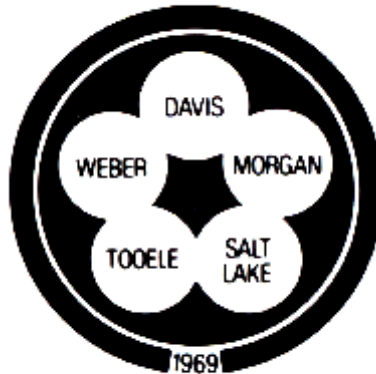

FINANCIAL PLAN

WASATCH FRONT URBAN AREA LONG RANGE TRANSPORTATION PLAN UPDATE

2004 - 2030

Technical Report 44

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TABLE OF CONTENTS

I.	Introduction	1
II.	Revenue Sources	3
	Federal Revenue Sources	3
	Federal Highway Administration	
	Federal Transit Administration	
	Other Federal Programs	
	State Revenue Sources	7
	Local Revenue Sources	7
	Private Sources	12
III.	Projected Revenue	13
	Statewide Highway Revenue	13
	Regional Highway Revenue	15
	Local Highway Revenue	16
	Transit Revenue	18
	Flexible Funding	21
IV.	Projected Cost	23
	Statewide Highway Operating and Preservation Cost Estimates	23
	Local Highway Cost Estimates	25
	Transit Cost Estimates	26
V.	Financial Plan	29
	New Capacity Improvements	29
	Highway Funding Plan	29
	Transit Funding Plan	30
	Conclusion	31
	Appendix A	33
	Appendix B	35
	Appendix C	41
	Appendix D	43
	Appendix E	45
	Appendix F	47
	Appendix G	49
	Appendix H	53

LIST OF TABLES

II-1	Transportation Program Funding Sources and Responsibilities	8
II-2	Potential Funding Sources For Transportation Projects	9
III-1	Projected Statewide Highway Revenue, 2004 - 2030	13
III-2	Projected Regional Highway Revenue, 2004 - 2030	16
III-3	Projected Local Highway Revenue, 2004 - 2030	16
III-4	Summary of Projected Statewide Highway Revenue, 2004 - 2030	17
III-5	Summary of Projected Regional and Local Highway Revenue, 2004-2030	17
III-6	Projected Transit Revenues, 2004 - 2030	21
IV-1	Projected State Highway Costs, 2004 - 2030	24
IV-2	Projected Local Highway Costs, 2004 - 2030	26
IV-3	Project Transit Costs, 2004 - 2030	28
V-1	Highway Revenue Allocation, 2004 - 2030	29
V-2	Transit Revenue Allocation, 2004 - 2030	30

I. INTRODUCTION

This Technical Report 44 entitled “The Financial Plan For Wasatch Front Urban Area” documents the projected revenue sources and expenditures needed to support the Wasatch Front Urban Area Long Range Transportation Plan Update: 2004 - 2030, Report 43 (2030 LRP Update). In this report, potential revenue sources have been identified and summarized. Estimates of future revenues from various federal, state and local sources have been made. The costs to meet the projected needs for all elements of Salt Lake and Ogden Urbanized Area Long Range Transportation Plans over the next twenty-seven years have also been estimated. Finally, the projected revenues are compared with projected costs and a financial plan developed.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) was the first federal transportation act to require that long range transportation plans developed by Metropolitan Planning Organizations (MPO) include a financial plan to fund recommended highway and transit facility improvements. ISTEA also required that long range plans be fiscally constrained, meaning only those new facilities and recommended improvements which could be funded using existing and projected revenue streams could be included in MPO long range transportation plans. The Transportation Equity Act for the 21st Century (TEA-21), the current federal transportation legislation, also requires that a financial plan be part of the overall long range transportation plan for a region. The purpose of this requirement is to ensure that the recommended improvements included in the long range transportation plan can be implemented and that air quality benefits assumed for the implementation of the plan are realistic.

Federal guidelines on preparing financial plans state: “The financial plan should compare the annual revenue from existing and proposed funding sources that are dedicated to transportation uses, and the annual costs of constructing, maintaining and operating the transportation system over the period of the Long Range Plan. The annual revenue by existing revenue source (at the local, State, and Federal level) dedicated to transportation improvements should be calculated and any shortfalls identified. Proposed new revenues should cover all forecasted capital, operating, and maintenance costs. All cost and revenue projections should be based on the best available data and trends. This requirement does not preclude MPO’s and states from also developing unconstrained ‘needs’ plans.”

For the Wasatch Front Urban Area, this requirement means that many of the projects recommended in previous Long Range Transportation Plans can no longer be included in a financially constrained 2030 plan. Long range transportation plans prepared before 1991 were based on need and identified facilities to serve projected transportation demand of the Area in the future. These pre-1991 long range transportation plans did not always identify the means to pay for their recommended facility improvements. At the most, these previous efforts estimated how much additional revenue would be needed and listed some potential sources to meet these needs. However, the long range transportation plans did not include a commitment to actually pursue these funds, and in many cases, the additional funds required could not reasonably be expected.

Finally, TEA-21 allows for illustrative highway and transit projects to be included as part of a regional long range transportation plan. These illustrative projects are those which cannot be included in a fiscally constrained long range plan, but which would be included if a viable future funding sources could be identified. The Wasatch Front Urban Area Long Range Transportation Plan includes a number of illustrative projects that are not covered by current funding sources identified in this financial plan. However, prospective regional funding sources will be identified for the financing of these projects before they are included as part of future long range transportation plans.



II. REVENUE SOURCES

Funding sources for transportation highway and transit improvement projects are essential if the recommended projects of the Wasatch Front Urban Area Long Range Transportation Plan are to be built. In the Wasatch Front Region, federal, state, and local governments as well as private developers provide funds to pay for improvements. ISTEA of 1991 combined or renamed many of the former federal-aid programs, such as Federal-Aid Urban and Federal-Aid Secondary. The ISTEA greatly increased the flexibility of federal highway and transit programs. ISTEA also created some new programs, such as the Congestion Mitigation /Air Quality (CMAQ) program and Transportation Enhancements. The following section describes various revenue funding sources and programs and how these revenues may be used. Table II-1 entitled “Transportation Program Funding Sources and Responsibilities” is a summary of potential funding sources for transportation improvements, including federal, state and local programs. Table II-2 entitled “Potential Funding Sources for Transportation Projects” describes the programs, funding mechanisms and eligibility requirements for various transportation projects. Both of these tables are located at the end of this chapter.

FEDERAL REVENUE SOURCES

The current federal highway legislation, the Transportation Equity Act for the 21st Century, continues the programs created by ISTEA, but with increased funding level. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) provide the major source of funds from the federal government for transportation improvements. However, some funds are also available from several other federal agencies. All are discussed below.

Federal Highway Administration

The FHWA administers the highway programs of the federal government. Included are programs for improvements to the Federal-Aid Interstate System, for improvements to other highways in rural and urban areas, and for safety related improvements. TEA-21 made a significant change in the funding to substantially increase the level of funding by approximately 54 percent over ISTEA. It assured a guaranteed level of federal funds for surface transportation through FY 2003. The annual floor for highway funding is keyed to receipts of the Highway Account of the Highway Trust Fund. Transit funding is guaranteed at a selected fixed amount. All highway user taxes are extended at the same rates when the legislation was enacted. In a major change to Federal Budget rules, highway and transit programs are now guaranteed a minimum level of spending under TEA-21. The amount guaranteed for the national surface transportation program is estimated to be \$198 billion over the life of the Act for both highway and transit. The full authorization for the highway and transit programs is \$218 billion. A concession to achieving this high spending level is that the Highway Trust Fund no longer receives interest income.

Federal-Aid Interstate Maintenance Program - These funds can be used for resurfacing, restoration, and rehabilitation of the Interstate Highway System. Since the Interstate System is complete in Utah, this program will increase in importance as the emphasis was shifted from construction of the Interstate System to maintaining the System. The Utah Department of Transportation (UDOT) and the State Transportation Commission program these funds. The federal share of these projects is approximately 93 percent.

National Highway System (NHS) - This is a funding category as a result of ISTEA for use in constructing, widening, or rehabilitating highways on the National Highway System. This category of highways includes all interstate and most other major principal arterials. Congress

has approved the national highway system, of approximately 160,000 miles. The federal share for this program is approximately 93 percent. Projects such as commuter parking lots, new interchanges, and transit improvements on National Highway Systems are also eligible to receive NHS funds. The estimated funding level for the NHS in Utah will be approximately \$254.8 million for the 6 years of TEA-21. These funds are distributed to states based on a formula, which has been revised to include each State's lane-miles of principal arterials, diesel fuel used on the State's highways, and per capita principal arterial lane-miles. The Act expands and clarifies eligibility of NHS funding for certain types of improvements, such as publicly owned bus terminals, infrastructure-based intelligent transportation system capital improvements, and natural habitat mitigation.

Surface Transportation Program (STP) - This category was created by ISTEA in 1991. It is a combination of the former Federal-Aid Urban (FAU), Hazard Elimination and Safety (HES), and part of the Federal-Aid Primary and Secondary (FAP and FAS) programs. The funds may be spent on any road that is functionally classified as a collector or higher for urban streets or as a major collector or higher for rural areas. The type of projects may range from rehabilitation to new construction. Eligible safety projects include hazard elimination, railroad crossings, and railroad protective devices. These funds may also be used for transit projects. The federal share for STP projects is 93 percent. The estimated total funding, from TEA-21, for Utah is \$389 million over the life of the Act. A state may augment its STP funds by transferring funds from other programs. In addition, portions of the Minimum Guarantee funds are administered as if they were STP funds. Fifty percent of the Surface Transportation Program (STP) funds are allocated to urban and rural areas of the state based on population. Thirty percent can be used in any area of the state at the discretion of the State Transportation Commission. Of the remaining 20 percent of the funds, half must be spent on highway safety projects, and half (10 percent of all STP) must be spent on "Transportation Enhancements." There are ten types of enhancements, which range from historic preservation, bicycle and pedestrian facilities, to water runoff mitigation. State allocations include a special rule for areas with less than 5,000 in population. ISTEA provision requires states to make available obligation to urbanized areas of more than 200,000 in population.

Congestion Management/Air Quality (CMAQ) - This FHWA program gives federal-aid to projects that reduce traffic congestion and improve air quality in non-attainment areas. Examples of CMAQ projects are signal coordination, park-and-ride lots, ridesharing, bus service expansion, and alternative transportation modes, which include bicycle and pedestrian facilities. The federal share for CMAQ projects is 93 percent. Statewide funding for CMAQ projects over the six years of the Act is approximately \$60,300,000.

Bridge Replacement Program - This program provides funds for the replacement of substandard bridges, both on and off federal-aid systems. Bridges must have a span of 20 feet in order to be eligible to receive these funds. The Utah Department of Transportation has evaluated all eligible bridges in the state and given them a rating. All bridges with a rating of less than 50 are eligible to receive funding on a first-come, first-served basis. UDOT re-inventories bridges about every two years. The State Transportation Commission has established a policy that 65 percent of these funds will be used for bridges on the state system with the remaining 35 percent being used for bridges under local jurisdiction. The federal share for these projects is 80 percent. Statewide funding for Bridge Replacement Programs over the six years of the Act is approximately \$126,400,000.

High Priority Projects - This program was created in TEA-21 to fund specific projects identified by Congress. Nationally, 1,850 high priority projects have been identified. In Utah,

15 projects have been funded with a total of approximately \$80,700,000 over the six years of the Act. The federal share for these projects is 80 percent.

Recreational Trails Program - This program was created in TEA-21 replacing the National Recreational Trails Funding Program of ISTEA of 1991. Funds may be used to maintain and restore trails, develop trailside and trailhead facilities, acquire easements or land for trails, and to construct new trails. Statewide funding for Recreational Trails Program over the six years of the Act is approximately 4,200,000. The federal share for these projects is 80 percent.

Minimum Guarantee - Federal-aid highway funds for individual programs are apportioned by formula using factors relevant to the particular program. After those computations are made, additional funds are distributed to ensure that each State receives an amount based on equity considerations. This provision ensures that each State will have a guaranteed return on its contributions to the Highway Account of the Highway Trust Fund. A certain share of the aggregate funding provides for the following programs: Interstate Maintenance, National Highway System, Bridge, Congestion Mitigation and Air Quality, Surface Transportation Program, Metropolitan Planning, High Priority Projects and other minor programs as well as the Minimum Guarantee itself. The shares are adjusted each year to ensure that each State's share of apportionments for the specified programs is at least 90.5 percent of its percentage share of contributions to the Highway Account based on the latest data available at the time of the apportionment. Over the six years of TEA-21, Utah received approximately \$63,300,000.

Federal Transit Administration

Federal funds for transit capital, planning and preventive maintenance are made available through the Federal Transit Administration (FTA). A brief description of the transit assistance program follows.

Section 5307 Urbanized Area Formula Program (formerly FTA Section 9 Program) - Established in 1982, by the Surface Transportation Assistance Act, the Urbanized Area Formula Program provided a block grant to local transit agencies to fund capital projects, provide operating assistance, and support planning activities. With the passage of TEA 21, use of the funds for operating assistance was not authorized for urbanized areas with a population over 200,000 people. However, the funds were authorized to be used for preventive maintenance activities.

The formula program funds are distributed annually to the Salt Lake-Ogden Urbanized Areas and calculated with a formula based on population, population density, and transit revenue miles of service. The federal share for projects under the Urbanized Area Formula Program is typically 80 percent of the net project cost.

