Hinckley Airport

The Ogden Hinckley Airport is a Regional GA airport It is located approximately two miles southwest of the Ogden City center and directly alongside I-15. The airport is owned and operated by the City of Ogden. The Ogden Hinckley Airport is a regional airport that provides direct access to nearby manufacturing and recreational sites, and it is a popular refueling stop for cross country flight. The airport's service area includes Ogden and surrounding Weber and Davis Counties. It also serves as a reliever for Salt Lake City International Airport. The Ogden Hinckley Airport has three runways and an air traffic control tower which make it an ideal location for recreational, training and business flying. Finally, it supports Williams International, a firm that designs and manufactures small turbine engines for a variety of purposes, including aircraft.

According the FAA 5010 data, as of 2010 Ogden Hinckley has 289 based aircraft, of which 231 are single engine aircraft. There are an estimated 33 multi-engine, and 9 jet aircraft based at Ogden, as well as 13 helicopters and 3 gliders. Kemp Aviation recently completed a private airport along the south side of the airport, which has significantly expanded basing capacity. In 2009, there were an estimated 88,300 aircraft operations. The majority of these operations were conducted by GA aircraft.

Surface access to the airport is excellent. I-15 runs adjacent to the airport, and direct access is provided via Hinckley Drive. The Ogden Hinckley Airport can also be accessed easily from a number of arterial streets in the area, including 1900 West in Roy and Riverdale Road. Planned surface transportation improvements in the area include I-15 widening, and extending Hinckley Driver between 1900 West and Midland drive.

Ogden has excellent capability to continue to grow and expand. There is sufficient available property for the development of additional apron and hangers. The area beyond the runway for the Ogden Hinckley Airport are located over roadways and interchanges, as well as some light industrial. The Monte Vista development is near the south end of Runway 3-21, and may begin to suffer noise issues if jet traffic increases.

Hill Air Force Base

A military airport, Hill Air Force Base (HAFB) is a major United State Department of Defense facility located in Davis County, approximately 20 miles north of Salt Lake City. Hill AFB is operated by the United States Air Force as a major Air Logistics Center, which is dedicated to the maintenance, repair, and testing of aircraft, including both fighter jets and transportation aircraft. It makes heavy use of the the Utah Test and Training Range for these purposes. Hill AFB is the center of Utah's \$1.4 Billion defense industry, and among its top five employers, with an estimated 10,000 to 15,000 employees.

Because of HAFB's role as a maintenance and repair depot, both basing and operations fluctuate in response to the need for repair and testing. There about 85 F-15's assigned to its current tenant units, some of which are currently deployed. There were an estimated 40,000 operations in 2009.

HAFB has been experiencing increasingly severe congestion over the past few years. As a secure facility, there are only a limited number of access points to the base, concentrating traffic onto roads leading to these points. As a result, there are significant roadway improvements planned near HAFB. These include operational improvements along SR-193 to the south, a new North-South road to the east of the base connecting 3000 N with I-84, and substantial widening along I-15 to the west. The I-15 widening includes an interchange connecting the base to I-15 at 1800 N. An enhanced bus service connecting the Clearfield Front Runner Station and the Layton Front Runner station to the south gate has also been planned.

A private developer has broken ground on the Falcon Hill aerospace research park, a new commercial facility constructed on 550 acres of leased based property. When completed, it will include new facilities for over 6,000 of HAFB's employees, and include over 2 million square feet of new office and commercial space.

HAFB is forecast to continue to be the Air Forces ' repair garage' for the foreseeable future. It enjoys strong local support and access to an almost unparalleled amount of military airspace. In 2010, the United States Air Force has selected HAFB as one of the preferred sites for 3 squadrons of the new F-35 Lightning. The base has sufficient property to be able to continue to grow and expand, and a continued mission to provide training and testing facilities for combat aircraft.

Military jet aircraft are significantly louder than civilian jet aircraft. Beyond the north end of the runway, there is still significant base property, and the extended flight path extends over the Weber River and I-84. In contrast, the blast zone at the south end of the runway is near the edge of base property. However, the Layton City General plan map shows it as an easement area, and the zoning map shows it as zoned for agricultural uses.

Bountiful Skypark Airport

Bountiful Skypark Airport is a privately owned, publicuse Regional GA airport, located on Redwood Road in Woods Cross City. The airport is located six miles north-northeast of SLCIA. It has a single runway and serves the general aviation needs of northern Salt Lake County and Davis County. Skypark Airport provides an economical and convenient niche for a large number of single engine GA aircraft, relieving

congestion at other WFRAS airports. It has become a major center for business GA. Training, business basing, helicopter operations and aircraft maintenance are also present.

According the FAA 5010 data, as of 2010 Bountiful Skypark had over 200 based aircraft, including 12 multi-engine aircraft and 10 helicopters. In 2009, there were an average of 135 operations a day, (about 50,000 annual operations). Barring 500 military operations, all were performed by GA aircraft. Approximately 60% of operations are by transient GA aircraft. If local business development continues in this area of Davis County, basing demand at Bountiful Skypark Airport could exceed airport capacity within the next 10 years.

Primary access is via Redwood Road, which connects to I-215 south of the Skypark Airport, and can be easily accessed by the recently constructed Legacy Highway. It can also be accessed from I-15 via the 2600 South exit in Woods Cross. Access to the east side of the airport is supplied by 1560 West, by way of 1100 N.

Planned surface transportation improvements near the airport include widening the nearby I-15 throughout Davis County, and widening Redwood Road from 1100 North in North Salt Lake to 500 South in West Bountiful. UCASP recommendations for Bountiful Skypark include the installation of Medium Intensity Runway Lighting (MIRL), and the construction of 50 additional Tie-downs.

Bountiful Skypark has limited potential to expand. It is hemmed in on all sides by urban development. The proximity of hangers and other development to the runway limit the airport ability to expand to accommodate larger aircraft. Wetlands issues constrain its ability to build additional hangers on the west side of the runway. However, the aiports proximity to a large metropolitan population suggests that demand for its facilities will continue to grow. Because of the constraints, no changes in aviation uses are predicted.

South Valley Regional Airport

South Valley Regional is a Regional GA airport located in West Jordan, approximately nine miles south of SLCIA, and is an FAA designated Reliever airport. It is a publicly owned, public use airport managed by the Salt Lake City Department of airports. It has a single North-South runway.

Existing aviation uses include business-related flying, law enforcement/fire/rescue flying services, recreational flying, flight training, and air charters. The Utah Army National Guard Aviation support facility is based at the airfield, and has expanded and become more active in recent years. According the FAA 5010 data, as of 2010 there were 240 based aircraft. In 2007, this included 20 multi-engine planes, 5 jet aircraft, 5 helicopters, and 24 military aircraft. According to the Salt Lake City Department of Airports, there are currently four corporate hangars, 18 'twin' hangars, 95 'single' hangars, and 42 shade hangars.

Surface access to the airport is improving. 7800 South, congested during peak times is currently under construction and is being widened. 6200 South remains highly congested, and due to significant resident opposition, seems likely to continue to be for the near future. However, the intersections of Banger and both 6200 South and 7800 South are being converted to Continuous Flow Intersections (CFI), which should substantially improve traffic flow along and across Bangerter Highway.

Recommended development identified in the UCASP include additional hangers, a runway extension, substantial taxiway development, and perimeter fencing. The 2007 Airport Layout Plan calls for a future Runway protection zone easement, a future MALSR (Medium-intensity Approach Lighting System with Runway alignment indicator lights), and future hangers on the west side of the airport, north of the existing corporate hangers. Future surface transportation improvements are limited. Future development plans also include general maintenance and rehabilitation of existing pavements and expansion of aircraft basing facilities to accept more general aviation airplanes from SLCIA. The WFRC draft LRTP includes additional widening for 7000 South as it connects into Jordan Landing Boulevard. Enhanced bus service is planned along 7800 South.

