

PLAN IMPLEMENTATION

Regional transportation planning, to be effective, is a continuous process. The transportation system needs to be monitored to determine its condition and operating efficiency. Short term measures to keep the system operating as effectively as possible need to be pursued. Projects recommended in the 2030 RTP need to be refined and evaluated for environmental and social impacts. Funding sources to implement the recommendations need to be identified and programmed. Finally, the Regional Transportation Plan needs to be updated every few years to consider changing development patterns, new technologies, and evolving goals and vision for the region. This chapter will describe how the recommendations of the 2030 RTP are implemented and the work needed to update the Plan in the future.

IMPLEMENTATION STRATEGIES

10.1

Implementation of the 2030 RTP is a cooperative effort of local, state, and federal officials. The Wasatch Front Regional Council has established a process to continuously monitor the development taking place and the progress in implementing the recommendations of the Wasatch Front Regional Transportation Plan: 2007-2030. The WFRC also works with other agencies to address short-range



congestion, pavement preservation, and bridge replacement and rehabilitation needs through management systems. The WFRC also helps conduct corridor and environmental studies for major highway and transit projects and assists local communities in their master plan updates. These efforts help refine the recommendations of the 2030 RTP.

Municipalities and counties of the Wasatch Front, UDOT, and UTA are responsible for the implementation of the projects in the 2030 RTP. The WFRC works with these agencies to encourage them to pursue the facility capital improvements recommended in the 2030 RTP and incorporates these projects in a Transportation Improvement Program. Each of the components of this continuous process is discussed in more detail in the sections that follow.

System Monitoring And Management Systems

The WFRC annually publishes a *Surveillance of Land Use and Socioeconomic Characteristics* report, which contains current population and employment data for the region. The development and adoption of the Wasatch Front Urban Area's TIP each year allows the WFRC to monitor the implementation of recommended 2030 RTP projects and to reevaluate the needs of the Wasatch Front Urban Area. The Utah Department of Transportation's highway traffic surveillance data, published every two years, along with periodic Utah Transit Authority ridership updates, also contribute information needed to update the 2030 RTP. In addition, as part of the continuing planning process, the WFRC and the Salt Lake and Ogden - Layton Area Transportation Advisory Committees will continue to identify and respond to issues which impact the Wasatch Front Regional Transportation Plan: 2007-2030.

The *Wasatch Front Regional Transportation Plan: 2007-2030* addresses the need to provide increased capacity to meet the growing travel demand in the region. Because of financial and other constraints, the recommendations of the 2030 RTP Update will not meet all of the demand in the year 2030. Travel demand management and transportation system management strategies will be needed to mitigate some of the continuing traffic congestion anticipated in the future. In addition to meeting increasing travel needs, the transportation system needs to be maintained and preserved and to provide for safe and secure travel. The WFRC addresses these congestion, preservation, and safety needs through several management systems developed in cooperation with, UDOT, UTA, and others. Funding to pay for the recommendations of the management systems is included in the Financial Plan for the 2030 RTP.

SAFETEA-LU requires that a Congestion Management Process be established in all Transportation Management Areas. Since October 1997 the Regional Council has had fully operational CMPs for the Salt Lake and Ogden - Layton Areas. The purpose of a CMP is to recommend actions to maximize the efficiency of the existing and future transportation system. The Salt Lake and Ogden - Layton Area Technical Advisory Committees work with WFRC staff to refine and implement the CMPs. The subcommittees monitor and provide input to implementation of congestion mitigation strategies on both a regional and a site-specific basis.

For all projects in the TIP that increase single occupant vehicle (SOV) capacity, the WFRC develops site-specific system management and demand management strategies that should be incorporated into each project. For all widening and new construction projects, the CMP also demonstrates that system management and demand management strategies by themselves will not meet the travel demand on a particular facility or, in other words, that additional SOV capacity is needed.

The Utah Department of Transportation uses a Pavement Management System and a Bridge Management System to develop its recommendations for pavement and bridge projects to include in the TIP. These systems identify the necessary maintenance and preservation projects to maintain the existing system. WFRC has worked with UDOT to develop a pavement management system for the Salt Lake and Ogden - Layton Areas that recommends cost-effective and timely treatments. These recommendations have begun to be considered in the development of the TIP.