Section 5309 Capital Program (formerly FTA Section 3 Program) - This program provides federal discretionary funding, outlined by Congress, for capital improvement projects under the bus, fixed guideway modernization, and new starts categories. Established in 1982, by the Surface Transportation Assistance Act, the Capital Program has been funded by a gasoline tax dedicated to transit. The federal share for projects assisted under the Capital Program is typically 80 percent of the net project cost. Specifically the three eligible project categories within the Capital Program are bus and bus-related facilities, modernization of fixed guideway systems, and new fixed guideway systems and extensions ("New Starts").

Bus and Bus-related Facilities: The major purchases under this category are buses and other

rolling stock, ancillary equipment, and the construction of bus facilities (i.e., maintenance facilities, garages, storage areas, waiting facilities and terminals, transit malls and centers, transfer facilities, and intermodal facilities). This category also includes bus rehabilitation and leasing, park-and-ride facilities, parking lots associated with transit facilities, and bus passenger shelters.

Modernization of Fixed Guideway Systems: Projects typically funded under fixed guideway modernization are infrastructure improvements to existing rail and other fixed guideway systems. These improvements can include track and right-of-way rehabilitation, modernization of stations and maintenance facilities, rolling stock purchase and rehabilitation, and signal and power modernization. Modernization of ferry terminals and the transit portion of ferryboats are also eligible costs.

New Fixed Guideway Systems or Extensions (New Starts): Capital projects under this category include preliminary engineering, acquisition of real property (including relocation costs), final design and construction, and initial acquisition of rolling stock for new fixed guideway systems or extensions, including bus rapid transit, light rail, heavy rail, and commuter rail systems.

Section 5310 Elderly and Persons with Disabilities Program (formerly FTA Section 16 Program) - This program provides funding to private non-profit agencies for capital improvements for the provision of transportation services to senior citizens and persons with disabilities. ISTEA also made public agencies eligible to receive these funds. The Utah Department of Transportation has established a committee to review the projects submitted to use these funds. The federal share for projects under the Elderly and Persons with Disabilities Program is 80 percent of the net project cost.

Other Federal Programs

Other federal agencies provide funds that can be used for transportation improvement under conditions. Two of these are discussed below.

Community Development Block Grants (CDBG) - These funds can be used for a wide variety of activities directed toward neighborhood revitalization, economic development, and improved community facilities and services, including the construction or improvement of streets and highways. However, it must be clearly demonstrated that all projects principally benefit low and moderate-income persons, aid in the prevention or elimination of slums and blight, or meet other urgent community health and safety needs. The Department of Housing and Urban Development is the sponsor of this program. Municipalities with a population of over 50,000 and counties with a population of over 200,000 are entitlement areas and are allocated CDBG funds on an annual basis. Municipalities with a population under 50,000 must compete for state-administered “small cities” Community Development Block Grant funds.

Economic Development Grants - This is another possible source of federal funding for transportation improvement projects, if the construction or rehabilitation activities have a significant and long-lasting favorable impact on an economically distressed area. These funds are available from the Economic Development Administration (EDA). EDA funds should be considered if a project is to be constructed in an area of high unemployment or will assist in the creation of long-term employment opportunities. In order to be eligible to make application for EDA funds, entities must be within an Economic Development District and the proposed project must be a part of the District’s Overall Economic Development Program.

STATE REVENUE SOURCES

The State of Utah makes funds available from several sources for highway construction. The sources include motor fuel taxes, special fuel taxes, vehicle registration fees, and driver license fees. The 1997 state legislative session changed many of the tax collection schedules for motor fuel. For fiscal year 1998, the gas tax was raised five cents to 24.5 cents per gallon. The special fuel tax and motor vehicle registration were also raised. Seventy-five percent of all these funds are kept by the Utah Department of Transportation for their construction and maintenance and administration program. The remaining 25 percent are made available to counties and cities in the state through the Class B and C Program.

With the approval of an increase in the state gasoline tax and other fees in 1997, the Utah State Legislature created a Centennial Highway Fund (CHF) to fund major highway needs throughout the state. This fund sets aside approximately \$1,799,000,000 through 2007 through a combination of revenues from sales tax, motor vehicle registration, and the state's general fund. The Legislature also created a revolving Corridor Preservation Fund (CPF) using a tax on rental cars. This fund can be used by State and Local agencies to acquire right-of-way for future transportation corridors. The amount of funds used will need to be paid back to the CPF by other sources when the project goes to construction.

Class B and C Program - Class B and C funds are allocated to each city and county by a formula based on population, road mileage, and the type of roadway. Type B funds are distributed to the counties and C funds to cities. These funds can be used at the discretion of the counties and cities for new construction, maintenance, or preservation.

Safe Sidewalks Program - A Safe Sidewalk Program has also been established by the Utah State Legislature to fund the construction of sidewalks on roads on the state system. The money is distributed on a formula basis partially based on miles of state road per UDOT Region. Each city and county located in the Region submits projects to the district, which then prioritizes them. A statewide representative committee then makes the final selection for each county.

LOCAL REVENUE SOURCES

Local government agencies have a variety of funding sources available to them for transportation improvements. The primary source is from the general fund of the cities and counties. These general funds can be used for construction of new roads or the upgrading of existing ones. Transportation projects, however, must compete with other needs of the city or county for the use of these funds.

Financial sources for municipal and county government transportation improvements include exactions from developers, which are required to construct certain portions of local roads that directly serve their new residential or commercial development, and transportation impact fees. Local governments have several other options for improving their transportation systems. Most of these options involve some kind of bonding arrangement, either through the creation of a redevelopment district, a more traditional special improvement district organized for a specific project benefiting an identifiable group of properties, or through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds. Finally, local funding for transit improvements and service is provided through a ½ percent sales tax in Davis and Weber Counties and a 7/16 percent sales tax in Salt Lake County. Revenues from an additional 1/16 percent sales tax in Salt Lake County are designed for improvements on state highways in the County.

Table II-1

TRANSPORTATION PROGRAM FUNDING SOURCES AND RESPONSIBILITIES

FUND CATEGORY	REVENUE SOURCE	PROGRAM MANAGEMENT
FEDERAL HIGHWAY ADMINISTRATION		
Surface Transportation Program (STP) Salt Lake & Ogden Areas Congestion Mitigation/Air Quality (CMAQ) Salt Lake & Ogden Areas Interstate Maintenance (IM) National Highway System (NHS) Surface Transportation Program Urbanized Area Small Urban Non-Urban Any-Area Statewide (STP) Safety Hazard Elimination Railroad Crossings Transportation Enhancements Bridge On System State Bridge Replacement Off System - Local Off System - Optional Federal Lands Programs High Priority Projects Recreational Trails	NATIONAL HIGHWAY TRUST FUND	<div style="border: 1px solid black; padding: 5px; text-align: center;"> WASATCH FRONT REGIONAL COUNCIL </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> UTAH DEPARTMENT OF TRANSPORTATION (See note below) </div>
FEDERAL TRANSIT ADMINISTRATION		
(5307) Block Grant Funds (5309) Discretionary Funds (5310) Capital Funds for services to elderly and disabled persons	TRANSIT ACCOUNT OF NATIONAL HIGHWAY TRUST FUND & U.S. GENERAL FUND	<div style="border: 1px solid black; padding: 5px;"> UTAH TRANSIT AUTHORITY </div> <hr style="width: 50%; margin: 5px auto;"/> UDOT (5310)
STATE		
State Construction State General Funds State Traffic Centennial Highway Funds Corridor Preservation Funds	STATE HIGHWAY USER RECEIPTS & STATE GENERAL FUND	<div style="border: 1px solid black; padding: 5px;"> UTAH DEPARTMENT OF TRANSPORTATION </div>
LOCAL		
County (B Funds) City (C Funds) General Funds Transit Sales Tax	SALES & PROPERTY TAX, OTHER GENERAL FUND, B & C ROAD FUND	<div style="border: 1px solid black; padding: 5px;"> CITY / COUNTY </div> <hr style="width: 50%; margin: 5px auto;"/> UTAH TRANSIT AUTHORITY
PRIVATE		
Donations / User Fee	<div style="border: 1px solid black; padding: 5px;"> PRIVATE </div>	<div style="border: 1px solid black; padding: 5px;"> PRIVATE </div>

The Joint Highway Committee makes recommendations to UDOT on the Small Urban, and Local Bridge Replacement Programs. Federal highway and transit funds must be included in the WFRC's Transportation Improvement Program.

Table II-2

POTENTIAL FUNDING SOURCES FOR TRANSPORTATION PROJECTS

Transportation Program	Funding Agency	Description	Requirements For Use
Surface Transportation Program - Urban	FHWA (WFRC)	For transportation facility improvements ranging from rehabilitation of existing facilities to new construction. May also be used for transit capital improvements and ridesharing promotion.	<ol style="list-style-type: none"> 1. May be used on any road not functionally classified as local or rural minor collector in the Metropolitan Area. 2. Must be consistent with Long Range and Short Range Elements of Transportation Plan, except for minor projects. 3. Initiation of projects by local officials through MPO. 4. Environmental impact evaluation.
Surface Transportation Program – Rural	FHWA	Same as above, only for use outside the Urban Area Boundary.	<ol style="list-style-type: none"> 1. Can be used for projects within the Metropolitan Area but outside the designated Urbanized Area.
Surface Transportation Program - Transportation Enhancements	FHWA	A mandatory ten percent of all STP funds to be used for non-traditional uses, including pedestrian and bicycle facilities and landscaping.	<ol style="list-style-type: none"> 1. Enhancement projects will be selected by the State Transportation Commission and by a UDOT appointed committee. The committee will include UDOT staff and persons from around the state interested in non-traditional transportation projects.
Surface Transportation Program - Highway Safety	FHWA	For safety improvements to roads, rail-highway crossings including crossing devices, and hazard elimination activities, respectively.	<ol style="list-style-type: none"> 1. Funds set aside for safety may be used on any public road for any of the activities of (rail-highway crossings and hazard elimination activities). 2. TEA-21 amended ISTEA to allow funding of safety improvements at public transportation facilities and public pedestrian and bicycle pathways and trails.
Congestion Mitigation/Air Quality (CMAQ)	FHWA (WFRC)	For transportation-related projects that significantly reduce emissions in non-attainment areas.	<ol style="list-style-type: none"> 1. Projects must contribute to the attainment of air quality standards (reducing emissions) in the region. 2. Projects that increase capacity for single occupancy vehicles are not allowed. 3. Projects in the State Implementation Plan for clean air attainment should receive priority.
Interstate Maintenance Program (IM)	FHWA	For the resurfacing, restoration, and rehabilitation of the Federal-Aid Interstate System.	<ol style="list-style-type: none"> 1. Limited to Federal-Aid Interstate System. 2. Environmental impact evaluation. 3. May not be used to add capacity or construct new interchanges.
National Highway System (NHS)	FHWA	To provide an interconnected system of principal arterial routes that serve major population centers, airports, public transportation facilities, and other intermodal transportation facilities. May also be used for transit-oriented projects.	<ol style="list-style-type: none"> 1. May be used on construction of, and operational improvements for, a Federal-aid highway not on the NHS and construction of a transit project eligible for assistance under the FTA if, (a) such project is in the same corridor and in proximity to, a fully access controlled NHS highway (b) improvements will improve the level of service on the fully access controlled highway and improve regional travel, (c) improvements are more cost-effective than work on the NHS highway would be to provide the same benefits.
Bridge Replacement Program	FHWA	For replacement of substandard bridges.	<ol style="list-style-type: none"> 1. Can be used for bridges on all streets, both on and off Federal-Aid Systems. 2. Bridges must have a 20-foot span and a rating of less than 50 using bridge evaluation procedures.

**POTENTIAL FUNDING SOURCES FOR TRANSPORTATION PROJECTS
(Continued)**

Transportation Program	Funding Agency	Description	Requirements For Use
Minimum Guarantee	FHWA	For projects eligible for all other federal highway programs.	1. Ensures that each State receives a specific share of funding based on its federal gas tax receipts
High Priority Projects (HPP)	FHWA	Specific projects identified by Congress. Nationally, there are 1,850 with 15 in Utah. The projects have been identified and will be funded over the six years of TEA-21.	1. Funds can only be used for the particular project assigned. 2. Funds are allocated to the States by project in accordance with the following schedule, 11% in FY 1998, 15% in FY 1999, 18% in each of FYs 2000-2001, and 19% in each of FYs 2002-2003. 3. Eligible activities for funds include (i.e., studies, preliminary engineering, construction, etc.) **Projects identified for HPP funds will remain eligible for the funds beyond 2003 unless funds are re-authorized by Congress.
Recreational Trails Program	FHWA	To maintain and restore trails, develop trailside and trailhead facilities, acquire easements or land for trails, and to construct new trails.	1. May be used to provide and maintain recreational trails for motorized and non-motorized recreational trail uses. 2. May be used to improve or construct trailside and trailhead facilities, including provisions to facilitate access for people with disabilities.
Section 5309 (Formerly Section 3)	FTA	Discretionary grant funds for bus or rail capital improvements to implement or improve public transit system.	1. Must be consistent with long range and short range transportation plan, goals, and objectives. 2. Environmental impact evaluation. 3. Restricted to capital improvements (purchase of equipment, construction of maintenance facilities, etc.)
Section 5307 (Formerly Section 9)	FTA	Formula grants for public transit capital improvements, preventive maintenance, or planning assistance.	1. Urbanized area allocation based on population, population density, and transit revenue miles. 2. May be used for preventive maintenance, capital improvements or planning assistance. 3. Must be part of an approved Transit Development Program. 4. Environmental impact evaluation.
Section 5310 (Formerly Section 16(b)2 Program)	FTA	Grants for capital expenditures by private non-profit and public agencies providing service to elderly persons and persons with disabilities.	1. Must be used for capital expenditures, including purchase of vans or buses. 2. Must be recommended by UDOT review committee. 3. Recipients must coordinate service with other service providers in area.
Safe Sidewalks Program	State	For sidewalk construction on roads on the state system.	1. Must only be used on state roads. 2. Funds allocated by formula to each county, prioritized by the UDOT District, and selected by a statewide committee.
State Motor Vehicle, Motor Fuel, Other Highway User Taxes and Fees	State	For construction, improvement, or maintenance of state highway system.	1. May be used throughout the State. 2. Projects are selected at the discretion of the State. 3. Must be approved by the Utah State Transportation Commission.