South Valley Regional is suffering from urban encroachment. It is surrounded by residential subdivisions on all sides. The massive Jordan Landing commercial development located east of the airport buffers the southernmost extent of the airport, but there are large parcels of developable land on all sides of the airport. Similar parcels have been developed at higher than normal density.

As demand for Air Carrier runway capacity at SLCIA increases, so does the need to separate GA aviation from commercial air carriers. The Salt Lake City Department of Airports has been meeting this need by increasing GA capacity at South Valley Regional. Because of it's proximity to users, there is strong demand for aviation services at South Valley Regional.

The air carrier approach to SLCIA overlays South Valley Regional, making business jets ability to use its GPS approach uncertain. On this basis, South Valley Regional is unlikely to expand as a business jet center, and can be expected to continue as a non-jet GA airport.

Wendover Airport

Wendover Airport is a National GA airport located along I-80, approximately 1 mile south east of the city of Wendover. It is a former WWII era military base which maintains two functional runways. Wendover serves as a stopover point for cross-country aircraft. West Wendover Casinos also charter Casino Express flights.

According the FAA 5010 data, as of 2010 there were 7 based aircraft, including 5 jet aircraft. There were an estimated 5,482 aircraft operations, of which Itinerant GA composed about 65%, Local GA another 20%, and Air Taxi about 13%.

The City of Wendover is located just off I-80, and the Wendover airport can be reached almost directly by following Airport Way. The condition of the surface access road to the airport (Airport Way) is an issue of concern, and likely to require reconstruction. According the UCASP, in order to fulfill its role in the Utah Airport System, Wendover needs a runway extension, a full parallel taxiway, a MALSR, and GVGIs. Planned development is listed in the UCASP as as a precision approach, a new terminal, full perimeter fencing, and extensive taxiway construction.

Wendover Airport is anticipated to continue to be able to meet increasing demand for aviation facilities as West Wendover continues to grow as a vacation and resort destination. The airport has sufficient property to grow and develop. There are currently no land use conflicts off the end of either runway.

Morgan County Airport

Morgan County Airport is a Regional GA airport located approximately 8 miles north west of Morgan city. It is a publicly owned and operated airport, with a single runway. Morgan County serves as a regional center for gliders and ultralight aircraft.

According the FAA 5010 data, as of 2010, the Morgan airport had 76 based aircraft, including 2 multi-engine aircraft and 19 gliders. Many of the based aircraft registered at Morgan County are kit-built and experimental aircraft. There were an estimated 13,258 operations in 2009, for an average of 36 operations a day, of which 75% of which were local GA operations. There is also extensive glider and ultra-light activity at the airport. Surface access is provided by Cottonwood Canyon Road (5700 N) and by Willow Creek Road. Both roads reach I-84 via SR-30. As the nearby Mountain Green area continues to grow and develop, SR-30 will probably become increasingly congested, interfering with airport access. A rebuild is included in the 2011-1016 Utah Department of Transportation Surface Transportation Improvement Plan, but not widening.

UCASP recommended improvements for Morgan County Airport to match its designated role were a runway extension, a runway widening, an increase in pavement strength, a parallel taxiway, GVGI's and REILs. Recommended improvements consistent with Morgan County Airports UCASP role are not consistent with its actual development potential. Due to surrounding terrain and development, expansion of airside facilities is not feasible. Geographic constraints limited the potential approach speed (and thus size) of aircraft using that facility. As a result, the airports ability to develop and handle larger planes is limited. As a result, Morgan County Airport is expected to continue as a local GA airport specializing in recreational flying.

Planned improvements included additional tie-downs and additional fencing. The airport has recently developed additional hangers south of the runway on the west end of the airport.

Morgan County is experiencing increasingly severe landuse conflicts are the previously rural area becomes a desirable location for second homes. Development in the foothills along Willow Creek Road includes several a low density residential subdivision in close proximity to the runway. Continued expansion in airport operations in conflict with expanding residential development in nearby area. The Runway Protection Zone for the south end of the runway cross the road, requiring a displaced threshold. There is existing storage and light industrial off the south end of the runway.

Tooele Valley Airport (Bolinder Field)

Tooele Valley is a Regional GA airport located five miles

TABLE 7-9
2007 Air Cargo Tons By Commodity (Utah)

| соммодіту | INBOUND TONS | OUTBOUND TONS | TOTAL TONS | % OF TOTAL |
|--------------------------------------|--------------|---------------|------------|------------|
| Mail \ Contract Traffic | 18,706 | 23,249 | 41,956 | 21% |
| Chemical Products | 7,157 | 20,990 | 28,146 | 14% |
| Misc Mixed Shipments | 9,517 | 13,051 | 22,568 | 11% |
| Machinery | 12,569 | 7,650 | 20,219 | 10% |
| Transportation Equipment | 5,023 | 11,327 | 16,350 | 8% |
| Electrical Equipment | 3,635 | 10,679 | 14,313 | 7% |
| Farm Products | 1,438 | 8,130 | 9,568 | 5% |
| Pulp\Paper Products | 1,672 | 9,008 | 10,680 | 5% |
| Instruments, Photo\Optical Equipment | 1,558 | 6,717 | 8,275 | 4% |
| Printed Matter | 3,042 | 5,544 | 8,586 | 4% |
| All Other | 8,178 | 9,651 | 17,829 | 9% |
| Totals | 72,495 | 125,996 | 198,490 | 100% |

TABLE 7-10
Projected 2040 AIRP Cargo Tons By Commodity (Utah)

| COMMODITY | INBOUND TONS | OUTBOUND TONS | TOTAL TONS | % OF TOTAL |
|---|--------------|---------------|------------|------------|
| All Other | 14,479 | 19,258 | 412,603 | 50% |
| Machinery | 67,947 | 15,774 | 83,721 | 10% |
| Misc Mixed Shipments | 32,318 | 48,279 | 80,597 | 10% |
| Chemicals Or Allied Products | 14,475 | 35,301 | 49,777 | 6% |
| Electrical Equipment | 24,543 | 23,224 | 47,768 | 6% |
| Instruments, Photo Equip, Optical Equip | 8,482 | 34,641 | 43,123 | 5% |
| Mail Or Contract Traffic | 14,329 | 20,834 | 35,163 | 4% |
| Pulp, Paper or Allied Products | 2,202 | 20,729 | 22,931 | 3% |
| Transportation Equipment | 10,564 | 11,824 | 22,389 | 3% |
| Farm Products | 0 | 13,878 | 13,878 | 2% |
| Printed Matter | 7,200 | 6,057 | 13,257 | 2% |
| Total | 196,539 | 249,799 | 825,207 | 100% |

north-west of Tooele, Utah, south of Highway 138. It is a public-use airport owned and operated by the Salt Lake City Department of Airports. It has a single North-South runway.

Located outside the Salt Lake City Class B airspace, it is heavily used for training flights. Tooele also serves as a fuel stop for itinerant aircraft. Significant skydiving activity is also present. According the FAA 5010 data, as of 2010 there were 24 based aircraft, including one multi-engine aircraft. There were an estimated 18,744 operations in 2009, of which 2/3 were Itinerant GA, and another 1/3 were local GA, for an average of about 51 operations a day.

Surface access is provided off airport road via Erda Way via Highway 36. In the future surface access to the airport may be improved with a connector from Highway 138 north of the airport. The Tooele Valley has become the preferred location for exurban development spilling over from the Wasatch Front. As a result, there has been a substantial and growing need for transportation improvements, and extensive new construction is planned.