Safety and security are of increasing importance. UDOT also has established procedures for identifying high hazard locations and selecting cost-effective projects for the use of federal safety funds. UTA and UDOT are working with other state and federal agencies to address security needs.

10.2**REGIONAL TRANSPORTATION PLAN REFINEMENT**

In addition to preparing the long range transportation plan, the WFRC works with UDOT, UTA, and local communities on alternatives analyses, environmental studies, corridor studies, and master plan updates to help refine the recommendations of the long range transportation plan as well as to assist in implementation of the plan's recommendations. These studies help achieve several goals by better defining project scopes; identifying needed rights-of-way for projects to allow UDOT, UTA, and local communities to pursue corridor preservation; and identifying transit facility alignments and station locations, so that local communities can begin planning for transit oriented development to make the projects more competitive.

For many major highway and transit improvements, the WFRC in cooperation with state and local engineers and planners prepares an alternatives analysis or corridor study. The purpose of an analysis / study is to provide input when refining the long range transportation plan and allow for



decisions to be made on the scope of the improvement(s) during the planning process, which is prior to project development and engineering. Several major corridor studies and / or alternatives analysis have been completed or are currently underway in the Wasatch Front Urban Area, for both highway and transit corridors. Each of the corridors for which an alternatives analysis is needed or underway, or for which a corridor study is completed is discussed below.

Mountain View Corridor from I-80 to the Salt Lake / Utah County Line - The 2030 RTP recommends the Mountain View Corridor (formerly the Western Transportation Corridor) be built as a freeway with HOV lanes from I-80 to the Utah County line. The Plan also recommends preserving a corridor for transit improvements along 5600 West. The WFRC, UDOT, and local communities in the corridor conducted a planning study evaluating alternative alignments and recommended a preferred corridor alignment. Much of the corridor has been, or is actively being, preserved, through efforts by local communities, UDOT, and WFRC. UDOT in cooperation with the local communities, UTA, and the WFRC are currently preparing an EIS for the corridor that is looking at both highway and transit alternatives.

I-15 from 600 North (Salt Lake City) to 200 North (Kaysville) - The 2030 RTP recommends an additional general purpose and / or HOV lane in each direction be added to I-15 from 600 North (Salt Lake City) to US-89 (Farmington). UDOT has prepared a DEIS for this project.

North Legacy Highway from US-89 in Davis County to I-15 in Weber County - The 2030 RTP recommends that a four-lane principal arterial street be built from US-89 to 5500 South in Weber County. For the portion of this corridor from 5500 South to I-15 near the Box Elder County line, the 2030 RTP recommends that a two-lane principal arterial street be built. The WFRC completed a corridor study for the entire Legacy Highway Corridor from I-80 in Salt Lake County to 12th Street in Weber County. In addition, the WFRC, UDOT, and local communities completed a study to identify and evaluate alternative alignments for this facility between US-89 and 12th Street in Weber County. A preferred corridor alignment was recommended from US-89 to 5500 South. Efforts to preserve the corridor are being made by the local communities, UDOT, and WFRC. One further study is underway to establish a corridor alignment through Weber County from 5500 South to I-15. Final environmental documents will need to be prepared and approved for this section of the Legacy Highway before construction.

Regional Corridor from Payson to Brigham City - The WFRC, in cooperation with The Mountainland Association of Governments, UDOT, UTA, and local communities, completed an alternatives analysis, which identified options for future highway and transit improvements for the Payson to Brigham City inter-regional corridor. This analysis examined a wide variety of alternatives and recommended highway widening improvements and new roadways, HOV lanes, commuter rail, and BRT service. The Utah Transit Authority has completed over 60 percent of the construction for commuter rail between Salt Lake City and Pleasant View and is preparing the necessary environmental studies to implement commuter rail service between Utah County and Salt Lake City.

Light Rail Transit Extensions - The 2030 RTP recommends the expansion of Salt Lake County's light rail transit system. The four additional corridors recommended are in various stages of development.

Downtown Salt Lake City to the Salt Lake City International Airport - The WFRC completed the DEIS / FEIS for a light rail transit line from the Salt Lake International Airport to the University of Utah in 1997. These studies are being reviewed and updated in anticipation that final design and construction can begin by 2008.