**POTENTIAL FUNDING SOURCES FOR TRANSPORTATION PROJECTS
(Continued)**

Transportation Program	Funding Agency	Description	Requirements For Use
Economic Development Grants	EDA	For public facilities such as access roads to industrial parks, or to other economically significant locations.	<ol style="list-style-type: none"> 1. Must fulfill a pressing need of the area and tend to improve opportunity for successfully establishing or expanding industrial or commercial plants or facilities. 2. Must assist in creation of long term employment opportunities. 3. Must benefit long term unemployed, members of low-income families or further the objectives of Economic Opportunity Act of 1964.
Community Development Block Grant (Entitlement and Discretionary Grants)	HUD	For acquisition, construction of certain public works facilities and improvements, parking facilities, pedestrian malls and walkways, curb, gutter, sidewalks, signs, lighting, and other transportation appurtenance.	<ol style="list-style-type: none"> 1. Entitlement grants allocated to cities with populations in excess of 50,000, or counties with population in excess of 200,000 or central cities in SMSA's with populations of fewer than 50,000. 2. Discretionary grants (small cities) allocated to all counties or units of general local government, except metropolitan cities and urban counties. 3. Projects must be shown to principally benefit persons of low and moderate income, meet an urgent public health or safety need, and eliminate slum or blight. 4. Highway expenditures have to be in support of broader community development programs.
State General Fund	State	For construction, improvement, or maintenance of state highway system. Also used to pay for bonding.	<ol style="list-style-type: none"> 1. May be used throughout the State. 2. Projects are selected at the discretion of the State. 3. Must be approved by the Utah State Transportation Commission. 4. State Legislature must appropriate each year.
Corridor Preservation	State	For acquisition of right-of-way to preserve corridors for future transportation projects.	<ol style="list-style-type: none"> 1. May be used throughout the State. 2. May be used for state and local highway, transit, or other transportation projects 3. Projects are selected by the Utah State Transportation Commission.
Class B&C Program	State	For road improvement projects including construction, improvement or maintenance of city or county streets and highways.	<ol style="list-style-type: none"> 1. Allocation by formula to cities and counties throughout the State. 2. Projects are selected at the discretion of the city or county. 3. Monies used primarily for street maintenance. 4. Thirty percent of the funds must be used for construction projects or maintenance projects over \$40,000.
General Fund	Towns, Cities and Counties	For transportation facility improvements ranging from maintenance to new construction.	<ol style="list-style-type: none"> 1. Major portion of fund is accumulated through property taxes. 2. Projects are selected at the discretion of the city or county. 3. Funds are generally allocated in conjunction with the capital improvements program needs of the municipality.
Special Improvement Districts	Cities and Counties	For permanently improving the roadways, curb, gutter, and sidewalks on any city or county road.	<ol style="list-style-type: none"> 1. Must be within a special improvement district as set up by the County Commission or City Council. 2. The cost of road improvements in any special road district except the intersection of roads within such districts shall be assessed upon the lots and lands abutting upon the roads.

**POTENTIAL FUNDING SOURCES FOR TRANSPORTATION PROJECTS
(Continued)**

Transportation Program	Funding Agency	Description	Requirements For Use
Transit Sales Tax	UTA	For support of public transit service in Salt Lake, Davis, Weber, and Tooele Counties.	<ol style="list-style-type: none"> 1. Can be used to pay for operating and capital costs of transit service. 2. One half percent sales tax has been approved by voters in Salt Lake, Davis and Weber Counties. 3. State law authorization is currently limited to one half percent.
Tax Increment	Towns, Cities and Counties	For public facility improvements within or adjacent to redevelopment project areas.	<ol style="list-style-type: none"> 1. Removal of slum and blight with redevelopment project area. 2. Must be for public improvements that support the redevelopment effort. 3. Establishment of redevelopment agency. 4. Identification of a redevelopment project area and a specific redevelopment.
General Obligation Bonds	Counties, Cities, Towns, and Improvement Districts	For capital improvements to implement or improve transportation facilities or other public facilities.	<ol style="list-style-type: none"> 1. Voter approval is required. 2. The taxing power of the jurisdiction is pledged to pay interest upon and retire the debt. 3. Limits on the amount of bonded indebtedness a jurisdiction may incur are established by state constitution or statute. Counties are limited to two percent of the reasonable fair cash value of the taxable property within the county and cities are limited to four percent.
Revenue Bonds	Counties, Cities, Towns, and Improvement Districts	For capital improvement projects which generally produce revenues.	<ol style="list-style-type: none"> 1. Revenue bonds may be issued where the revenue generated from the improvement or other specifically pledged revenues are used to finance the bonds.
Demonstration	FHWA	For studies, preliminary engineering, construction, etc. for projects designated by Congress.	<ol style="list-style-type: none"> 1. Information relative to eligible activities is specified in the project description in the section of the law authorizing it.
Developer Dedications	Private	For transportation improvements including dedication of right-of-way and new roads.	<ol style="list-style-type: none"> 1. Municipal planning commission must review new subdivision plats and conditional plan.

PRIVATE SOURCES

Private interests often provide sources of funding for transportation improvements. Developers construct the local streets with subdivisions and often dedicate right-of-way for and participate in the construction of collector and arterial streets adjacent to their developments. Developers should also be considered as a possible source of funds for projects needed because of the impacts of the development, such as the need for traffic signals or arterial street widening.

Private sources also need to be considered for transit improvements that will provide benefits to them. For example, business or developers may be willing to support either capital expenses or operating costs for transit service which provide them with special benefits, such as a reduced need for parking or increased accessibility to their development.

III. PROJECTED REVENUES

The Wasatch Front Regional Council (WFRC), in cooperation with the Utah Department of Transportation (UDOT) and the Utah Transit Authority (UTA), developed estimates of available revenues based on projected sources that will be available for transportation improvements through the year 2030. Included in these revenue estimates are traditional federal, state and local sources for highway and transit improvements, along with possible innovative sources. Assumptions were made concerning revenue growth and new or increased sources of funds. The projections and assumptions used are discussed in the balance of this section.

STATEWIDE HIGHWAY REVENUE

A combination of federal, state, and other government revenues will be available for highway improvements in the Wasatch Front Urban Area for the next several years. WFRC, with input from the Utah Department of Transportation's Statewide Planning Division, projected revenue estimates based on reasonable assumptions. The type of funding sources and the assumptions used in UDOT's revenue projections through the year 2030 are discussed below. Table III-1, entitled "Projected Statewide Highway Revenue 2004 - 2030", summarizes all available federal, state, and other government revenue amounts through 2030.

Table III-1

**PROJECTED STATEWIDE HIGHWAY REVENUE
2004 - 2030**

REVENUE SOURCE	PROJECTED STATEWIDE HIGHWAY REVENUES			
	2004 - 2012	2013 - 2022	2023 - 2030	TOTAL 2002 - 2030
Federal Revenue	1,398,000,000	2,076,000,000	1,983,000,000	5,457,000,000
State Revenue	4,276,000,000	8,460,000,000	10,854,000,000	23,590,000,000
Centennial Fund - Bonds & Other Revenue	72,000,000	808,000,000	984,000,000	1,864,000,000
Transfers Appropriated to Other State Agencies	(1,604,000,000)	(2,697,000,000)	(3,133,000,000)	(7,434,000,000)
Total Highway Funds Available	4,142,000,000	8,647,000,000	10,688,000,000	23,477,000,000

Federal Revenue: ISTEA established several federal programs for the allocation of funding for highway improvements, which are administered by the Utah Department of Transportation and the State Transportation Commission. TEA-21 continued these programs at slightly higher funding levels. These programs include Interstate Maintenance, National Highway System, Any Area Surface Transportation Program, STP Safety and Enhancement Programs, and Bridge Replacement Programs. For the purpose of projecting future revenues, TEA-21 authorized amounts were assumed to be available for these programs through 2003. A modest growth of two percent per year for each program was then assumed for the period between 2004 and 2030. Approximately \$5,457,000,000 of total revenue was projected for statewide federal funds between 2004 and 2030.

State Revenue: State of Utah revenues for transportation are primarily generated through highway user fees. In addition, the Legislature has programmed a portion of the state's general fund to

support Utah Department of Transportation projects. These include motor fuel taxes, special fuel taxes, motor vehicle registration, licensing, driver's license fees, a tax on rental cars (specifically earmarked for transportation corridor preservation), and sales taxes. Future projections of state highway revenues were made by UDOT assuming a historic, yearly growth rate.

1/16 Cent Sales Tax - The Utah State Legislature has approved a 1/16 percent sales tax increase per year that would go toward the Class B and C funding, park access and transportation corridor preservation. The Legislature capped this revenue for state highway use from the sales tax at \$18,743,000 per year in House Bill 6004.

Motor Fuel Tax - The motor and special fuel tax assumed a 3 percent increase per year in the number of gallons sold, along with a \$.05 increase per gallon every six years, or in 2006, 2012, 2018, 2024 and 2030. This will result in a total per gallon tax increase of \$0.25 by 2030.

Vehicle Control Fees - Personal property tax for passenger cars and light trucks is a uniform fee based on the age of the vehicle. The fee is applicable to passenger cars, light trucks (including sport utility vehicles) and vans.

Motor Vehicle Registration - Motor vehicle registration revenue, both non-committed and that earmarked for the Centennial Highway Fund (CHF), and drivers license and other taxes and fees are assumed to grow at three percent per year.

Proportional Registration - An owner or operator of a Utah based fleet of commercial vehicles operating in two or more jurisdictions may apply for an apportioned registration. This registration allows commercial vehicles to comply with registration requirements of more than one jurisdiction and to pay registration fees based on the percentage of operation in those jurisdictions. The prorated percentage for each requested jurisdiction is determined as a fraction, the numerator of which is an amount equal to fleet mileage traveled in that jurisdiction and the denominator is total miles operated by the fleet in all jurisdictions. The total bill is determined by adding the amounts for each requested jurisdiction.

Temporary Permits - The fee is \$2.50 for motor vehicles or trailers. The permit allows use of the highways for a time not to exceed 96 hours. The permit is used to move an unregistered vehicle out of the state of Utah.

Special Transportation Permits - Permit fees collected by the Ports of Entry for overweight and oversize loads on single or combination tractor/trailer units.

Highway Use Tax - Collected by the State Tax Commission for all out of state vehicles through the registration process in lieu of county property tax normally collected with Utah State Vehicle Registration.

Safety Inspections & Miscellaneous Fees - Safety inspection fees collected in conjunction with regular vehicle registrations fees. Other miscellaneous violation fines and fees collected by the Ports of Entry for overweight/oversize trucks & trailers traveling without permits.

Centennial Fund - Bonds & Other Revenue: The Centennial Highway Fund (CHF) was established in 1997 by the Utah State Legislature and greatly increased the amount of state revenues assigned to the Utah Department of Transportation.

Dedicated Sales Tax - The Utah State Legislature has approved a 1/64 percent sales tax to fund the CHF account. Revenues from the sales tax are projected to increase by three percent per year after 2007.

Dedicated Gas Tax - The last fuel tax was increased in 1997, at \$.05 per gallon, and goes directly into the CHF account.

Dedicated Registration Fees –In 1997, the Legislature increased the vehicle registration fee by \$10. This \$10 registration goes directly into the CHF account.

State General Fund - Finally, the CHF program assumes a significant increase in general fund revenues for transportation through 2007. The CHF program initially assumed general fund revenues up to \$145,000,000 per year. The Legislature has recently reduced this level to \$60,000,000 per year due to budget constraints. The 2030 LRP Update assumes approximately \$60,000,000 per year through 2007, but expects that the economy and budget situation will improve to allow the Legislation to provide \$100,000,000 per year afterwards (Appendix A is a listing of all transportation projects funded with the Centennial Highway Fund.)

Transfers Appropriated to Other State Agencies - Not all of the highway user revenues are available to UDOT. In the past, approximately 8 percent of these funds have been diverted to other agencies, such as Highway Patrol, Driver’s License Division, and the Utah State Tax Commission. Of the remaining amount, 25 percent is transferred to cities and counties through Class B and C funds. UDOT estimated that future amount of diversions to other agencies. The total amount of transfers and diversions from 2004 through 2030 is approximately \$7,434,000,000.