UCASP recommended improvements for Tooele Valley Airport to match its designated role were a runway extension, a rental or courtesy car, upgraded terminal and pilots lounge, and a FBO (Fixed Base Operator). Programmed capital development includes a taxi-lane, T-hangers and associated

infrastructure. The airport has sufficient property to continue to grow and expand, including sufficient room for hanger development.

As demand for Air Carrier capacity at SLCIA increases, so does the need to separate GA aviation from commercial air carriers. The Salt Lake City Department of Airports has been meeting this need by increasing GA capacity at Tooele Valley. In addition, facilities have been developed to accommodate larger GA aircraft, including the installation of an ILS (Instrument Landing System).

While Tooele Valley airport lies within the SLCIA Mode-C veil, it is outside the Class B airspace. The less congested airspace and ILS approach procedure make the airport an excellent location for pilot training, and thus flight training and related touch-and-go operations will likely remain a regular aviation use for the foreseeable future.

Air Cargo

While Air Cargo carries only a fraction of a percent of the total freight tonnage, it fills a special niche in Utah's freight system. Air cargo's primary advantage is speed. Air cargo makes it possible to get mail and cargo to distant locations in a matter of hours rather than in days. From urgently needed replacement parts for mining equipment to fresh fish, air freight is a key component in Utah's supply chain. According to the

Economic Development Corporation of Utah (EDCU), Utah air cargo volumes have been growing at an average annual rate of 9%.

According the Federal Aviation Administration (FAA) data domestic air cargo Revenue Ton Miles declining over 17 percent in 2009, partially as a result of new security restrictions. However, the FAA forecasts air cargo demand to continue to grow in synch with economic growth. According to the FAA Forecast Fact Sheet (FY '10-'30), the cargo fleet increases from 854 aircraft in 2009 to 1,531 aircraft in 2030, an average increase of 2.8 percent a year. However, this increase is contingent, assuming that the shift from air cargo to truck relay has stopped. In response to increased security measures for air cargo, a specialized system of ground transportation based on truck relays has become an important cargo mode, one that is nearly as fast as air cargo, but at a lower price.

Utah Air Cargo Commodities

In addition to mail and contract traffic, air cargo includes a wide variety of additional commodities. According Utah Department of Transportation's 'Freight Report' an estimated total of 198,490 tons of air cargo transited to or from Utah airports in 2007. Of this cargo 125,995 tons were outbound (exports from the state) while 72,494 tons were inbound (imports to the state). The tons of air cargo inbound to the state is 58 percent higher of the tons of air cargo leaving Utah. Only three tons of cargo are estimated to travel within the State of Utah by air. The following table shows air cargo tonnages for Utah in 2007. Percentage totals may not total 100% due to rounding. Table 7-9 lists the inbound, outbound, and total tons of air cargo commodities by type for Utah in 2007.

In 2007, the 'Mail or Contract Traffic' commodity constituted the largest tonnage for both inbound and outbound traffic. 'Machinery' was the only category where inbound tons exceeded outbound tons. The 'Pulp\Paper Products' commodity had the highest ratio of inbound to outbound tons. Table 7-10 shows projected changes in commodity tonnages for the State of Utah and the projected percent of total tonnages in 2040.

Air cargo transported within Utah is projected to grow at an average rate of over 4 percent annually. The types of commodities carried by air cargo are expected to become more varied. In 2007, the top three commodities were estimated to account for 46 percent of air cargo, while in 2040 they are projected to account for only 26 percent. The percent of air cargo falling under the 'All Other' category is projected to increase from 9 percent in 2007 to 50 percent in 2040. 'Mail or Contract Traffic' made up 21 percent of Utah air cargo tonnage in 2007, while in 2040, it is project to fall to only 4% of the total. The inbound tonnages of 'Instruments, Photo Equipment, Optical Equipment' and 'Machinery' are projected to grow over 400%, and over 500% for 'Electrical Equipment'. The 'Instruments, Photo Equipment, Optical Equipment' commodity is projected to increase outbound tons by a much larger percentage than any other commodity.

Salt Lake City International Airport Air Cargo

Convenient air freight service from the Salt Lake City International Airport puts shippers within hours of any point in the nation, Canada and Mexico. The FAA 'All-Cargo Data' shows the SLCIA handled over 449,267 tons of cargo in 2009.

Currently within the US, the majority of parcel movements are between the major cities in the eastern third of the nation. As a result, major air freight/parcels shippers located distribution centers in close proximity to their markets. For example, FedEx shipments must travel to and from their distribution center in Memphis, Tennessee each night, while UPS operates out of a hub in Louisville, Kentucky. However, as mountain west and west coast cities continue to grow and develop, it is likely that the demand for air cargo facilities in the west, including the SLCIA will continue to increase.

There are two terminals designated for air cargo, one at the south end of the airport, and one at the north end of the airport. The southern air cargo terminal serves is primarily devoted to air mail and serves Federal Express (Fed-Ex) and the United States Postal Service (USPS). Federal Express and the United States Postal Service, together, average 110 trucks to and from the SLCIA via Exit 115 on Interstate I-80. The northern terminal is primarily used by the United Parcel Service (UPS). It is accessed by I-215. UPS averages 30 trucks per day via Exit 25 on I-215. The vast majority of air freight/parcel traffic to and from the SLCIA is concentrated during the Monday to Friday work week.

FUTURE TECHNOLOGIES

It is safe to say that trying to predict the future is a tricky errand at best. However, because transportation is so important to commerce and quality of life, it behooves the WFRC to attempt to look into the future in a way that allows, as much as possible, the accommodation of the future impact of trends that are discernable at present. History teaches that those communities and broader urban areas that fail to quickly adapt are bypassed as new circumstances remake the economy and the landscape.

What seems to be clear is that future changes in transportation related technology continue to be governed by three basic principles: First, large scale change must meet a large scale need; second, change is a product of overall technological trends; and third, transportation changes are generally adopted only after public entities support them financially.

Meeting a Need

Some of the more pressing transportation relate, needs appear to be as follows: air quality, accommodation of commerce, climate stabilization, energy independence, and accommodation of population growth. It can be argued that each of these needs is growing in importance and is likely to drive changes in transportation technology.

Air quality affects the Wasatch Front resident to regional health in several ways. As the senior population grows so does the percentage of residents who are most susceptible to poor air quality. This growing senior population will enjoy considerable political power and may increase the pressure to resolve air quality concerns. Additionally, advances in health research are further delineating the links between pollutants at lower concentrations and poor health. The Wasatch Front Region, with its unique geographic conditions, will need to respond to pressures to improve air quality, using the best management practices and technologies available.

Accommodation of existing and future commerce will be very important to the Wasatch Front Region. Business requires movement of people and goods. Modern business requires the ability to attract talent. Talented people are highly mobile and are frequently free to relocate, based upon quality of life issues. Beyond the air quality needs noted above, a reasonable

commute is essential to a good quality of life. Modern business is also more reliant upon "just in time" delivery which is, in turn, dependent upon the ability to cheaply and reliably move freight.

Climate change is a fast growing concern. Reductions in carbon dioxide and other green house gas releases is steadily becoming a global and business concern and is even starting to drive the economy. Energy independence is an increasing National concern. Many of the Nations petroleum sources are beyond peak performance. New oil resources are expensive to develop, difficult to retrieve and environmentally damaging. Increasing reliance upon foreign oil runs counter to national interests. It can be assumed that more effort will be made to develop alternative energy resources. Utah will play an important role as alternative resources are developed.