West Valley City Corridor -West Valley City completed a study of the corridor extending from UTA's existing north-south TRAX line to the Valley Fair Mall / City Hall area. This study designated a light rail transit alignment as the Locally Preferred Alternative. This same study included an Environmental Assessment (EA) for the West Valley City Intermodal Center. A Finding of No Significant Impact (FONSI) for the EA was issued for the Intermodal Center. The WFRC and UTA have prepared a draft EIS for the light rail transit project in this corridor. Preparation of a local environmental study is complete in anticipation of construction beginning in the next two years.

Mid-Jordan Corridor –The WFRC completed a feasibility study for potential light rail transit corridors in the south part of Salt Lake County. The study found that light rail transit is feasible in a corridor extending from UTA's existing north-south TRAX line through Midvale and West Jordan to South Jordan. The WFRC and UTA have prepared a draft EIS for the light rail transit project in this corridor. Preparation of the final EIS is underway in anticipation of construction beginning in the next two years.

Draper Extension – The WFRC completed a feasibility study for potential light rail transit corridors in the south part of Salt Lake County. The study found that light rail transit is feasible in a corridor extending from the existing terminus of UTA's north-south TRAX line in Sandy along the UTA-owned rail corridor to Draper. UTA and the WFRC in cooperation with Sandy and Draper have conducted an alternatives analysis for this corridor and selected a preferred alignment. UTA will need to complete the necessary environmental work for this project.

US-89 from I-15 to Harrison Boulevard - The 2030 RTP recommends US-89 be upgraded to an expressway with interchanges. The recommendations are that a general-purpose lane be added in each direction to this section of US-89 and that interchanges are constructed at major cross streets. The recommendations were developed through a corridor study and an EIS.

I-15 from US-89 (Farmington) to I-84 (Weber County) - The 2030 RTP recommends additional lanes be added in each direction, to this section of I-15. A corridor study completed in 2005 for this section of I-15 recommended these improvements along with some short term projects to improve traffic operations on I-15.

Other special planning studies have been completed, are currently underway, or will shortly begin to help refine the recommendations of the 2030 RTP. These studies include:

South Davis County Transit Needs Analysis - The 2030 RTP recommends a BRT facility to connect downtown Salt Lake City to the south Davis County communities. The six cities in south Davis County (North Salt Lake, Woods Cross, Bountiful, West Bountiful, Centerville, and Farmington) along with Davis County, Salt Lake City, UTA, and the WFRC completed a study in 2005 to identify the need for transit improvements in the corridor. The study identified BRT and street car as possible modes in the corridor and selected an alignment for the project. An environmental impact study is currently underway for this project.

Downtown Ogden to Weber State University Transit Needs Analysis - The 2030 RTP recommends a BRT facility to connect the downtown Ogden Intermodal Facility to Weber State University. Ogden City, along with UTA and the WFRC, completed a study to identify the need for transit improvements in the corridor in 2005. The study recommended an alignment and either streetcar or BRT as the preferred mode to serve this corridor.



Sugarhouse Transit Corridor Study - UTA and Salt Lake City have begun a study to look at the feasibility of a major transit investment in the corridor from UTA's Central Point TRAX station to Sugarhouse. UTA purchased a rail line in this corridor from the Union Pacific Railroad several years ago. The RTP recommends that a streetcar be implemented in this corridor.

Foothill Drive Corridor Study - UTA, UDOT, Salt Lake City, and the University of Utah are currently sponsoring a study of the Foothill Drive Corridor in Salt Lake City from the University to I-80. The RTP recommends both highway and transit improvements in the corridor. The study will help the region define the types of improvements needed.

Salt Lake City Downtown Transportation Master Plan - UTA and Salt Lake City recently completed a master plan for transportation in the City's downtown area. This study made recommendations for bus and rail transit circulation and major transfer points within the downtown area, for pedestrian and bicycle facilities, and for roadway improvements.

East-West Transportation Needs Studies - The State Legislature in 2007 appropriated funding for a study of east-west highway needs within Salt Lake County. UDOT with assistance from the WFRC will evaluate alternatives for meeting the growing east-west traffic demand, especially on the west side of the County. A wide range of alternatives, including possible new freeways, will be studied. The Utah State Legislature also provided additional funding for studies in other counties. UDOT is planning a study of the east-west street and highway needs in northwest Davis County and southwest Weber County. The WFRC will also participate in this study to evaluate a range of improvements including road widening, new roadways, and railroad grade separations.