REGIONAL HIGHWAY REVENUE

The Wasatch Front Regional Council, in cooperation with the Utah State Department of Transportation and the Utah State Transportation Commission, is responsible for programming a portion of the National Highway Trust Fund in the Salt Lake and Ogden Urbanized Areas. In consultation with UDOT and the Utah Transit Authority, the WFRC develops the Surface Transportation Program and the Congestion Mitigation/Air Quality Program for both the Salt Lake and Ogden Urbanized Areas. For projecting future revenues, TEA-21 authorized amounts were assumed to be available for these programs through 2003. These National Highway Trust Funds can be used for projects on the state highway system, as well as on local streets. STP and CMAQ funded projects have local sponsors that are required to commit a portion of the projects total cost. A total revenue amount of approximately \$514,000,000 was projected for WFRC programmed Highway Trust Funds between 2004 and 2030.

A 1/4 percent transit sales tax increase was passed in November 2000. As part of this sales tax, Salt Lake County will receive 1/16 percent sales tax to go towards state roads. Wasatch Front Regional Council estimates this 1/16 percent sales tax will generate approximately \$752,000,000 over the next 27 years. Table III-2, entitled “Projected Regional Highway Revenue 2004 - 2030”, summarizes STP, CMAQ and Salt Lake County 1/16 percent sales tax revenue amounts for 2004 through the year 2030.

Table III-2

**PROJECTED REGIONAL HIGHWAY REVENUE
2004 - 2030**

REVENUE SOURCE	PROJECTED REGIONAL HIGHWAY REVENUES			
	2004 - 2012	2013 - 2022	2023 - 2030	TOTAL 2002 - 2030
Surface Transportation Program	130,000,000	145,000,000	116,000,000	391,000,000
Congestion Mitigation / Air Quality Program	41,000,000	46,000,000	37,000,000	124,000,000
Salt Lake County 1/16 percent sales tax	136,000,000	263,000,000	353,000,000	752,000,000
Total Regional Highway Revenue	307,000,000	454,000,000	506,000,000	1,267,000,000

LOCAL HIGHWAY REVENUE

City and county governments have four main sources of revenues for needed local transportation projects. These sources are federal funds from the Salt Lake and Ogden Surface Transportation Programs and the Congestion Mitigation/Air Quality Programs, Class B and C Funds from state highway user revenues, local general funds and some limited innovative financing. Each of these revenue sources is discussed below, including the projection assumptions used to increase these amounts through the year 2030. Table III-3, entitled “Projected Local Highway Revenue 2004 - 2030”, summarizes projected available local city and county funding for highway improvements between 2004 and 2030.

Table III-3

**PROJECTED LOCAL HIGHWAY REVENUE
2004 - 2030**

REVENUE SOURCE	PROJECTED LOCAL HIGHWAY REVENUES			
	2004 - 2012	2013 - 2022	2023 - 2030	TOTAL 2004 - 2030
Class B and C Program Funds	541,000,000	950,000,000	1,142,000,000	2,633,000,000
Local General Funds	861,000,000	1,268,000,000	1,322,000,000	3,451,000,000
Innovative Funding Sources	84,000,000	94,000,000	75,000,000	253,000,000
Total Local Highway Revenue	1,486,000,000	2,312,000,000	2,539,000,000	6,337,000,000

Class B and C Program Funds: The Class B (for counties) and C (for cities) roadway funds are allocated from the highway user fees revenues on a ratio of population and road miles per various counties and cities throughout the state. Based on the current allocation formula, the Salt Lake and Ogden Urbanized Areas receive 41.25 percent of the Class B and C funds available for the entire State of Utah. This percentage was maintained for the future projections of funds through 2030 that generates approximately \$2,633,000,000.

Local General Funds: Both cities and counties program a significant amount of local general funds for highway maintenance and improvement. Current and past general fund spending on highways by counties and cities was examined to project future revenues. City and county governments spent approximately \$77,500,000 in 2001 for local street and highway improvements, for a total expenditure of approximately \$3,451,000,000 of their general funds between 2004 and 2030 on local highways. These expenditures are projected to grow by three percent a year through 2030.

Innovative Funding Sources: Local governments will need to consider several innovative highways funding programs in the future. Many already levy transportation impact fees on new development. In addition, developers are a source for funding for major projects, which directly benefit their development. These and other innovative sources will provide funding over the next 27 years for local highway projects. The Long Range Plan Update assumes \$9,375,000 per year period starting in 2004 for a total of \$253,000,000 from 2004 through 2030. Tables III-4 and III-5 below provides a summary of all highway revenues.

Table III-4

**SUMMARY OF PROJECTED
STATEWIDE HIGHWAY REVENUE
2004 – 2030**

SOURCE	AMOUNT
Projected Statewide Revenue	
Federal Revenue	
Highway Trust Funds	5,457,000,000
State Revenue	
Highway User Funds (less diversions)	23,590,000,000
Centennial Fund – Bonds & Other Revenue	1,864,000,000
Transfers Appropriated to Other State Agencies	(7,434,000,000)
Total Statewide Revenue Available	23,477,000,000

Table III-5

**SUMMARY OF PROJECTED
REGIONAL AND LOCAL HIGHWAY REVENUE
2004 – 2030**

SOURCE	AMOUNT
Projected Regional Revenue	
Surface Transportation Program	391,000,000
Congestion Mitigation / Air Quality	123,000,000
Salt Lake County 1/16 percent sales tax	752,000,000
Total WFRC Programmed Revenue	1,266,000,000
Projected Local Highway Revenue	
Class B and C Program Funds	2,633,000,000
Local General Funds	3,451,000,000
Innovative Funding Sources	253,000,000
Total Local Highway Revenue	6,337,000,000

Summary

The projected revenue sources and expenditures needed to support the 2030 LRP Update include federal, state, and local funding sources. These varied sources combine to provide policy officials a total revenue amount to allocate to selected highway improvement projects. The 2030 LRP Update is financially constrained, containing only those highway improvement projects that can be constructed using available and projected revenue between 2004 and 2030. Refer to Chapter V “Financial Plan,” for the Wasatch Front Region’s portion of all the available state funding for new capacity projects over the next 27 years. The above Tables III-4 and III-5 summarize the projected statewide, regional, and local highway revenues for 2004 through 2030.

TRANSIT REVENUE

Revenues for transit service and improvements are available from several sources including federal funds, a local sales tax, fares, and others. Federal funds for transit capital and planning assistance are made available through the Federal Transit Administration (FTA). These funding programs are financed through the federal gasoline tax as well as from general fund monies. The Utah Transit Authority (UTA) is the primary recipient of these funds that are used to make system improvements, introduce new transit technology, increase service, and purchase new equipment.

Revenues for transit improvements were projected using the voter approved ½ percent transit sales tax in Weber and Davis Counties and 7/16 percent in Salt Lake County and an additional ½ percent anticipated in implementation in 2007. In addition, federal formula grant funds available for transit were assumed to grow by 4.2 percent a year. Also, it was assumed that federal funding for major transit improvements would be available. Federal funds for major transit improvements were assumed to pay 52 percent of the cost for these major improvements and 39 percent of all capital costs. Finally, fare revenue was projected to cover 20 percent of bus operating costs, just under five percent of paratransit operating costs, and 40 percent of the north/south light rail and regional commuter rail operating costs. Additionally, fare revenues are projected to cover 30 percent of enhanced bus, bus rapid transit, and other light rail line operating costs.

Federal Transit Funds

Federal funds for transit capital and planning assistance are made available through the Federal Transit Administration. These funding programs are financed through the federal gasoline tax currently going to the Mass Transit Account of the Highway Trust Fund as well as from general fund reserves. These are discussed below.

Section 5307 Formula Grants: This program provides a block grant to local transit agencies for capital improvements. These funds can also be used to support preventive maintenance and planning activities. Funding is distributed annually to the Wasatch Front Urban Area by a formula based on population, population density, and transit revenue miles of service. Fiscal Year 2000 Section 5307 grants were \$22 million for the Ogden-Layton and Salt Lake City Urbanized Areas. WFRC staff assumed that this annual amount would grow by 4.2 percent each year in order to keep up with the inflation of operating costs. A total \$1,109,000,000 is projected to be available for Section 5307 between 2004 to 2030 for Wasatch Front Urban Area.

Section 5309 Discretionary Bus Grants: This program provides discretionary funding for capital improvement projects such as the purchase of buses, the construction of park-and-ride lots, or the construction of operating and maintenance facilities. FTA allocates these funds throughout the country on the basis of need. The federal share of these projects is up to 80 percent, but actual share typically is much lower. Because of their discretionary nature, Section 5309 funding for area transit projects varies from year to year. For this 2030 LRP Update analysis, the WFRC assumed that UTA would receive the amount they received in 2003 (\$3.9 million), with a 3 percent annual increase to adjust for inflation. The projected total for this discretionary grant is \$165,500,000 through the year 2030, which is the equivalent of 30 percent of the region's total bus capital costs.

Section 5309 New Starts Grants: FTA also has a separate Section 5309 Program for new projects over 50 million dollars. The federal share for these projects generally ranges from 50 to 80 percent. The WFRC staff assumed that UTA would receive an inflation adjusted revenue stream of \$50.5 million per year. Over the life of the 2030 LRP Update this federal income would amount to about 46 percent of the total capital costs of commuter rail, light rail, bus rapid transit, and enhanced bus. A total of \$2,408,000,000 is projected for this grant program.

Other Federal Grants: FTA also has a separate Section 5309 Program for rail modernization which each rail project becomes eligible for after seven years in service. A total of \$50,500,000 was assumed for this program. Additionally, federal grants for Congestion Management/Air Quality were assumed to be \$206,000,000 respectively.

Local Sales Tax Revenue

A portion of local sales tax revenues is used to support transit services. In the past 24 years, taxable sales have grown at an average rate of about 6.5 percent per year. Beginning in 2001, this sales tax levy was raised to ½ percent from 1/4 percent in Weber, Davis, and Salt Lake Counties. In Weber and Davis Counties this amount is fully dedicated to Utah Transit Authority. In Salt Lake County 7/16 of a percent is dedicated to UTA and the remaining 1/16 percent is to be used for projects on the state highway system in the County.

Since this referendum and the dramatic success of first the Sandy Line and then the University Line, public, business, and policy maker pressure has increased for the region to take more serious strides in building a robust transit system in the region. Community leaders are embracing transit for their communities and have passed resolutions in favor of an additional tax increase to support transit. In approving the Long Range Transportation Plan in December 2001, the Regional Council asked the WFRC staff to work with local officials to identify additional transit opportunities and potential funding sources. The Regional Council formed a blue ribbon committee, the Transit 2030 Committee, to make recommendations to make the transit portions of the Plan Update more robust.

The Transit 2030 Committee consisted of representatives of both the public and private sectors, including local and state officials, Chambers of Commerce, the Utah Manufacturers Association and other business interests, Envision Utah, and Utahns for Better Transportation.

The Transit 2030 Committee, held workshops for local officials to identify the transit needs for their communities in 2002. The Committee then evaluated the suggestions and recommended major transit improvements that should be pursued in the next 27 years. The Committee also identified the need to implement many of the projects on the Long Range Plan Update sooner than on the Plan adopted in 2001.

The Committee also reviewed a wide range of potential funding sources to pay for these improvements. Based on their analysis of the level of local support in other cities around the county, the support expressed by local officials in the region, and the results of public opinion surveys concerning the general public's support for more transit, the Transit 2030 Committee recommended that the region pursue an increase in local support for transit equivalent to a ½ percent sales tax through a referendum in November 2006.

Trans Com and the Regional Council adopted the Transit 2030 Committee's recommendation as a reasonable estimate of future local support for transit at their August 2003 meetings. Therefore, the 2030 LRP Update assumes that the voters will pass the equivalent of an additional ½ cent sales tax devoted to transit in November of 2006 and that the additional revenue will be available for improvements beginning in July of 2007. The Plan assumes that the rate of taxable sales will pick up again growing at rate of 5.5 percent in 2005 and maintain that growth rate through 2030. The annual sales tax receipts discussed above amounts to \$96,300,000 in FY 2004 and \$251,900,000 in 2008. Projected total sales tax revenue for transit improvements equals \$11,592,400,000.

This 5.5 percent growth rate in sales tax is conservative as compared to both the average growth in the past 24 years and as compared to the 6 percent growth rate predicted for the sales tax income to highway projects. However, given the recent downturn in the economy and transit's heavy reliance upon sales tax in its revenue stream, the WFRC feel that a 5.5 percent growth rate is appropriate for transit revenues. If the region were to realize a sales tax growth rate higher than 5.5 percent, the WFRC would feel even more comfortable with the plan as envisioned because it would result in less debt and a quicker emergence from debt than what is currently projected.

User Fare Revenue

The Utah Transit Authority receives additional revenue from the daily operation of its bus and light rail system through user fares. UTA's Strategic Plan states that it is the goal of the UTA to obtain 20 percent of its bus operating costs from patron fares. The WFRC assumed that UTA would receive fare revenue to cover approximately 20 percent of its bus operating costs and just under five percent of its paratransit operating costs. Light rail and commuter rail systems generally cover a greater share of their operating costs than bus operations. The WFRC assumes that fares would generate revenues equivalent to approximately 30 percent of light rail spur, bus rapid transit, and enhanced bus operating costs and 40 percent of north/south TRAX and regional commuter rail operating costs. User fare revenue projection for the next 27 years equals approximately \$2,482,600,000.