Utah has a particular need to accommodate rapid population growth. Utah has a perennially high growth rate and much of that growth is centered on the Wasatch Front. In 2006, Utah had the highest fertility rate in the Nation, the third longest life expectancy rate, and the sixth highest rate of population growth. By 2050 it is anticipated that the Wasatch Front will have about 5 million residents. This is over twice its current population and about the current size of Philadelphia, Pennsylvania. Much of the region's highway infrastructure is in place and is unlikely to be doubled. Even more congestion can be expected, resulting in less road throughput or capacity.

Overall Technological Trends

Among the most influential technological factors driving changes in the economy are those involving information, containerization, and materials engineering. Information technologies applied to transportation include, but are not limited to, parking and transit locator services, demandactivated transit systems, computer assisted driving, those that aid telecommuting, and the provision of goods and services via the internet. This segment of the nation's economy continues to increase as technology occupies an increasingly important role in providing transportation demand solutions.

Parking and transit locator services provide direct, realtime communication between operators of transit vehicles and the user. These services could allow for demand-activated transit systems in lower density areas to provide door-to-door

service and optimized routing. Computer assisted driving would improve safety and allow for more road capacity by shortening the gaps between vehicles. Telecommuting and the provision of goods and services via the Internet may ultimately eliminate many trips altogether.

Containerization, the concept of allowing trunk line and collector-distributor functions to share a single container or vehicle, has revolutionized the freight industry. A single container of goods is transported in mass by ship, downloaded to a train traveling to a large common destination, and then downloaded to a tractor trailer for delivery to a specific destination. Applications of this technology in the movement of people would involve personal rapid transit and various types of bus rapid transit. Personal Rapid Transit (PRT) generally consists of small vehicles, each carrying about the same number of persons as an automobile. These vehicles would travel over an exclusive right-of-way or guideway network, either over standard routes, or else automatically routed individually from origin to destination at network stations.

Bus rapid transit can operate in much the same way as PRT but with larger passenger capacities. Currently several BRT lines include line-haul and collector-distributor segments. A line in England operates driverless on a fixed-guideway and then with a driver added as a collector-distributor. In Boston and Seattle the fixed-guideway portion of the lines are located in tunnels. Los Angeles has a BRT with its fixed-guideway portion on a rail line that previously served as freight haulage. In France, the fixed-guidway portion is reversible, allowing only the bus in the peak direction to use the guideway. In Korea, a bus line that was to debut in 2009, was to operate on both magnetic railways and asphalt roads.

The use of newly engineered composite materials holds huge promise for transportation. As lighter and stronger materials become more economically viable, vehicles will emit fewer pollutants, use less energy, and potentially take up less space. Thus far, transit has been one of the first industries to adopt some of these materials in vehicles. These materials are also finding a place in highway construction. For example, specialty wraps have been introduced to prolong the life of bridge support structures.

High Speed Rail

The International Union of Railways (UIC) defines high-speed rail as services that regularly operate at or above 155 mph on new tracks, or 125 mph on existing tracks. A number of characteristics are common to most high-speed rail systems. Most are electrically driven via overhead lines, although this is not necessarily a defining aspect. For instance, other forms of propulsion, such as diesel locomotives, may be used, as on Britain's HST services. A definitive aspect of high-speed trains is the use of continuous welded rail. Welded rail reduces track vibrations and discrepancies between rail segments sufficiently to allow trains to pass at speeds in excess of 125 mph.

The current Federal Administration envisions a network of high-speed rail corridors across America. The proposal is to transform the nation's transportation system by rebuilding existing rail infrastructure while launching new high-speed passenger rail services in 100 to 600 mile corridors connecting U.S. communities. The idea is similar to how the Interstate system and the U.S. aviation system were developed in the 20th century. That is a partnership consisting of public sector and private industry, will construct the system when strong federal leadership providing a national vision.

The Western High Speed Rail Alliance (WHSRA) has been formed under the leadership of the Denver Regional Council of Governments, Maricopa Association of Governments, the Regional Transportation Commission of Southern Nevada, the Regional Transportation Commission of Washoe County and Utah Transit Authority. The Alliance was founded for the purpose of determining the viability of developing and promoting a high-speed rail network that would provide high-speed rail connections throughout the Intermountain West, with possible future connections to the Pacific Coast and other areas of the United States. The members of the alliance agree to work jointly to acquire funding for studies of high-speed rail options, to develop plans for high-speed rail infrastructure, and to construct high-speed rail facilities throughout the Intermountain West. The Western High Speed Rail Alliance shares a common vision for a future high-speed rail infrastructure connecting Denver, Reno and Las Vegas, with links to other regions. This high speed rail system would provide efficient, cost-effective rail operations for passenger and freight customers, and enhance economic growth through reduced air, rail and highway congestion. It is felt that

HSR would promote economic expansion, including new manufacturing jobs; would create new choices for travelers in addition to flying or driving, would reduce national dependence on oil, and fosters urban and rural community development.

SAFETY AND HOMELAND SECURITY RECOMMENDATIONS

Safety Recommendations

Enhanced safety is an objective of the 2040 RTP and in the growth principles guiding its development. The Wasatch Front Regional Council recommends and encourages all projects in the RTP to be planned, designed, and implemented, with the safety of future users given high priority. As required by SAFETEA-LU, safety is a key component in transportation planning. The Federal Highway Administration (FHWA) in cooperation with the National Highway Carrier Safety Administration (NHCSA), the Federal Motor Carrier Safety Administration (FMCSA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA) provided guidance for local planning efforts in the form of a document titled the "Strategic Highway Safety Plans: A Champion's Guide to Saving Lives, Interim Guidance to Supplement SAFETEA-LU Requirements." This guide proposed that a Strategic Highway Safety Plan (SHSP) be developed to identify the State's key safety needs and guide investment decisions to reduce highway fatalities and serious injuries. The SHSP is a statewide coordinated safety plan that will establish statewide goals, objectives, and key emphasis areas developed in consultation with Federal, State, local, and private sector safety stakeholders.

The Utah Safety Leadership Team, led by UDOT, has completed an initial SHSP called the "Utah Comprehensive Safety Plan (UCSP), Working Together, Achieving Success, Zero Fatalities". The contributing members of the Utah Safety Leadership Team included UDOT, FHWA, FMCSA, the Utah Department of Public Safety, and the Utah Local Technical Assistance Program Center (LTAP). The WFRC also participated on the Utah Safety Leadership Team. The UCSP will be continuously reviewed, revised, and updated.

The adopted UCSP is comprised of three separate and distinct areas. Each part has a different overall direction while maintaining the ultimate goal of reducing serious injury

crashes and fatalities. The first section identifies "Emphasis Areas", where it is felt added attention and emphasis from safety organizations is needed for the next five years. Emphasis areas identified include reducing roadway departure crashes, increasing the use of safety restraints, reducing impaired driving, and reducing aggressive driving. second area is the "Continuing Safety Area", where continued support and enhancement of current programs is needed. These areas include improving intersection safety, improving pedestrian safety, enhancing child safety, increasing work zone safety, promoting safer truck travel, improving motorcycle safety, enhancing railroad crossing safety, enhancing safety management systems, and improving the crash data system. The third area is the "Special Safety Area" and contains new and innovative programs or programs that have received minimal attention in the past. Special safety areas include reducing fatigued driving, improving young driver safety, enhancing older driver safety, promoting bicycle safety, and enhancing emergency services capabilities.

The WFRC can directly contribute to many of the programs identified in the UCSP. These programs include improving intersection safety, improving pedestrian safety, promoting safer truck travel, enhancing railroad crossing safety, improving the crash data system, and promoting bicycle safety. Examples of projects within the RTP that address some of these areas of concern include the following.