Transit Development Program - The Utah Transit Authority and the WFRC prepare on a regular basis a five year, short range plan for service, operation costs, and capital facilities improvements as part of the 2030 LRP Update.

TRANSPORTATION IMPROVEMENT PROGRAM

10.3

Funding is needed to implement the recommended highway and transit projects in the 2030 RTP. The WFRC works with UDOT, UTA, and local communities through the Transportation Improvement Program (TIP) to program funding for RTP projects. The WFRC, as the MPO for the Salt Lake and Ogden-Layton Urbanized Areas, is responsible for preparing and approving a TIP for the Wasatch Front Region. An MPO-approved TIP is required by federal legislation for a region to receive federal highway and transit funding. The purpose of the TIP is to list transportation projects for which funding will be sought over a four-year period. The TIP should reflect the region's priorities, represent a consensus among state and regional officials, show a direct relationship to the regional transportation plan, be financially constrained, and conform with federal air quality regulations as they relate to transportation. Finally, the TIP must be subjected to thorough public review during development and prior to adoption.

The WFRC develops the TIP in cooperation with UDOT and UTA for all highways, transit, and other modal projects in the Salt Lake and Ogden-Layton Areas. The WFRC, UDOT, and UTA have worked together to develop methods and procedures for evaluating, selecting and prioritizing projects to be included in the TIP. The WFRC has also developed policies to guide the approval of the TIP and the project selection process required by TEA-21 and reemphasized with SAFETEA-LU. SAFETEA-LU allows for four funded years in the TIP. The WFRC TIP includes four funded years plus two years of projects in concept development for a total of six years.



The WFRC staff is continuously reviewing and identifying methods to improve the evaluation and ranking of projects eligible for the urban STP and CMAQ programs. Criteria have recently been revised, so that the prioritization of urban STP projects consider system efficiency, benefits and costs, congestion relief, safety needs, economic benefits, system preservation, environmental impacts, and system and demand management strategies. The prioritization for CMAQ projects considers air quality benefits in terms of emission reductions, congestion relief, cost benefits, length of effectiveness, and degree of congestion.

For other federal aid and state highway funds, a series of workshops are held annually in each UDOT Region to review the progress of projects on the current program and to identify projects to add to the program. In preparations for these workshops, each region holds a monthly Pavement Management or Roadway Management committee meeting to discuss the needs, concerns, and priorities of the roadway network throughout their region. Pavement preservation and maintenance needs, safety, traffic operations, and new capacity needs are among the criteria UDOT uses to recommend priorities. WFRC staff members participate at the meetings and provide the regions with information and priorities for new capacity needs. UDOT's Programming Section and the Transportation Commission consider the recommendations of their regions in development of the programs.



The WFRC staff works with UTA to identify transit projects to include in the TIP. Projects are selected based on the priorities and needs established in the Transit Development Program and the Regional Transportation Plan. The WFRC also compiles lists of projects funded by local governments and includes them in the TIP. Once the TIP is compiled, the WFRC conducts an analysis to determine if the TIP conforms with state air quality plans. This conformity analysis is made available to the State Division of Air Quality and the public for review and comment. The FHWA and FTA must concur in this finding.

A TIP, containing the recommended programs along with the conformity determination is submitted to the Transportation Coordination Committee for the Regional Council annually for its review. The county councils of governments also have an opportunity to review and comment on the TIP. Appropriate adjustments are made and a final TIP is developed. The final conforming TIP is then recommended to the WFRC for its approval. Following the Wasatch Front Regional Council's approval, the Executive Director of UDOT, as the Governor's designee, must review and approve the TIP and the Utah State Transportation Commission must include the TIP without modification in the Statewide Transportation Program.

10.4 FUTURE PLAN UPDATES

As mentioned above, transportation planning is a continuous process. Changing development patterns resulting from continued growth in the region, fluctuating economic conditions, and shifting energy and environmental concerns all impact the transportation needs in the Wasatch Front Urban Area and the types of improvements required to meet those needs. In order to keep the Plan current,



the WFRC reviews the recommendation of the long range transportation plan at least every four years and updates it as necessary. The next revision to the RTP will occur by May 2011.