Other Revenue

The Utah Transit Authority receives revenues from other sources, mainly bank account interest, bus advertising, federal planning funds, and joint development. UTA currently receives \$7,400,000 a year from these sources of revenue and is anticipated to receive another \$75,000 beginning in 2004 from joint development. Approximately 80 percent is estimated to be derived from the WFRC area. The Long Range Financial Plan Update assumes that UTA will continue to receive these revenues and will receive 5.5 percent interest (1.3 percent net of inflation) on its yearly balance. These revenues are anticipated to result in total receipts of \$873,000,000 between 2004 and 2030. Table III-6 entitled "Projected Transit Revenues 2004 – 2030," summarizes the various federal, local sales tax, fares, and other revenues that will fund the 2030 LRP Update's recommended transit improvement for the next 27 years.

Table III-6**PROJECTED TRANSIT REVENUES
2004 – 2030**

SOURCE	AMOUNT
Federal Revenues	
Section 5307 Formula Grants	1,109,000,000
Section 5309 Discretionary Bus Grants	165,000,000
Section 5309 New Start Grants	2,244,000,000
Other Federal Grants	257,000,000
Local Sale Tax Revenue	11,592,000,000
User Fare Revenue	2,483,000,000
Other Revenue	603,000,000
Total Transit Revenue	18,453,000,000

FLEXIBLE FUNDING

While the funds discussed above have been identified with either highways or transit, there is some flexibility in the use of many of these funds. Most of the federal funds can be used for either highways or transit under certain conditions. Interstate Maintenance, National Highway System, Surface Transportation Program, and Congestion Mitigation/Air Quality funds can all be used for transit capital projects. FTA Section 5307 funds can be used for highway improvements if UTA has met all Americans with Disabilities Act requirements.

State highway user revenues, including Class B and C funds, must be used for highway improvements. However, eligible uses would include construction of bus turnouts along arterial streets and construction of joint use park-and-ride lots that can also serve transit riders. State and local general fund revenues that are currently dedicated to highway improvements could possibly be used to support transit's capital or operating expenses, with approval of local governing bodies. The local sales tax for transit is restricted to transit uses. This Long Range Transportation Financial Plan Update does not anticipate a significant transfer of funds between highways and transit, since the projected funds for each will not meet all the future needs. However, CMAQ funds have been used in the past to purchase light rail vehicles, buses, and vans for UTA and are programmed to be used to construct several park-and-ride lots. The planning process will continue to consider the need for similar transfers in the future.



IV. PROJECTED COSTS

The costs for making the needed improvements for both highways and transit as identified by the Wasatch Front Urban Area Long Range Transportation Plan Update: 2004-2030 were analyzed. The costs to meet the projected needs of the 2030 LRP Update estimated. These costs include those required to meet the needs identified in the 2030 LRP Update as well as costs estimates for general administration and the operation and maintenance of the existing transportation system. (Appendix B and Appendix C show details on the estimated costs for the 2030 LRP Update recommended highway and transit projects.)

UDOT estimated the overall highway costs based on a formula for each type of improvement. These estimated costs included: operating costs, contractual maintenance, signal spot improvements, lighting, and barrier, bridge preventive maintenance, bridge rehabilitation / replacement, highway rehabilitation / replacement, hazard elimination, safety and enhancements, and region / department contingencies. (Financial projections for each of these categories can be found in Appendix G). Transit costs estimates include expenditures for bus and miscellaneous bus related operations and improvements and for light rail, bus rapid transit, enhanced bus, commuter rail alignment construction and operations. All administration costs are included in the operations cost.

STATEWIDE HIGHWAY OPERATING AND PRESERVATION COST ESTIMATES

The Utah Department of Transportation, working in close cooperation with the WFRC, estimated the various statewide highway operating costs and preservation costs over the next 27 years. The total costs estimated for the various types of estimates are discussed below. These assumptions are based on UDOT's experience and a survey of UDOT concerning their expenses. The Utah Department of Transportation estimated statewide cost totals for each of six categories. Growth and inflation assumptions were applied to these cost totals from 2004 through 2030. Table IV-1 includes the projected statewide highway operating costs for 2004 through 2030.

UDOT Operations: UDOT Operation costs include UDOT staff, planning and preliminary engineering, maintenance, snow plowing the highways, and other costs. UDOT estimated their administrative costs based on their past budgets. In 2003, UDOT's budget for Operations was approximately \$153,600,000 statewide. This cost was inflated at two percent per year until 2030. A total of \$5,538,000,000 has been estimated for UDOT Operations expenses through the year 2030. Table IV-2 summarizes the projected local highway costs for 2004 through 2030.

Contractual Maintenance: Contractual maintenance costs are the costs associated with short season maintenance projects that are contracted out such as: slurry seals, chip seals, and striping. UDOT estimated their contractual maintenance costs based on their past budgets. In 2003, UDOT's budget for contractual maintenance was \$50,000,000 statewide. This cost will increase \$5,000,000 in 2006 and then every six years after, in conjunction with the gas tax increase until 2030. A total of \$1,675,000,000 has been estimated for contractual maintenance for UDOT through the year 2030.

Signals, Spot Improvements, Lighting, and Barrier: Signals, spot improvements, lighting, and barrier activities include signing, marking, and signal installation and maintenance. UDOT estimated their costs for these activities. UDOT's maintenance cost for 2003 was \$10,900,000 statewide. These costs were increased by three percent a year to account for cost inflation. Based on Utah Department of Transportation assumptions, they will have approximately \$488,000,000 for signals, spot improvements, lighting and barrier expenses between 2004 and 2030.

Bridge Preventative Maintenance: The Utah Department of Transportation estimated their statewide costs for bridge preventative maintenance activities at \$10,000,000 in 2003. These costs were increased by three percent a year to account for cost inflation. Based on UDOT assumptions, approximately \$649,000,000 will be set aside for pavement preservation for 2004 through 2030.

Bridge Rehabilitation / Replacement: UDOT estimated bridge rehabilitation and replacement costs for 2004 through 2030 based on the 2003 budget of \$4,700,000 statewide. These costs were increased by three percent a year to account for cost inflation. Based on UDOT assumptions, \$356,000,000 will be used for highway rehabilitation and replacement for 2004 through 2030.

Highway Rehabilitation / Replacement: The Utah Department of Transportation estimated highway rehabilitation and replacement costs for 2004 through the year 2030 based on the 2003 budget of \$28,100,000 statewide. These costs were increased by three percent a year to account for cost inflation. Based on UDOT assumptions, \$2,027,000,000 will be used for highway rehabilitation and replacement for the years 2004 through 2030.

Hazard Elimination, Safety, and Enhancements: Hazard elimination, safety, and enhancements include hazard elimination, intersection upgrades, railroad crossing improvements, other similar projects and the development of pedestrian facilities, bicycle facilities, and landscaping projects. UDOT estimated their statewide costs for these activities at \$7,500,000 in 2003. Approximately 10 percent of STP funds are spent on enhancement projects. These costs were increased by three percent a year to account for cost inflation. Based on Utah Department of Transportation assumptions, UDOT will have \$314,000,000 for hazard elimination, safety and enhancement expenses between 2004 and 2030.

Region / Department Contingencies: UDOT Region and department contingencies are used for overruns on projects, spot improvements and other immediate needs. UDOT estimated their statewide costs for these activities at \$3,500,000 in 2003. This cost will increase \$400,000 in 2006 and then every six years after, in conjunction with the gas tax increase until 2030. Based on Utah Department of Transportation assumptions, UDOT will have \$121,000,000 for region and department contingency expenses between 2004 and 2030.

Table IV-1

**PROJECTED STATE HIGHWAY COSTS
2004 – 2030**

EXPENDITURE	AMOUNT
Statewide Highway Operating and Preservation Costs	
UDOT Operations	5,538,000,000
Contractual Maintenance	1,675,000,000
Signals, Spot Improvements, Lighting, Barrier	488,000,000
Bridge Preventive Maintenance	649,000,000
Bridge Rehabilitation / Replacement	356,000,000
Highway Rehabilitation / Replacement	2,027,000,000
Hazard Elimination, Safety, Enhancements	314,000,000
Region / Department Contingencies	121,000,000
Total Statewide Highway Operating and Preservation Costs	11,168,000,000

LOCAL HIGHWAY COST ESTIMATES

Six local cost categories were estimated, which include administration, maintenance, pavement preservation, traffic operations and safety, and enhancements. The total costs estimated for the various types of costs are discussed below. These assumptions are based on a survey of local agencies concerning their expenses. Growth and inflation assumptions were applied to these cost totals from 2004 through 2030. The WFRC then estimated its share of these costs for the same period of time for each of the categories. (Appendix D contains details on the estimated costs used for projecting administration, maintenance, pavement preservation, structure preservation, traffic operations and safety, and enhancements.) Table IV-2 summarizes projected local highway costs.

Administration: Administration costs are the costs associated with administering transportation agencies and transportation sections of larger public works departments. These costs include such expenditures as local staff, planning and preliminary engineering costs, and so on. Cities and counties along the Wasatch Front are estimated to spend 15 percent of their revenues for transportation projects on administration. A total of approximately \$977,000,000 has been estimated for local administration costs through the year 2030.

Maintenance: Maintenance activities include snow removal, sweeping, weed control, crack sealing and pothole patching. Estimates of local spending for maintenance were calculated from city and county financial reports. Local maintenance costs were estimated to be approximately \$1,500 per lane mile. These costs were estimated to increase by three percent a year, while the number of lane miles is estimated to increase by one percent annually. Cities and counties along the Wasatch Front are responsible for approximately 8,875 lane miles. A total of approximately \$809,000,000 has been estimated for local maintenance costs from 2004 to 2030.

Pavement Preservation: Pavement preservation actions are treatments for streets and highways, which are more intensive than maintenance. These treatments range from a chip seal up to a full reconstruction. Local pavement preservation costs were calculated based on experience from city and county financial reports. Local agency costs for pavement preservation are estimated, on average, at about \$4,100 per lane mile per year for collector, arterial and local streets. These costs were estimated to increase by three percent a year. The Wasatch Front Urban Area has 8,875 lane miles of collector, arterial and local streets. The number of lane miles was assumed to grow at one percent a year. A total of \$2,185,000,000 has been estimated for local pavement preservation costs for the years 2004 through 2030.

Traffic Operations and Safety: Traffic operations activity includes signing, marking, and signal installation and maintenance. Safety improvements include hazard elimination, intersection upgrades, railroad crossing improvements, and other similar projects. Local agency costs for traffic operations and safety are estimated, on average, at about \$2,100 per lane mile per year for collector, arterial and local streets. These costs were estimated to increase by three percent a year, while the number of lane miles is estimated to increase by one percent annually. Cities and counties along the Wasatch Front are responsible for approximately 8,875 lane miles. A total of \$1,096,000,000 has been estimated for local traffic operations and safety costs for the years 2004 through 2030.

Enhancements: Enhancements include development of pedestrian facilities, bicycle facilities, and landscaping projects. Local enhancement costs were estimated to be approximately \$400 per lane mile. These costs were estimated to increase by three percent a year, while the number of lane miles is estimated to increase by one percent annually. Cities and counties along the Wasatch Front are responsible for approximately 8,875 lane miles. A total of \$218,000,000 has been estimated for local enhancement costs through the year 2030.

Table IV-2

**PROJECTED LOCAL HIGHWAY COSTS
2004 – 2030**

EXPENDITURE	AMOUNT
Local Highway Costs	
Administration	977,000,000
Maintenance	809,000,000
Pavement Preservation	2,185,000,000
Traffic Operations and Safety	1,096,000,000
Enhancements	218,000,000
Total Local Highway Costs	5,285,000,000

TRANSIT COST ESTIMATES

The costs for making the needed transit improvements as identified by the 2030 LRP Update were analyzed. These costs include those required to meet the needs identified in the 2030 LRP Update as well as costs estimates for general administration and the operation and maintenance of the existing transportation system.

The WFRC worked with UTA to estimate the costs to implement the 2030 LRP Update's recommended transit improvements in the Wasatch Front Urban Area. Included in these estimates are operating and maintenance costs as well as capital costs for both existing and expanded services. Recommended major capital investments are considered the construction of the proposed commuter rail, light rail, bus rapid transit, and enhanced bus lines. Other significant capital investments are the purchase of replacement and expansion vehicles and the installation of improvements to increase the speed, comfort, and connectivity of transit services. These estimated costs are discussed below.

Operating and Maintenance Costs: Operating and maintenance costs are the total non-capital costs associated with transit services. Local and paratransit bus service costs were based upon revenue miles traveled because the specific nature of the routing was unknown. Regional commuter rail was also based upon vehicle revenue miles because of the source material used. Light rail, bus rapid transit, and enhanced bus corridor operating and maintenance costs, however, were based upon vehicle hours of service which takes into account estimated travel speeds.

In 2002, the Wasatch Front Urban Area had about 18,443,000 revenue miles in its regular bus service and about another 4,400,000 revenue miles in its paratransit services. The 2030 LRP Update recommends regular bus service to increase by another 100% and paratransit to increase by another 50 percent by the year 2030. The annual operating and maintenance costs of regular bus service in 2002 was \$78,300,000 and the annual cost of Flextrans service was \$14,900,000. The projected annual cost of the recommended regular and paratransit bus systems, including the 4.2 percent inflation factor, is \$477,000,000 in 2030. Bus rapid transit and enhanced bus are anticipated to add an additional \$89,000,000 to this 2030 operating cost.