- SR 201 Interchanges at 7200 West and 8400 West in Salt Lake County – Improve intersection safety
- BRT and Enhanced Bus Improve pedestrian safety
- 24th Street Interchange in Ogden Promote safer truck travel.
- 1800 North in Clinton Includes a grade separation at the Union Pacific Railroad crossing
- Commuter Rail South Includes improvements to atgrade railroad crossings
- The Bicycle Plan Promotes bicycle safety

Homeland Security Recommendation

Similar to safety, security plays a significant role in the development of a regional transportation plan. While many improvements to the transportation system will impact both safety and security the Regional Transportation Plan more directly addresses security of the transportation system in

several ways. The recommended plan includes improvements at choke points, increased multimodal redundancies within the system, capacity expansion, enhancement of the Intelligent Transportation System program and continued coordination, and training and exercising of regional emergency preparedness plans. The 2040 RTP recommends choke point improvements on I-80 and SR-201 in Salt Lake County and on the I-15 corridor in Weber, Davis and Salt Lake Counties. In Weber County the RTP calls for two additional freeway lanes to be added to I-15 at the Box Elder County line and an additional HOV lane to be added in the Centerville area of Davis County. In Salt Lake County, as well as adding to three freeway lanes to I-15 at the Utah County line, it is recommended that capacity improvements be implemented on eastbound I-80 and westbound SR-201.

To increase the redundancy and multimodal aspect of the transportation system the RTP recommends a considerable increase in transit. High capacity transit is extended north from Ogden to Brigham City, streetcar service is planned for Ogden, Salt Lake City, and the Sugarhouse Corridor and, an LRT extension proposed for Draper City. Bus Rapid Transit lines are included in the RTP for the Ogden Central Business District, and extend south from Weber County through Davis County to Salt Lake County. The BRT lines will connect growth centers, employment areas and residential neighborhoods. BRT is also planned to serve several other major corridors throughout the Region.

System capacity expansions have also been recommended in the RTP. As mentioned above, capacity has been added to the system with the expansion on I-15 throughout Davis County and on the southern end of I-15 in Salt Lake County. Freeway capacity improvements are also included for State Route 201 and I-80 in Salt Lake County and US-89 in Davis County. A new four lane north-south facility paralleling I-15 is planned for the west side of Weber and Davis Counties, as is an eight lane facility (Mountain View Corridor) for the west side of Salt Lake County. Additionally, improvements are recommended for 20 significant east-west corridors and 10 north-south corridors in the Region.

Planned improvements for the Intelligent Transportation System (ITS) program are certainly a vital component to maintaining and improving the security of the regional transportation system. The RTP recommends expansion of variable message signs and closed-circuit television (CCTV) coverage across the Region and includes continued improvements to ITS communications networks for both highway and transit. In addition to the physical transportation infrastructure the 2040 Plan recommends continued collaboration with the State Department of Public Safety Division of Homeland Security, UDOT, UTA, municipalities and counties, and private sector organizations throughout the Wasatch Region in the development, coordination, refinement, training and exercise of emergency preparedness plans.

ACTIVE LIVING PRINCIPLES

The urban centers, transit oriented developments, corridor communities, and livable neighborhoods promoted by the WFRC Growth Principles and the Wasatch Choice for 2040 Vision are designed to help increase walkability and active living principles. A report, developed in 2006 and entitled Public Health and Transportation: Planning for Active Modes Along Utah's Wasatch Front was presented this year to the Wasatch Front Regional Council. This study considered the people of the Wasatch Front relative to their general health, travel behavior, existing infrastructure for walking and bicycling and the influence on active living, the role of urban form, specific programs, community design, and funding sources.

Recommendations

Various national studies have found that communities that provide for more walking and biking improve the overall health of residents. The active living report makes several recommendations for policy approaches that were adopted by the Wasatch Front Regional Council in 2006. These policy approaches are designed to increase physical activity in local settings, as well as to help people adopt healthier life styles. The following policy approaches and specific recommendations have been carried over from the 2007-2030 RTP and are incorporated as part of the 2040 RTP.

- Promote complete street designs and adopt ordinances which provide adequate infrastructure for all modes of transportation when building new or reconstructing existing streets.
- Encourage provision of adequate active links to new

transit stations/stops as well as improved access for existing transit, including safe convenient bike paths and pedestrian routes.

- Incorporate bicycle parking and storage in key transit oriented locations.
- Recommend a four foot paved shoulder along new or improved shared roadways to improve the safety and convenience of bicyclists and motorists.
- Designate connected bicycle routes throughout the Region that are distinctly separate from the automobile rights-ofway to serve as arterials for active modes.
- Recommend that new sidewalks provide at least a 3-foot buffer in all urban areas to separate pedestrians from faster moving vehicles, such as bikes and automobiles. Where providing a 3-foot buffer may not be possible, a 6-foot sidewalk next to the curb and gutter would be sufficient.
- Identify appropriate locations to incorporate shared use paths along rivers, canals, utility rights-of-way, railroad or freeway corridors, within or between college campuses, parks and cul-de-sacs, and anywhere else natural barriers exist.
- Incorporate proper signage, as well as specific surface treatments for active trails, to clearly separate them from vehicle rights-of-way.
- Through the implementation of the Wasatch Choice for 2040 Vision and Growth Principles, encourage municipalities and counties to designate land uses that enhance active living and to make provisions for active transportation choices in their general plans.

MULTI-MODAL APPROACH TO ROADWAY INVESTMENTS

The streets of cities and towns are an essential part of the communities. They allow children to access school and parents to travel to work. They bring together neighbors and draw visitors to neighborhood stores. Communities are asking their planners and engineers to build roads that are safer, more accessible, and easier for pedestrians, bicyclists, and public transit patrons of all ages and abilities to use, as well as the vehicle operators. In the process, they are creating better communities for people to live in, play, work, and shop. Facilities that attempt to balance the needs of all modes and the communities in which they are located have been called "complete streets and context sensitive solutions." In March,

2010, Secretary of Transportation Ray LaHood issued a new policy statement that calls for the full inclusion of pedestrians and bicyclists in transportation projects, with particular attention paid to transit riders and people of all ages and abilities. Amongst statement details are the following:

- A "well-connected walking and bicycling design should be a part of federal-aid project developments."
- "Legislation and regulations exist that require inclusion
 of bicycle and pedestrian policies and projects into
 transportation plans and project development. Accordingly,
 transportation agencies should plan, fund, and implement
 improvements to their walking and bicycling networks,
 including linkages to transit."
- "United States Code and the Code of Federal Regulations in Title 23, Highways; Title 49, Transporation; and Title 42, The Public Health and Welfare. These sections, describe how bicyclists and pedestrians of all abilities should be involved throughout the planning process, should not be adversely affected by other transportation projects, and should be able to track annual obligations and expenditures on non-motorized transportation facilities."

There is no singular design prescription for streets that meet all needs of a community. However, streets all have two things in common: (1) every investment in streets start with early attention to the community context and multi-modal potential; and, (2) streets are designed to balance safety and convenience for all users.

The Benefits of Investing With All Users in Mind

The benefits of investing in our public rights-of-way with all the users in mind can be far reaching. Doing so facilitates our regional visioning efforts, it improves public health and safety, it empowers the disadvantaged among us, and allows us all to live more financially and ecologically sustainably. Extensive information from the CompleteStreets.org and the U.S. Department of Transportation was used in this discussion.

The Wasatch Choice for 2040 Visioning Process has singled out areas for urban, mixed use, rural, and open space land uses and has for a major objective reducing vehicle miles

traveled per capita. However, the vision cannot accomplish its objectives without a supportively designed road system. Appropriate land uses, regardless how well planned, will not reduce single occupant vehicle trips unless the road system serves not only vehicle drivers but the potential pedestrian, cyclists, and transit patrons. Density without good pedestrian and bicycle access to transit does not alleviate congestion and complementary land uses separated from each other by a nearly un-crossable street are of little benefit.