During the next four years, the WFRC will build upon the work completed to develop the current Regional Transportation Plan. This process will include continued emphasis on understanding the land use-transportation relationship and using that information to refine the future vision for the region. The WFRC will monitor changing land use patterns and major new developments. Future financial projections will depend on the action of the Legislature, local officials and voters. As always, the WFRC continues to update its planning capabilities through improvements to the region's travel models. Incorporating National Environmental Protection Act into the planning process will be another area the WFRC will pursue more fully during the next four years. Finally, the Wasatch Front Regional Council will continue to update the process used to develop the long range transportation plan and anticipate addressing new issues in future updates.

Visioning

As discussed in Chapter 2, the Wasatch Front Regional Council made a significant effort during 2005 to work with local officials and the public to develop a vision for the future of the region and to identify growth principles to help guide future development. This effort included ten workshops, three open houses, and many meetings with city councils, county councils and county commissions. These were just the first steps to better consider the relationship between land use and transportation in the planning process. Over the coming years, the Regional Council will convene workshops, community meetings, and other forums to provide for greater discussion of how the region wants to develop in the future and how the transportation system can support that development.



Changing Growth Patterns

The Wasatch Front Region will continue to grow, and the transportation system will need to address the consequences of this growth. Over the next few years, new developments and redevelopment will occur that will be considered in future plans. Among those that will have the greatest impact are the redevelopment of downtown Ogden to promote employment as well as residential uses, the expansion at the Business Depot Ogden, Hill Air Force Base's plans to allow commercial and office development on the west side of the base, Weber State University's Davis County campus in Layton / Clearfield, redevelopment in downtown Salt Lake City, and Kennecott Land

Company's planned development on the west side of Salt Lake County. In addition to these activities, new development is likely to occur around the light rail and commuter rail transit stations in the region.

Funding Sources

The Regional Council will also continue to monitor funding levels for transportation improvements. Over the past two years, the Utah Legislature has significantly increased state funding for highway



improvements. In addition, the Legislature has authorized new local option sales taxes and vehicle registration fees for highway, transit, and airport improvements. These funds can be used for congestion mitigation, new capacity, and corridor preservation.

With the adoption of the 2030 RTP, the local officials on the Wasatch Front Regional Council will now work to make state and federal lawmakers aware of the significant needs still existing for preserving and expanding the region's transportation system. The WFRC will also work with state and federal officials to pursue new and increased funding sources for highway and transit projects.

Modeling Capabilities

The WFRC uses travel forecasting models to project future traffic and transit ridership based on forecasted land use characteristics. These travel forecasts are used to identify the needed highway and transit improvements to the transportation system. The WFRC will continue to upgrade its traffic modeling capabilities over the next four years to be able to better represent freight (truck) traffic in the travel demand modeling process and to allow for more comprehensive planning for freight services. The WFRC is somewhat limited, at present, in its ability to model freight (truck) traffic. However, it will soon be able to model types of scenarios such as the relocation of Union Pacific Railroad's intermodal freight center to Salt Lake City's west side, as well as to test the effect that different public policies may have on freight. Other planned improvements to the travel demand models include incorporating market segmentation into trip distribution and further enhancements in the traffic assignment process.

Other planned improvements to the travel demand models include refining the Traffic Analysis Zone (TAZ) structure in order to improve traffic projections in areas with increasing growth; incorporating new Peak Period Traffic Counts into the base data set in order to improve the travel model accuracy; and continuing to improve the link between UrbanSim (the land use forecasting tool) and the travel demand model to advance the ability to analyze the relationship and compare and contrast alternative land use and transportation system scenarios. In addition, efforts to conduct travel surveys will continue in order to identify and or confirm trends within the travel market and provide data with which models can be recalibrated.

The National Environmental Protection Act (NEPA) And Planning

By addressing NEPA issues in the planning process, the WFRC hopes to streamline the project development process for project sponsors. To address inherent issues, the WFRC will make a greater effort to identify and evaluate multi-modal alternatives in major transportation corridors, increase public involvement opportunities regarding these major corridors, address environmental factors in the evaluation process, and prepare a draft purpose and needs statement that could be used as a basis for the preparation of the necessary environmental studies. The WFRC hosted a workshop of state and federal transportation and resource agencies in 2005 to address NEPA and planning issues. The workshop developed an action plan with strategies for considering environmental issues in the planning process. The WFRC, UDOT, and FHWA plan to pursue these strategies in the next four years.