Regional commuter rail operating costs are influenced by the economies of scale present in their operations. Accordingly, a per car mile cost of \$10.63 was used for Ogden to Salt Lake service whereas this cost was reduced to \$8.86 for the larger Provo to Ogden run. Twenty minute peak frequencies and forty minute off peak frequencies were assumed on week days and sixty minute peak

hour frequencies were assumed on non-weekdays. Additionally, three-car peak-hour trains and one-car off-peak trains were assumed. This would cost WFRC \$19,720,000 per year in 2008 when running from Ogden to Salt Lake and \$25,983,000 per year in 2011 to run between the Utah County Line and Ogden when running between Provo and Ogden.

Operating and maintenance costs are based upon vehicle hours of service and takes into account projected travel speeds. UTA light rail vehicle operating costs per revenue hour are \$178.23. UTA bus operating costs was \$27.50 per revenue hour plus \$0.90 per revenue mile. Headways for these services were assumed to match that of the existing TRAX service. About three vehicles per train were assumed for the north/south line and about two vehicles per train were assumed for rail spurs, whereas single vehicles were assumed for BRT and enhanced bus. Weekend and holiday service was assumed to be half that of current TRAX weekday service.

Capital Costs: UTA will need to replace its existing fleet of buses and rail vehicles as well as expand its bus and rail fleet to provide the recommended levels of service in the year 2030. The average age of the current fleet is about seven years and, generally speaking, buses last about 12 years in service. The per bus cost ranges from \$275,000 for a 40 foot bus to \$470,500 for an articulated bus. Light rail vehicles last 30 years and cost \$2.2 million each. In order to expand service as recommended, an additional 506 buses or paratransit vans, 116 bus rapid transit vehicles, 83 light rail vehicles, and 43 commuter rail vehicles will be need to be purchased and housed. Factored into the cost of each expansion vehicle is the cost of its maintenance facility. UTA estimates these facility costs to be \$500,000 for each new rail vehicle and \$250,000 for each new bus or BRT vehicle. Over the course of the 2030 LRP Update, 1,373 regular buses and 23 light rail, and 146 bus rapid transit vehicles will need to be replaced.

The 2030 LRP Update recommends the construction of a regional commuter rail line, an enhanced bus line, and several light rail and bus rapid transit lines by 2030. These construction costs include the fixed-guideways, stations, and structures.

The financial plan allocated sufficient funding to build a regional commuter rail from Ogden to Salt Lake, from Salt Lake to Utah County, and from Ogden to 2700 North in Pleasant View. WFRC's contribution to this line's capital costs is anticipated to be \$637,000,000 in year of expenditure dollars.

The 2030 LRP Update recommendations includes enhancements to the north/south TRAX line several light rail extensions. UTA's light rail construction estimates of \$30 million per downtown mile, \$25 per suburban mile, and \$11 million per existing right-of-way mile, as well as park-and-ride/station costs, \$10 million per structure, \$2.2 million per vehicle, and a 20 percent contingency cost was used to model each of the proposed lines. The projected capital costs in year of expenditure dollars were \$195 million for north/south enhancements, \$298 million for the Airport Line, \$19 million for the Intermodal Center Line, \$40 million for the Sugarhouse Line, \$245 million for the West Valley Line, \$439 million for the 3500 South Line, \$151 million for the Mid-Jordan Line, \$166 for the Day Break Line, \$76 million for the Draper Line, and \$298 million for the Traverse Line. Total year of expenditure light rail line costs are anticipated to be \$1,908,000,000.

The 2030 LRP Update also recommends several bus rapid transit lines. The construction costs of each bus rapid transit line was estimated based upon the construction of bus lanes where congestion is anticipated to be severe and the use of signal priority and queue jumpers at each signalized intersection, as well park-and-ride/station costs, \$10 million per structure, \$1 million per vehicle, and a 35 percent contingency cost. Bus lane costs were estimated at \$13 million per downtown mile, \$8 million per suburban mile, and \$4 million per existing right-of-way mile. The projected capital costs

in year of expenditure dollars were \$96 million for the Washington Boulevard Line, \$52 million for the Ogden/WSU Line, \$198 million for the North Davis Line, \$100 million for the South Davis Line, \$235 million for the Tooele Line, \$79 million for the Fort Union Line, \$191 million for the 1300 East Line, \$173 million for the Redwood Road Line, and \$601 million for the Mountain View Line. Total year of expenditure bus rapid transit line costs are anticipated to be \$1,725,000,000. The Foothill/I-215 enhanced bus line, with out specialized vehicles or exclusive right-of-way is anticipated to cost \$80 million in year of expenditure dollars.

Other Capital and Operating Costs:

Many of the miscellaneous costs associated with UTA operations as well as the rideshare operations are included in the operating and maintenance costs discussed in the operating and capital costs above. One important exception is debt service. The Long Range Financial Plan Update assumes that UTA will pay seven percent (1.5 percent more than it earns on its positive balances or 2.8 percent net of inflation) on its yearly debt.

Other capital costs include intermodal centers, transit hubs, additional park-and-ride lots, bus stop improvements, and intelligent transportation system capital projects. Intermodal centers are recommended for Ogden, Salt Lake (600 West 200 South), West Valley, and the Murray/Midvale area. The costs for the first three of these centers were derived from their environmental assessments. The cost for the Murray/Midvale center was estimated to be the same as the West Valley center at \$7.5 million un-inflated dollars. Transit hubs are recommended for each commuter rail station, Weber State University, the Airport/North Temple area, the University of Utah, Sugarhouse, West Jordan, and Fort Union. The cost for each of these hubs was estimated to be \$4.7 million un-inflated dollars. Park-and-rides, in addition to those in fixed-guideway corridors, are recommended for several locations. The cost for each of these park-and-rides was estimated to be \$2.4 million un-inflated dollars. Investments in Intelligent Transit Systems (ITS) and improved transit stop amenities were also recommended in the 2030 LRP Update. Total year of expenditure ITS and transit stop amenity costs are anticipated to be \$128,000,000 and \$46,000,000 respectively. Table IV-3 summarizes projected transit capital and operating costs that will be needed between 2004 and 2030 to expand and improve the existing UTA system.

Table IV-3

**PROJECTED TRANSIT COSTS
(Including Allocated Debt Service)
2004 - 2030**

EXPENDITURE	2004-2012	2013-2022	2023-2030	Total (2004-2030)
Bus Operating Costs	972,000,000	1,832,000,000	2,633,000,000	5,437,000,000
Bus Capital Costs	172,000,000	347,000,000	538,000,000	1,057,000,000
Paratransit Operating Costs	196,000,000	373,000,000	501,000,000	1,070,000,000
Paratransit Capital Costs	17,000,000	28,000,000	30,000,000	75,000,000
BRT & Enhanced Bus Operating Costs	71,000,000	408,000,000	682,000,000	1,161,000,000
BRT & Enhanced Bus Capital Costs	526,000,000	1,389,000,000	0	1,915,000,000
Rail Operating Costs	583,000,000	1,591,000,000	1,796,000,000	3,970,000,000
Rail Capital Costs	1,795,000,000	699,000,000	140,000,000	2,634,000,000
Other Capital and Operating Costs	195,000,000	67,000,000	86,000,000	348,000,000
Total Transit Costs	4,526,000,000	6,735,000,000	6,406,000,000	17,667,000,000

V. FINANCIAL PLAN

The Financial Plan for the Wasatch Front Urban Area was prepared based on the revenue projections and cost estimates discussed in Chapter III and IV, respectively. The projected revenues were allocated to each cost category, including administration, maintenance, management systems, and long range capacity improvements. Since highway and transit revenues and costs were projected separately and since little transfer of funds between modes is anticipated, highway and transit funding are covered separately below.

NEW CAPACITY IMPROVEMENTS

The 2030 LRP Update estimates the cost to provide new capacity for collector and arterial streets that will be needed to meet the transportation demands in 2030. These costs are approximately \$9,524,000,000 in the Wasatch Front Urban Area. The cost for local street construction is not included in these estimates. It is assumed that private developers will build these streets. (Appendix E explains the cost estimating used for recommended freeway and arterial projects.)

HIGHWAY FUNDING PLAN

The Financial Plan assumes that federal funding for highway improvements will grow at moderate rates through the year 2030 and that existing state and local sources will grow at rates based on the trends of the past ten years. In addition, a five-cent per gallon statewide gasoline tax increase every six years beginning in 2006 has been included in the Plan's revenue projections.

The Financial Plan has allocated various revenue sources to the various cost categories. The cost of administration, maintenance, and the system preservation can all be met with projected revenues. In addition, revenues are available to implement the recommendations of the 2030 LRP Update. Table V-1 outlines revenue allocation for statewide and local highway improvements recommended by the 2030 LRP Update. (Appendix G provides more detail on these projected revenues and costs.)

Table V-1

HIGHWAY REVENUE ALLOCATION 2004 - 2030

SOURCE / EXPENDITURE	AMOUNT
Statewide Revenue Available	23,477,000,000
Statewide Highway Operating Costs	(11,168,000,000)
Available Funds for Capacity	12,309,000,000
WFRC's Available Funds for Capacity from State Funds	7,405,000,000
Regional Revenue Available	1,266,000,000
Local Revenue Available	6,337,000,000
Local Highway Operating Costs	(5,285,000,000)
WFRC's Available Funds for Capacity from Local Funds	2,318,000,000
Total WFRC Available Funds for Capacity	9,723,000,000
Total WFRC Highway Project Costs 2004-2030	9,524,000,000

The 2030 LRP Update assumes that Wasatch Front Regional Council will receive 55 percent of the UDOT funding available for capacity projects. This equals approximately \$6,770,000,000 of the \$12,309,000,000 total new capacity funds available for UDOT. WFRC also will receive approximately \$635,000,000 for CHF projects, for a total of \$7,405,000,000 available capacity funds from UDOT. WFRC also estimates that approximately \$2,318,000,000 will be available for Local capacity projects. WFRC's total amount for planning capacity projects is approximately \$9,723,000,000.

TRANSIT FUNDING PLAN

The Financial Plan assumes that federal funding for transit operating costs will continue at current inflation adjusted levels. Federal discretionary funding is projected to provide 52 percent of major transit improvements such as enhanced bus, bus rapid transit, light rail, or commuter rail and 39 percent of all capital costs. Local sales tax revenues are projected to grow at 5.5 percent per year. This is slightly lower than past sales tax growth rates but with the proposed sales tax increase it will roughly double in 2007. Fare revenues will grow so that fares will pay for 20 percent of the operating costs for bus service, just under five percent for paratransit service. Additionally, fares are projected to pay for 40 percent for north/south light rail line and regional commuter rail line services and 30 percent for other rail, bus rapid transit, and enhanced bus lines. Other revenues, including joint development and advertising, are also anticipated to increase.

Transit cost estimates form the basis for the Financial Plan's revenue allocation for the 2030 LRP Update recommended improvements for 2030. Transit costs include an increase in revenue miles for both bus service and paratransit service and increases in UTA's bus fleet to about 890 buses in the Wasatch Front Urban Area. They also include the development of regional commuter rail, the extension of light rail service, the development of a bus rapid transit/enhanced bus system and other transit improvements, including bus stop, park-and-ride lots and transit hubs, rideshare vans, and support equipment. Table V-2, entitled "Transit Revenue Allocation, 2004 – 2030" breaks down revenue allocation by the type of expenditure for the Salt Lake, Ogden and Wasatch Front Region.

Table V-2

TRANSIT REVENUE ALLOCATION (Including Allocated Debt Service) 2004 - 2030

SOURCE / EXPENDITURE	AMOUNT
Federal Revenues	
Section 5307 Formula Grants	1,109,000,000
Section 5309 Discretionary Bus Grants	165,000,000
Section 5309 New Start Grants	2,244,000,000
Other Federal Grants	257,000,000
Local Sale Tax Revenue	11,592,000,000
User Fare Revenue	2,483,000,000
Other Revenue	603,000,000
Total Transit Revenues	18,453,000,000
Total Transit Costs	17,667,000,000

CONCLUSION

The Financial Plan for the Wasatch Front Urbanized Areas provides adequate revenues to not only address the needs to operate and maintain the existing highway and transit systems, but to provide for future demand. A recognized need to increase long range highway capacity is addressed in 177 funded projects designed to improve the overall highway system through increased capacity. The transit portion of the Plan allows for a substantial increase in the existing bus and rideshare van fleet, the expansion of the Region's light rail system, creation of bus rapid transit / enhanced bus corridors and the implementation of regional commuter rail service from Ogden to Provo. Therefore, the Long Range Plan is financially constrained.