The 2001 National Household Transportation Survey finds that 50 percent of all trips in metropolitan areas are three miles. In addition, 28 percent of all metropolitan trips are one mile or less – distances easily traversed by foot or bicycle. About 44 percent of morning peak hour vehicle trips are not work related. Instead, these trips are for shopping, going to school or the gym, or running errands. Parents cite traffic as a primary reason for driving children to school. However, in choosing to drive they add 7 to 11 percent to the total of non-commuting vehicle traffic during morning rush hour.

Many local trips could be made by walking, bicycling, or taking transit if people were provided with attractive, safe facilities to utilize. Shifting even a small portion of travelers out of single occupancy vehicles can have a big effect on congestion. In 2008, when national vehicle miles traveled (VMT) dropped by 3.6 percent, congestion plunged 30 percent in the nation's 100 most congested areas. Currently, short bicycling and walking trips account for 23 billion miles traveled annually. For typical U.S. cities with populations over 250,000, each additional mile of bike lanes per square mile is associated with a roughly one percent increase in the share of workers commuting by bicycle. Streets that are well designed for transit can encourage more people to get out of their cars and onto the bus. Such streets provide accessible bus stops and assist buses in moving through traffic. Since 2000, Enhanced Bus (BRT 1) service in Los Angeles has used a priority signal system that allows buses to extend green lights or shorten red ones. Within the first year of operation, travel time on transit buses decreased by 25 percent and ridership increased by more than 30 percent. Additionally, the California Center for Innovative Transportation found a 7 percent increase in traffic flow during morning rush hour and a 14 percent decrease in total time spent in congestion since the Orange Line Bus Rapid Transit line (BRTIV) began operating.

The participants in the extensive Wasatch Choices public involvement process recognized how essential multi-modal streets are to this vision. Eighty-four percent of participants named Transit Oriented Emphasis as their first or second ideal mix of transportation facilities and eighty-one percent named the Walkable Boulevard Emphasis whereas only 23 percent named Decentralized Employment Center and 20 percent Business As Usual as their first or second choices for transportation mix.

In 2007, there were 4,654 pedestrian deaths and 70,000 reported pedestrian injuries nationally. Pedestrian injury is a leading cause of unintentional, injury-related death among children, age 5 to 14. In 2008 over 175,000 pedestrians and cyclists were killed or injured. Facility design seems to be critical aspect of these tragic events. Pedestrian crashes are more than twice as likely to occur in places without sidewalks. Streets with sidewalks on both sides have the fewest crashes. More than 40 percent of pedestrian fatalities occurred where no crosswalk was available. One study found that geographically designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28 percent. Riding bicycles on sidewalks, especially against the flow of adjacent traffic, is more dangerous than riding in the road due to unexpected conflicts at driveways and intersections. On-road bicycle lanes reduced these accident rates by about 50 percent.

The latest data show that 32 percent of adults are obese, the number of overweight or obese American children nearly tripled between 1980 and 2004. Childhood obesity also tripled during this timeframe. Health experts agree that a big factor is inactivity – 55 percent of the U.S. adult population falls short of recommended activity guidelines, and approximately 25 percent report being completely inactive. Inactivity is a factor in many other diseases, including diabetes, heart disease, and stroke. Streets lacking pedestrian, bike, and transit facilities can mean that many people lack safe opportunities to be active. A comprehensive study of walkability has found that people in walkable neighborhoods had about 35-45 more minutes of moderate intensity physical activity per week and were substantially less likely to be overweight or obese than similar people living in low-walkable neighborhoods. Unlike a gym membership, walking requires no more than a pair of suitable

shoes and a safe route away from heavy traffic congestion.

Streets within communities must provide safe and comfortable travel for everyone, including the young, the elderly and people with disabilities. In total, the young, the elderly and people with disabilities make up around half of the population of Utah and many of these people do not drive. Yet, our public rights-of-way put them at a disadvantage by not accommodating them. All too frequently this leads to lost economic opportunities, isolation, health and safety issues, higher transportation costs, and more reliance upon society for the less fortunate among us.

In 1990, those under 18 years of age accounted for about 31 percent of all Utahans'. Many of these people are unable to drive or do not have access to an automobile. For our youth that do not have good pedestrian, bike, or transit facilities, this can lead to isolation and inactivity. For the very youngest this lack of perspective on the part of road planners is a personal safety issue. As indicated above, pedestrian injury is a leading cause of unintentional, injury-related death among children, age 5 to 14. For our older low income youth it can be a serious impediment to getting to much needed work.

Senior citizens are a quickly growing segment of our society. In 1990, senior citizens accounted for about 9 percent of all Utahans' and the U.S. Census forecasts that the number of seniors will more than double with some of the most significant changes coming in the older segments of the senior citizen population. Those with disabilities account for 13 percent of Utah's population. Many of the elderly and disabled also are unable to drive or do not have access to an automobile. Yet, often our roadways are difficult to navigate for people who use wheelchairs, have diminished vision, can't hear well, or for people who move more slowly. Unpaved surfaces and disconnected, narrow, or deteriorated sidewalks discourage wheelchair travel and the lack of a curb ramp can force a pedestrian into the street. Wide intersections designed to quickly move motorized traffic may not provide enough time for someone with a disability to cross safely. Pedestrian signals that use only visual cues can lead to dangerous situations for those with low vision.

Many older adults will continue to drive for most of their trips, but some will face physical and cognitive challenges that must be addressed to enable their continued mobility and independence. In 2008, older pedestrians were overrepresented in fatalities; while comprising 13 percent of the population, they accounted for 18 percent of the fatalities. Designing a street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for travelers with disabilities – may reduce pedestrian risk by as much as 28 percent.

In 2009 nearly twelve percent of all Utahan's lived under the federal poverty level. To put that into perspective a family of four would need to make less than \$23,000 a year to be considered impoverished by federal standards. About onethird of these people and more than twice the proportion of those newly impoverished in the last ten years live in the more auto dominated suburbs. Transportation is the second largest expense for American households, costing more than food, clothing, and health care. Even prior to the recent runup in gasoline prices, Americans spent an average of 18 cents of every dollar on transportation, with the poorest fifth of families spending more than double that figure. Much of this household transportation expense is pumped directly into the gas tank. The United States uses 20 million barrels of oil per day and over 40 percent of American oil consumption goes to passenger cars. Using public transportation helps the United States save 1.4 billion gallons of fuel annually, which is 3.9 million gallons saved every day. That translates into family savings. In fact, a two-person adult household that uses public transportation saves an average of \$6,251 annually compared to a household with two cars and no public transportation accessibility. Improving access to transit also reduces the dependence of those who are disadvantaged on more costly alternatives, such as paratransit or private transportation services.

In short, the USDOT Policy Statement on Bicycle and PedestrianAccommodationRegulations and Recommendations may say it best. "The establishment of well-connected walking and bicycling networks in an important component for livable communities, and their design should be a part of project developments. Walking and bicycling foster safer, more livable, family-friendly communities; promote physical activity and health; and reduce vehicle emissions and fuel use."

FIGURE 7-8 Recommended WFRC Actions to Accommodate Multiple Modes in Public Rights-of-Way

- Adopt a Wasatch Front Regional Council Complete Streets Policy
- Expand the Wasatch Choice for 2040 vision to include a functional classification system for the existing and future road network which recognizes land use, development type; existing and future modal mix; trip type; and regional and community objectives as a guide to amenity placement.
- Encourage jurisdictions to adopt pedestrian, bicycle, and transit elements in their General Plans, internal policies and ordinances.
- Encourage the use of the best currently available standards and guidelines such as the AASHTO
 Guide to AASHTO's A Policy on Geometric Design of Highways and Streets; the Institute of
 Transportation Engineers "Design and Safety of Pedestrian Facilities", and the U.S. Departmentof
 Transportation sponsored Designing Sidewalks and Trails for access Part II: Best Practices Design
 Guide.
- Develop a best practices manual for the region.

Recommendations for WFRC Actions

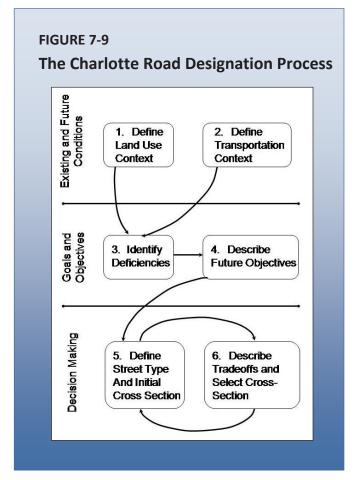
Federal, State, Regional and Local governments need to work in concert to apply multi-modal accommodations across jurisdictional boundaries and to all roads regardless of which government agency "owns" them. Nineteen States have established internal policies and/or legislation to guide the accommodation of multiple modes in the public rights-of-way including our neighboring state, Colorado. Nearly 200 local or regional jurisdictions including Salt Lake City and Salt Lake County have adopted express policies and processes for the accommodation of multiple modes in their public rights-of-way. With regard to the role of Metropolitan Planning Organizations, the Federal Highway Administration states that "MPOs hold the greatest responsibility for adopting livability goals and promoting concepts such as complete streets in an urban region." Some of the things that MPOs can do include:

Setting regional goals and commitments (San Antonio MPO);

- 2. Including multimodalism in determining funding priorities (Bloomington MPO);
- 3. Ensuring that a robust public involvement process includes key stakeholders, interest groups, and the public; and,
- Coordinating regional planning with local transportation and comprehensive plans to include not only roadways but also facilities and systems related to transit and nonmotorized traffic (Cheyenne MPO).

The Regional Transportation Plan recommends that WFRC develop a set of policies and planning efforts to support the federal and local efforts to better accommodate pedestrian, bike, and transit uses on our public rights-of-way. The specific recommendations are in Figure 7-8, on the following page:

One of the most cited local efforts to include consideration of all modes into the public rights-of-way is that of Charlotte,



NC. Charlotte uses a road functional classification system which recognizes land use, community character; existing and future modal mix; trip type; and regional and community objectives as a guide to road design. Each facility segment is broadly assessed for its needs using the six step process outlined Figure 7-9.

Appendix T briefly describes the state of the region to include a city by city survey of sidewalks and bike lanes, a survey of pedestrian and bike facilities on bridges and other crossings, and Salt Lake City and Salt Lake County's Complete Street Efforts. It also provides information how a jurisdiction may go about accommodation of multiple modes in their public rights-of-way to include excerpts from Charlotte, North Carolina's nationally recognized urban street guidelines; brief discussions of potential roadway treatments; and financing possibilities.

TOOELE COUNTY

In November, 2004 Grantsville City, Tooele City, and Tooele County established the Tooele Valley Rural Planning Organization (RPO) in order to cooperatively plan transportation system improvements and priorities for the eastern portion of the County. UDOT has funded most of the work of the WFRC staff in assisting the local jurisdictions in developing plans and establishing priorities. Both UDOT and UTA have been active participants in the RPO process. One of the principal products of this effort is the Tooele Valley Regional Long Range Transportation Plan, completed in October, 2006. This plan addresses highway and transit capacity needs and also contains recommendations related to bicycle facilities, safety, and intelligent transportation system improvements. An extensive needs assessment was conducted, including input from the general public and elected officials. Also, several alternatives were evaluated in determining how best to serve traffic moving to and from Salt Lake County. Map 7-11 on the following page includes both project type and phase of the highway projects recommended in the *Tooele* Valley Regional Long Range Transportation Plan.

Recommendations

The Tooele Valley Plan includes the following specific recommendations:

- Construct an additional north-south high-speed facility in the Tooele Valley to address the demand for travel to and from Salt Lake County. An environmental study of the preferred corridor is currently underway
- Triple peak period transit service between the Tooele Valley and Salt Lake County
- Construct several other highway capacity improvements called for in the Plan to address travel demand within the Valley
- As population and employment reach sustainable thresholds within Tooele Valley, increase local bus service

MORGAN COUNTY

With the support of the Morgan County Council and the Morgan City Council, the Regional Council began a study of transportation needs in Morgan County in July 2006. With the assistance of City, County and UDOT staff, the Regional Council prepared a comprehensive review of transportation needs and proposed improvements. Since that time, the

Recommended 2030 Highway Improvements Great Salt Grantsville Todele **Projects** 2.5

Regional Council has helped fund, and provided staff support for a visioning process to help guide growth in Morgan County. Subsequently, in 2010, the Regional Council gave financial support for an update of the Morgan County Master Plan, based on the visioning process completed earlier. The following is a list of recommendation from the Morgan Visioning Study.

Recommendations

- Maintain a long-term, regional perspective to ensure quality of life for future generations.
 - Prioritize and coordinate implementation activities
 - Measure the progress of Envision Morgan implementation
 - Update county and city general plans to ensure consistency with Envision Morgan
 - Develop specific ordinances to implement the Vision
 - Guide growth into preferred locations, specifically in already established town centers
 - Work toward focused resort centers that make the most of Morgan County's natural amenities without unduly sacrificing them
- Guide growth into efficient patterns emphasizing complete streets and walkable communities
 - Create water efficient landscaping standards
 - Require an impact analysis of proposed real estate development projects.
 - Determine acceptable impact standards
- Conserve open lands for future generations through the creation of a complete data set identifying existing open lands, soils, wetlands, geologic hazards, historically or culturally significant areas, the proximity to land already preserved by federal, state or local or other conservation agencies, and other significant evaluation criteria
- Focus growth in mixed-use neighborhoods and communities
 - Create zoning ordinances that encourage blending a variety of uses and housing types in Morgan City and the unincorporated community of Mountain Green
 - Create neighborhood centers and focus growth around them
- Create a variety of housing options to meet the needs of people of all income levels, family types and stages of life
 - Create flexible zoning codes that encourage a range

- of housing sizes and types
- Replace minimum lot sizes requirements with net density standards
- Consider incentivizing major developments to provide affordable housing
- Use growth tools that allow for real estate development while permanently preserving open lands
 - Adopt a policy encouraging conservation easements
 - Adopt zoning codes that allow clustering of development while retaining overall density requirements
 - Implement a program to facilitate the appropriate transfer of development rights.
- Expand economic and educational opportunities. Seek out, embrace and invest in opportunities for economic growth
 - Conduct an economic baseline analysis
 - Develop a method for measuring progress toward achieving desired outcomes
 - Identify and prioritize sites that should be reserved for employment uses
- Provide recreational opportunities for residents and tourists alike
 - Provide public access to land for a range of recreational uses
 - Create strategies to work with private landowners envisioning resort development or other recreational land uses

PUBLIC INPUT ON PLANNED IMPROVEMENTS

In addition to the comment by comment summary included in Appendix D to the Regional Transportation Plan: 2011-2040, a brief summary is included here describing the primary comments and responses received during the formal public comment period for the 2040 RTP which ran from February 16, 2011through March 18, 2011. It should be noted that there were other comments not addressed in this document directed mostly to individual projects. A complete record of these comments are noted and answered in the comment by comment summary in Appendix D to the 2040 RTP. There are many comments that are not reflected in this section.