APPENDIX A
CENTENNIAL HIGHWAY FUND PROJECTS 1998 - 2007

ROUTE	PROJECT LOCATION	YEAR	AMOUNT
County	Agricultural Access Road	1998	1,501,000
91	1100 South Overpass - Brigham City	1998 - 2006	22,000,000
6	Soldier Summit to Helper	1998 - 2006	32,000,000
6	Price to Green River	1999 - 2004	12,000,000
10	Price to State Route Interstate 70	2000 - 2004	5,000,000
County	Cache Valley Highway	1998 - 1999	608,000
89	Logan Canyon	2002 - 2005	19,000,000
91	Smithfield to Idaho State Line	2000 - 2005	30,000,000
89	Mountain Road Interstate 15 to Harrison Blvd.	1998 - 2005	101,270,000
County	Legacy Highway in Farmington to Interstate 80	1998 - 2007	468,193,000
15	Interstate 15 North Expansion and HOV Ramp	1999 - 2001	28,283,000
15	Interstate 15 from 600 North to Centerville	1998 - 2004	1,487,000
20	Interstate 15 to US Highway 89	1998 - 2005	15,000,000
191	Moab to Interstate 70 at Crescent Junction	1998 - 2005	20,000,000
56	Interstate 15 to Iron Springs Road	1998 - 2004	12,000,000
Local	2000 East Extension to Interstate 15	2002 - 2007	0
68	Redwood Road from 9000 South to 12300 South	1999 - 2005	50,000,000
71	12300 South from 700 East to Bangerter Highway	1998 - 2005	91,300,000
80	Interstate 80 from State Street to Parley's Canyon	1998 - 2007	45,000,000
171	3500 South from 2700 West to 8400 West	2001 - 2007	50,000,000
173	5400 South, Railroad Crossing at 4800 West	1998 - 2000	5,173,000
201	2100 South from Bangerter Highway to the Jordan River	2003 - 2005	66,000,000
151	10600 South from I-15 to Redwood Road	2001 - 2006	43,000,000
191	Blanding to Moab	2001 - 2005	10,000,000
80	Interstate 80 at Silver Creek Junction	1999 - 2001	22,000,000
36	Tooele to Lakepoint	1998 - 2006	49,000,000
6	Interstate 15 to Soldier Summit	1998 - 2005	17,000,000
15	South University Avenue in Provo	1998 - 2003	0
15	University Avenue to Center Street in Provo	2003 - 2003	32,000,000
15	1200 South in Orem	1998 - 2000	18,500,000
52	800 North in Orem from Interstate 15 to Olmsted Junction	2002 - 2005	40,000,000
15	Pleasant Grove	1998 - 2003	16,518,000
189	Provo Canyon from Wildwood to Heber City	1999 - 2005	45,000,000
County	Southern Corridor	1998 - 1999	2,000,000
15	Washington Interchange	1998 - 2005	26,000,000
18	Bluff Street and Sunset Interchange	1998 - 2001	2,627,000
15	Interstate 15 from 31 st Street to 2700 North in Ogden	2004 - 2007	180,000,000
79	31 st Street from Wall Street to Harrison Blvd. in Ogden	1999 - 2005	35,000,000
134	2700 North from Interstate 15 to Washington Blvd.	2002 - 2004	11,000,000
26	Riverdale Road from Interstate 15 to Washington Blvd.	2002 - 2006	28,000,000
15	11400 South Interchanges	1998 - 2006	42,000,000
154	Bangerter Highway from 90 th South to Interstate 15	1998 - 2003	103,233,000
TOTAL			1,798,693,000



APPENDIX B
LONG RANGE TRANSPORTATION PLAN UPDATE
HIGHWAY PROJECTS 2004 – 2030

ID	STREET	FROM	TO	TYPE	LENGTH (MILES)	2030 FUNC CLASS	PHASE		PHASE COST
							1=04-2012	2=13-2022	
* Indicates projects added since 2002-2030 Long Range Plan									
SALT LAKE COUNTY, EAST-WEST FACILITIES									
1	500 / 700 South	Surplus Canal	Mountain View Corridor	Widening	4.2	Collector	2		\$25,600,000
2	Indiana Avenue	Redwood Road	Pioneer Road	Widening	1.1	Collector	2		\$6,700,000
3	Indiana Avenue	Pioneer Road	California Avenue	New Construction	1.7	Collector	2		\$10,400,000
4	California Avenue	Pioneer Road	Bangerter Hwy.	Widening	1.7	M. Arterial	2		\$12,000,000
5	California Avenue	Bangerter Hwy.	4800 West	Widening	0.8	M. Arterial	2		\$5,700,000
6	California Avenue	4800 West	Mountain View Corridor	Widening	1.0	M. Arterial	2		\$7,100,000
7	I-80	State Street	Parleys Canyon	Widening	5.6	Freeway	2		\$900,000,000
8	SR-201	Jordan River	3200 West	Widening	2.6	Freeway	1		\$65,000,000
9	SR-201	3200 West	Mountain View Corridor	Widening	3.4	Freeway	2		\$105,000,000
10	SR-201	I-215 Interchange and Auxiliary	Lanes	Upgrade	-	Freeway	3		\$125,000,000
11	SR-201 Interchange	@ 7200 West		New Construction	0.0	Freeway	2		\$15,600,000
12	SR-201 Interchange	@ 8400 West		New Construction	0.0	Freeway	2		\$15,600,000
* 104	2700 South	4800 West	5600 West	New Construction	1.4	M. Arterial	1		\$6,500,000
13	3100 South	1400 West	3300 South	New Construction	0.5	Collector	1		\$3,700,000
* 14	3500 South	Redwood Road	4000 West	Widening	1.5	P. Arterial	1		\$13,300,000
15	3500 South	4000 West	Mountain View Corridor	Widening	2.3	P. Arterial	1		\$20,300,000
* 16	3500 South	Mountain View Corridor	8400 West	Widening	3.2	P. Arterial	2		\$37,400,000
17	3900 South	2300 East	Highland Drive	Widening	1.0	M. Arterial	1		\$5,200,000
18	4500 South	2300 East	700 East	Widening	2.4	P. Arterial	3		\$26,300,000
19	4500 South	I-15	State Street	Widening	0.7	P. Arterial	1		\$3,900,000
20	4700 South	I-15	Redwood Road	Widening	2.0	P. Arterial	2		\$19,100,000
21	4700 South	4000 West	Mountain View Corridor	Widening	2.3	P. Arterial	2		\$14,000,000
23	6200 South	5600 West	SR-111	New Construction	1.8	M. Arterial	2		\$11,000,000
* 112	7000 South	3000 East	Wasatch Blvd.	Widening	1.0	M. Arterial	1		\$4,600,000
24	7000 South	Redwood Road	Bangerter Hwy.	Widening	1.9	M. Arterial	2		\$11,600,000
25	New Bingham Hwy.	7800 South	SR-111	Widening	4.4	M. Arterial	3		\$42,100,000
26	7800 South	2700 West	Bangerter Hwy.	Widening	1.0	M. Arterial	1		\$5,600,000
27	7800 South	Bangerter Hwy.	Mountain View Corridor	Widening	2.8	M. Arterial	1		\$15,500,000
* 222	7800 South	Mountain View Corridor	SR-111	Widening	1.4	M. Arterial	2		\$17,500,000
28	9000 South / 9400 South	700 East	1300 East	Widening	1.3	P. Arterial	1		\$7,200,000
30	9000 South	Bangerter Hwy.	New Bingham Hwy.	Widening/NC	3.1	P. Arterial	1		\$17,200,000
29	9400 South	2100 East	Wasatch Boulevard	Widening	2.1	P. Arterial	3		\$20,100,000
31	9800 South/10000 South	1300 West	Redwood Road	New Construction	0.5	Collector	1		\$2,300,000
32	10600 South	1300 East	Highland Drive	Widening	0.9	M. Arterial	1		\$4,200,000
33	10400 South	Redwood Road	Bangerter Hwy.	Widening	2.0	M. Arterial	1		\$11,100,000
34	10400 South	Bangerter Hwy.	SR-111	New Construction	5.0	M. Arterial	2		\$47,700,000
35	11400 South	1300 East	Highland Drive	Widening	1.1	M. Arterial	3		\$9,600,000
37	11400 South	I-15	700 East	Widening	1.2	M. Arterial	1		\$6,700,000
38	11400 South	I-15	Redwood Road	Widening/NC	2.3	M. Arterial	1		\$24,500,000
39	11400 South	Redwood Road	Bangerter Hwy.	Widening	2.4	M. Arterial	2		\$17,600,000
40	11400 South / 11800 South	Bangerter Hwy.	SR-111	Widening/NC	4.9	M. Arterial	2		\$46,800,000
42	12600 South	Bangerter Hwy.	5200 West	Widening	2.0	P. Arterial	3		\$23,500,000
43	12600 South	5200 West	SR-111	Widening/NC	3.7	P. Arterial	3		\$56,400,000
44	13400 South	Mountain View Corridor	Bangerter Hwy.	Upgrade	1.0	P. Arterial	3		\$12,500,000
45	14600 South	D&RG RR Structure		Remove, Replace	0.0	M. Arterial	3		\$4,100,000
46	Porter Rockwell Road	Frontage Road	Redwood Road	New Construction	1.7	P. Arterial	3		\$28,800,000
47	Porter Rockwell Road	I-15/14600 South Interchange	Frontage Road	Widening	1.1	P. Arterial	3		\$18,600,000
48	Avalanche snowshed over Little Cottonwood Canyon Road	@ Whitepine Chutes		New Construction	0.0	M. Arterial	1		\$13,000,000

**LONG RANGE TRANSPORTATION PLAN UPDATE
HIGHWAY PROJECTS 2004 - 2030
(Continued)**

ID	STREET	FROM	TO	TYPE	LENGTH (MILES)	2030 FUNC CLASS	PHASE	
							1=04-2012 2=13-2022 3=23-2030	PHASE COST
SALT LAKE COUNTY, NORTH-SOUTH FACILITIES								
84	8400 West/SR-111	SR-201	3500 South	Widening	1.5	P. Arterial	3	\$21,100,000
85	8400 West/SR-111	5400 South	11800 South	Widening	8.5	P. Arterial	3	\$101,300,000
78	Mountain View Corridor	I-80	Utah County Line	ROW Purchase	25.5	Various	1	\$33,500,000
79	MVC / 5600 West	I-80	2100 South	Widen/NC	3.3	P. Arterial	3	\$36,900,000
80	Mountain View Corridor	2100 South	6200 South	New Construction	6.0	Freeway	1	\$353,000,000
81	Mountain View Corridor	6200 South	10500 South	New Construction	5.9	Freeway	2	\$459,700,000
231	Mountain View Corridor	10500 South	13400 South	New Construction	3.4	Freeway	2	\$79,500,000
82	Mountain View Corridor	10500 South	13400 South	New Construction	3.4	Freeway	3	\$345,600,000
83	Mountain View Corridor	13400 South	Utah County Line	New Construction	6.9	P. Arterial	3	\$63,200,000
77	5600 West	4400 South	6200 South	Widening	2.5	M. Arterial	1	\$13,900,000
75	Gladiola (3400/3200 W)	500 South	California Avenue	Widening/NC	1.2	Collector	2	\$7,300,000
76	3200 West	California Avenue	1820 South	New Construction	0.7	Collector	2	\$4,300,000
74	2200 West	2200 North	700 North	Widening	2.0	Collector	2	\$12,200,000
54	I-215	I-80 (West Side)	300 East	Widening	11.2	Freeway	1	\$58,900,000
55	I-215 Interchange	@ 3900 South or 4500 South		Upgrade	0.0	Freeway	3	\$50,900,000
72	Redwood Road	Davis County Line	1000 North	Widening	2.2	M. Arterial	2	\$16,200,000
73	Redwood Road	10400 South	Bangerter Hwy.	Widening	4.3	P. Arterial	1	\$32,500,000
101	Redwood Road	Bangerter Hwy.	Utah County Line	Widening	4.8	P. Arterial	1	\$26,600,000
71	900 West	3300 South	700 West	New Construction	0.9	Collector	2	\$5,500,000
70	Bingham Junction Blvd.	6800 South	8400 South	New Construction	2.1	M. Arterial	2	\$20,100,000
49	I-15	I-215	Beck Street	Upgrade	1.2	Freeway	1	\$4,000,000
88	I-15	I-215	Beck Street	Widening	1.2	Freeway	3	\$122,000,000
50	I-15	Beck Street	600 North	Widening	3.0	Freeway	3	\$305,000,000
51	I-15	10600 South	Bangerter Highway	Widening	3.8	Freeway	1	\$25,300,000
52	I-15	Bangerter Highway	Utah Co. Line	Widening	3.9	Freeway	1	\$11,500,000
* 221	I-15	10600 South	Utah Co. Line	Widening	7.7	Freeway	2	\$32,800,000
36	I-15 Interchange	@ 11400 South		New Construction	0.0	Freeway	1	\$22,400,000
53	I-15 Interchange	@ 14600 South		Upgrade	0.0	Freeway	3	\$20,400,000
56	Main Street	4400 South	Vine Street	New Construction	0.9	Collector	2	\$5,500,000
57	Main Street / 300 West	5200 South	7200 South	Widening/NC	3.1	Collector	1	\$14,300,000
58	State Street	7200 South	11400 South	Widening	5.3	M. Arterial	1	\$38,100,000
59	700 East	9400 South	12300 South	Widening	3.7	P. Arterial	1	\$20,500,000
60	900 East	2900 South	4500 South	Widening	2.1	Collector	3	\$16,700,000
61	900 East	Van Winkle Expressway	6600 South	Widening	2.4	P. Arterial	1	\$11,100,000
63	2000 East	Fort Union Blvd.	9400 South	Widening	3.1	P. Arterial	3	\$29,700,000
64	Highland Drive	9400 South	Sego Lily	Widening/NC	1.2	P. Arterial	1	\$6,700,000
65	Highland Drive	Sego Lily	13800 South	New Construction	4.4	P. Arterial	2	\$63,400,000
66	Highland Drive Conn.	13800 South	I-15	Widening/NC	2.6	P. Arterial	2	\$19,100,000
67	I-80 to I-215 Ramp	I-80 Eastbound	I-215 Southbound	Widening	0.5	Freeway	2	\$3,200,000
68	Wasatch Boulevard	7000 South	North Little Cotton Road	Widening	2.2	P. Arterial	2	\$16,200,000
69	Wasatch Boulevard	North Little Cotton Road	Little Cottonwood Road	Widening	1.1	Collector	1	\$5,100,000
SALT LAKE AREA ILLUSTRATIVE PROJECTS								
98	I-215	I-15 (North Salt Lake)	I-80 (West Side)	Widening	6.3	Freeway		Illustrative
99	I-215	300 East	2000 East	Widening	3.5	Freeway		Illustrative
100	SR-201	Mountain View Corridor	I-80	Widening	8.9	Freeway		Illustrative
102	Foothill Drive	1700 South	I-80	Widening	1.5	P. Arterial		Illustrative
SALT LAKE AREA PROJECTS FROM 2002 PLAN - COMPLETED, DELETED, MODIFIED, OR UNDER CONSTRUCTION								
22	6200 South	2700 West	5600 West	Widening	3.5	M. Arterial		Under Construction
26	7800 South	Redwood Road	2700 West	Widening	1.2	M. Arterial		Under Construction
27	9800 South/10000 South	I-15	1300 West	New Construction	1.5	Collector		Completed
41	12300 South/12600 South	900 East	Bangerter Hwy.	Widening	6.4	P. Arterial		Under Construction
62	1300 East	Creek Road	7800 South	Widening	0.6	M. Arterial		Completed
73	Redwood Road	9000 South	10400 South	Widening	1.8	P. Arterial		Under Construction
104	2700 South	Bangerter Hwy.	Mountain View Corridor	New Construction	1.2	M. Arterial		Completed
106	3500 South Interchange	@ I-215		Improve flow	0.0	Freeway		Completed
107	5400 South	RR Structure @ 4800 West		Widening	0.0	M. Arterial		Completed
112	7000 South	1700 East	3000 East	Widening	1.7	M. Arterial		Completed
114	10400 South / 10600 South	I-15	Redwood Road	Widening	2.3	M. Arterial		Completed
121	1300 East	Van Winkle Expressway	5900 South	Widening	2.0	M. Arterial		Completed
124	5600 West	2100 South	4400 South	Widening	2.0	M. Arterial		Completed