The Regional Council received hundreds of comments

through the scoping, alternatives financially unconstrained draft, and the financially constrained final draft. As noted above, the vast majority concerned individual highway and transit projects. This section is primarily for region wide issues, not individual projects.

Issue Financial resources should be re-directed from highways to public transit.

Answer The Regional Council seeks a 'balanced' transportation system which incorporates the best features of each mode. Therefore, even though current transit usage is a small proportion of all trips, transit investment accounts for 31 percent of capital expenses. Other, larger urban areas within the country have sought such a balance and portions of the Wasatch Front are beginning to reach that threshold where a more mature, urban transportation system is necessary.

> Also, financial resources are assigned to transit or highways by federal, state or local legislative bodies and, generally, may not be re-directed by the Regional Council. The United States Congress appropriates money through the federal transportation program which proscribes the end usage of the money granted. With some small exceptions, these funds are earmarked for highways or transit and may be redirected by state or local agencies only in very limited circumstances. Certain funding designated for the Interstate Maintenance Program could be redirected to transit at the request of the Governor. However, given the needs for maintenance within the Interstate System, this possibility should be considered unlikely.

> The Regional Council chooses to fund numerous transit projects with the federal funding it does control, such as the Sandy 10000 South transit oriented development project, various park-andride lots and the van pool program. The Utah State Constitution requires all taxes on liquid motor fuels be dedicated to highway construction, maintenance and operation. Any redirection of these funds to transit would require a constitutional amendment.

The Utah State Legislature has appropriated certain general sales tax monies to the transportation fund for the purpose of accelerating selected high priority highway projects. Any changes in the use of those funds would require approval from the Legislature.

The Utah State Legislature has allowed the county councils of governments to pursue sales tax increases for highway or transit projects. To date, transit has received the lion's share of those funds available for local prioritization, especially in Salt Lake County. Additionally, transit is contemplated to receive a large percentage of future local sales tax monies in plans adopted by the Davis County and Weber County Councils of Governments.

Lastly, the draft RTP calls for a heavy investment in new BRT lines across the entire region and new streetcar lines in downtown Salt Lake City and downtown Ogden.

Issue Air Quality concerns would suggest that most future road building be curtailed and future expansion of transportation facilities be mostly transit.

Answer Air quality is better today than it was 20 years ago. The Air Quality Conformity Memorandum 27 accompanying the 2040 RTP demonstrates that mobile source pollution will continue to decrease and that total vehicular emissions 20 years from now will be less than they are today. These improvements are mostly the result of improved engine and pollution control technology, particularly in diesel engines. A small portion of this improvement will be due to increased transit usage and reduced congestion. Also, while the introduction and growth of plug-in hybrid and electric vehicles have not been programmed into the air quality model, it is anticipated that as they become an ever larger portion of the vehicle fleet, the air quality benefits will be significant.

> The Wasatch Front Region has met air quality conformity targets for several years and projected mobile source pollutants within the current 2040

RTP will also be met. Even with the tighter standards for PM 2.5, the 2040 RTP meets all air quality conformity tests.

Issue

The 2040 RTP commits a grossly disproportionate 31 percent of capital construction funding to transit when it represents only 1.5 percent of all passenger miles traveled in the Region.

Answer The Regional Council understands that the 2040 RTP proposes a very large transit plan relative to current usage. This is because the Regional Council is seeking for a 'balanced' transportation system that incorporates the best features of each mode. For example, in certain highly congested corridors, capacity cannot easily be increased. However, TRAX or commuter rail cars could be added at much less cost than building more capacity. In addition, in larger, more urbanized areas of the country, it has been shown that while free flow on a freeway lane may collapse under demand of more than 2200 vehicles per hour, a fixed guideway transit system will keep moving, even when it is packed with patrons. The Wasatch Front Region has begun to reach that threshold in certain areas and, therefore, need the transit program as outlined.

Issue

The sequencing of transit on 5600 West after the construction of the Mountain View Corridor (MVC) is contrary to the vision agreement in the MVC EIS.

Answer The agreement calls for the Bus Rapid Transit 3 facility to be built in the same phase of the RTP as the freeway portion of the MVC. Both those facilities are in Phase II of the RTP.

Issue

Highways will only induce more demand and sprawl.

Answer Highway construction generally follows rather than precedes demand due to funding constraints. Were new highways to be built into lightly populated areas they could indeed induce demand. Growth projections show demand keeping well ahead of future highway construction.

In order to help reduce sprawl and the growth in vehicle miles traveled (VMT), the Regional Council has adopted a vision for growth and development, the Wasatch Choice for 2040. and the associated growth principles. Those growth principles, which have become the foundation for the 2040 RTP, include such elements as the creation of regional centers served by high capacity transit, encouraging contiguous development, and the shifting of employment toward residential areas to minimize the need for travel.

The Regional Council is a partner in a consortium that received a \$5 million grant from the U.S. Dept. of Housing and Urban Development to promote the Wasatch Choice for 2040. The Regional Council is now actively participating in efforts to further implementation of that "Vision".

Issue

The model used to predict transit ridership is "notoriously unable to predict transit ridership."

Answer The travel models have recently been upgraded with 2006 data from UTA's On Board Survey. Generally, models are used only as a tool among others and are compared to actual data as it becomes available. Also, the 1993 Home Interview Survey has been updated with information from the 2000 Census and the 2001 National Household Travel Survey. Lastly, the Regional Council, in partnership with UDOT, UTA and the other MPOs will conduct a new Home Interview Survey in 2011 to further validate the model.

Issue

The plan does not specify the importance of sidewalks for pedestrian, and bike lanes. The importance of bike lane and sidewalk design, especially around transit stops, cannot be over stated.

Answer The Regional Council agrees on the need for additional non-motorized transportation improvements. To this end, the bicycle portion of the 2040 Plan includes a "complete streets" provision meaning all highway projects should provide for non-motorized travel

needs.

Issue East/west travel capacity is sorely needed in all three urban counties.

Answer The Regional Council has long been aware of the need for additional east/west capacity. To meet this growing need, the 2040 RTP calls for a dramatic expansion of east/west capacity in the form of multiple bus rapid transit lines, several improved arterial streets and two freeways (the western portion of SR 201 and the southern portion of the Bangerter Highway) within the western portion of Salt Lake County. East/west arterial and transit improvements in Davis County and Weber County are also a central

element of the 2040 RTP.

Issue There were a number of comments supporting the construction of a streetcar from the Ogden intermodal center to Weber State University, and limiting expansion of Harrison Boulevard with the exception of operational improvements.

Answer The Regional Council agrees, based on the latest data and ridership estimates including the ongoing EIS, that the streetcar project to Weber State University should proceed in Phase I of the 2040 RTP. After consultation with the Ogden City Council, the Mayor and UDOT, it was agreed that the widening of Harrison Boulevard will occur only south of 40th Street.

Issue The West Davis Highway, in its projected configuration as a freeway, will induce sprawl and is beyond what is needed for the area. Construction of the road as an arterial street with at-grade intersections would meet needs and not induce sprawl.

Answer The project level EIS being conducted by UDOT has recommended a freeway level of service based on the Tier I analysis and that grade separated interchanges would be necessary to meet the purpose and need for the highway.

Issue The Regional Council has not incorporated 'green'

infrastructure elements into the RTP.

Answer The Regional Council has funded and carried out a study on the need for 'green' infrastructure and possible implementation of recommendations. The study is still ongoing. Nevertheless, many of the findings have been incorporated into the RTP.