**LONG RANGE TRANSPORTATION PLAN UPDATE
HIGHWAY PROJECTS 2004 - 2030
(Continued)**

ID	STREET	FROM	TO	TYPE	LENGTH (MILES)	2030 FUNC CLASS	PHASE		PHASE COST
							1=04-2012 2=13-2022 3=23-2030		
DAVIS COUNTY, EAST-WEST FACILITIES									
127	2300 North (Clinton)	RR Structure		Remove, Replace	0.2	Collector		1	\$2,400,000
128	1800 North	Main Street (Sunset)	2000 West (Clinton)	Widening	2.0	M. Arterial		3	\$24,900,000
129	1800 North (Clinton)	2000 West	5000 West	Widening	3.0	M. Arterial		2	\$18,300,000
130	700 South	State Street (Clearfield)	South Main Street	Widening	0.6	M. Arterial		1	\$5,300,000
131	200 South/700 S Conn.	200 South (Clearfield)	700 South (Clearfield)	New Construction	0.7	M. Arterial		1	\$3,300,000
132	200 South	500 West (Clearfield)	2000 West	Widening/NC	1.6	M. Arterial		1	\$14,200,000
133	200 South (Syracuse)	2000 West	Legacy Parkway	New Construction	1.3	M. Arterial		2	\$7,900,000
135	Syracuse Road (SR-108)	1000 West	2000 West	Widening	1.0	M. Arterial		1	\$5,600,000
136	Syracuse Road (SR-127)	2000 West	4500 West	Widening	2.5	M. Arterial		2	\$18,400,000
139	Antelope Drive	2200 East	US-89	New Construction	0.6	M. Arterial		2	\$3,700,000
140	Gordon Avenue (1000 N.)	1600 East	US-89	New Construction	1.3	Collector		2	\$7,900,000
137	Hill Field Road Extension	2200 West	3200 West (Layton)	New Construction	2.1	M. Arterial		2	\$15,400,000
141	Gentile St (Layton)	SR 126	Fairfield Road	Widening	1.0	M. Arterial		1	\$4,600,000
142	Gentile St (Layton)	Fairfield Road	1350 East (Oakhills Dr)	Widening	0.3	M. Arterial		2	\$1,900,000
143	Oakhills Drive (SR-109)	1350 East	US-89	Widening	1.5	M. Arterial		2	\$9,200,000
144	700 South (Layton)	I-15	2700 West (Layton)	New Construction	3.1	M. Arterial		2	\$29,600,000
145	200 North (Kaysville)	700 East	US-89	Widening	0.6	M. Arterial		1	\$2,800,000
146	200 North (Kaysville)	I-15	Legacy Parkway	Widening	3.0	M. Arterial		2	\$18,300,000
90	Parrish Lane (Centerville)	I-15	Legacy Parkway	Widening/NC	0.6	M. Arterial		1	\$2,800,000
92	500 South	I-15	Legacy Parkway	Widening	2.0	M. Arterial		1	\$11,100,000
DAVIS COUNTY, NORTH-SOUTH FACILITIES									
157	Legacy Parkway	5500 South (Roy)	I-15/US-89	ROW Purchase	17.7	P. Arterial		1	\$23,600,000
158	Legacy Parkway	Weber Co. Line	Syracuse Road	New Construction	4.5	P. Arterial		2	\$38,600,000
159	Legacy Parkway	Syracuse Road	Gentile St (Layton)	New Construction	3.0	P. Arterial		3	\$33,600,000
227	Legacy Parkway	Gentile St (Layton)	I-15/US-89 (Farmington)	New Construction	9.4	P. Arterial		1	\$30,500,000
228	Legacy Parkway	Gentile St (Layton)	I-15/US-89 (Farmington)	Widening	9.4	P. Arterial		2	\$40,300,000
94	Legacy Parkway	I-15/US-89 (Farmington)	I-215	New Construction	12.0	Freeway		1	\$451,000,000
155	2000 West (SR-108)	Syracuse Road (SR-108)	Weber County Line	Widening	4.5	M. Arterial		1	\$24,900,000
156	2700 West (Layton)	Hill Field Road Extension	Legacy Parkway	New Construction	1.4	M. Arterial		2	\$16,400,000
93	Redwood Road	500 South (Davis Co.)	Salt Lake Co. Line	Widening	4.3	M. Arterial		2	\$31,500,000
147	I-15	Weber Co. Line	Hillfield Road (SR-232)	Widening	6.4	Freeway		3	\$711,500,000
138	I-15 Interchange	@ Hillfield Road		Upgrade	0.0	Freeway		2	\$31,200,000
148	I-15 Interchange	@ South Layton Interchange		Upgrade	0.0	Freeway		1	\$29,500,000
86	I-15	US-89 (Farmington)	500 S. (Davis Co)	Widening	7.1	Freeway		3	\$721,700,000
149	I-15 Interchange	@ Glovers Lane or Lund Lane		New Construction	0.0	Freeway		3	\$50,900,000
89	I-15 Interchange	@ Parrish Lane		Widening	0.0	Freeway		1	\$10,600,000
87	I-15	500 S. (Davis Co)	I-215	Widening	3.6	Freeway		2	\$374,000,000
150	Main Street	200 North (Kaysville)	I-15 (Layton)	Widening	1.5	M. Arterial		1	\$8,300,000
151	Fort Lane (Layton)	Main Street	Gordon Avenue (1000 N.)	Widening	1.6	Collector		1	\$7,400,000
152	Fairfield Road	200 North (Kaysville)	Gentile St (Layton)	Widening	1.6	M. Arterial		2	\$9,800,000
153	Fairfield Road	Gentile St (Layton)	SR-193	Widening	2.9	M. Arterial		2	\$17,700,000
154	Church Street	Gordon Avenue (1000 N.)	SR-193	Widening	2.1	Collector		2	\$12,800,000
91	Bountiful Blvd.	Eaglewood	Beck Street	New Construction	3.1	Collector		2	\$15,000,000
160	US-89	I-15 (Farmington)	I-84	Widening	11.1	Freeway		3	\$338,500,000
166	US-89 Interchange	@ Antelope Drive		New Construction	0.0	Freeway		2	\$46,800,000
165	US-89 Interchange	@ Gordon Avenue		New Construction	0.0	Freeway		2	\$31,200,000
164	US-89 Interchange	@ Oakhills Drive (SR-109)		New Construction	0.0	Freeway		2	\$46,800,000
163	US-89 Interchange	@ 400 North (Fruit Heights)		New Construction	0.0	Freeway		1	\$45,900,000

**LONG RANGE TRANSPORTATION PLAN UPDATE
HIGHWAY PROJECTS 2004 - 2030
(Continued)**

ID	STREET	FROM	TO	TYPE	LENGTH (MILES)	2030 FUNC CLASS	PHASE		PHASE COST
							1=04-2012 2=13-2022 3=23-2030		
WEBER COUNTY, EAST-WEST FACILITIES									
171	Mountain Road	2700 North	US-89	New Construction	5.6	M. Arterial	3		\$39,900,000
174	Pioneer Road	I-15	1200 West	Widening	0.9	Collector	2		\$9,400,000
175	Pioneer Road / 2nd Street	1200 West	Wall Avenue	Widening	1.8	Collector	1		\$13,000,000
176	2nd Street	Wall Avenue	Washington Blvd.	Widening	0.4	Collector	2		\$3,900,000
177	12th Street (SR 39)	1200 West	Wall Ave	Widening	1.6	P. Arterial	2		\$15,300,000
178	1200 South	I-15	Legacy Parkway	Widening	4.4	P. Arterial	3		\$68,100,000
180	24th Street	I-15	Lincoln Avenue	Widening	1.7	M. Arterial	3		\$76,800,000
181	Hinckley Drive	I-15	Wall Ave	Widening	0.8	P. Arterial	1		\$5,800,000
184	40th Street	Wall Avenue	Gramercy Avenue	Widening	1.6	M. Arterial	1		\$7,400,000
185	4000 South (SR-37)	1900 W (SR-126) (Roy)	4700 W (W. Haven)	Widening	3.5	M. Arterial	2		\$21,300,000
186	Midland Drive (SR-108)	SR-126 @ SR-79	3500 West (Roy)	Widening/NC	2.6	M. Arterial	1		\$14,400,000
187	4800 South	1900 W (SR-126) (Roy)	3500 West (Roy)	Widening	2.0	Collector	1		\$9,200,000
188	5500 South	3500 West (Roy)	5900 West (Hooper)	Widening	3.1	M. Arterial	2		\$18,900,000
189	5600 South Conn.	I-15	I-84	New Construction	1.2	M. Arterial	2		\$7,800,000
190	Edgewood Dr	Adams Avenue	Glassman Way	New Construction	0.4	Collector	1		\$1,500,000
WEBER COUNTY, NORTH-SOUTH FACILITIES									
212	Legacy Parkway	5500 South (Roy)	12th Street	ROW Purchase	5.7	Various	1		\$17,700,000
213	Legacy Parkway	5500 South (Roy)	Davis Co. Line	New Construction	0.8	P. Arterial	2		\$6,900,000
191	4700 West	4000 South	4800 South	New Construction	1.0	M. Arterial	2		\$7,400,000
200	3500 West (SR-108)	Midland Drive	Davis County Line	Widening	1.6	M. Arterial	1		\$8,900,000
208	I-15	2700 North	450 North	Widening	2.6	Freeway	3		\$180,200,000
230	I-15	450 North	12th Street	Widening	1.8	Freeway	2		\$95,700,000
209	I-15	12th Street	31st Street	Widening	4.8	Freeway	1		\$180,000,000
210	I-15	31st Street	Davis Co. Line	Widening	4.1	Freeway	3		\$477,800,000
179	I-15 Interchange	@ 24th Street		Upgrade	0.0	Freeway	1		\$11,800,000
211	I-15 Interchange	@ I-84		Upgrade	0.0	Freeway	3		\$81,400,000
* 229	I-15 Interchange	@ Riverdale Road (SR-26)		Upgrade	0.0	Freeway	1		\$10,400,000
196	1200 West	12th Street	400 North	Widening	1.6	M. Arterial	2		\$11,800,000
195	1200 West	17th Street	12th Street	Widening	0.6	Collector	1		\$2,800,000
194	1100/1200 West	Weber River	17th Street	New Construction	0.3	Collector	1		\$1,400,000
193	1100 West	20th Street	Weber River	Widening	0.3	Collector	1		\$1,400,000
204	Riverdale Road (SR-26)	SR-126	Wall Ave	Widening	3.0	P. Arterial	1		\$29,400,000
205	Riverdale Road (SR-26)	Wall Ave	Washington Blvd.	Widening	0.7	P. Arterial	1		\$6,900,000
198	300 West	Riverdale Road	4400 South	Widening	0.5	Collector	1		\$2,800,000
199	300 West	4400 South	4800 South	Widening	0.3	Collector	1		\$1,400,000
201	Wall Avenue	2700 North	US-89	New Construction	2.4	Collector	3		\$23,700,000
192	Monroe Boulevard	1300 North	2700 North	New Construction	2.0	M. Arterial	2		\$14,700,000
202	Harrison Blvd.	400 North	7th St	Widening	1.0	Collector	2		\$7,400,000
203	Harrison Blvd.	12th St	US-89	Widening	6.1	P. Arterial	2		\$44,700,000
226	US-89	I-84	Harrison Blvd.	Widening	1.9	Freeway	1		\$33,600,000
214	US-89 Interchange	@ Uintah/I-84		Upgrade	0.0	Freeway	1		\$70,700,000
206	Skyline Drive	US-89	Country Hills Dr	New Construction	3.6	Collector	2		\$21,900,000
207	Skyline Drive	Country Hills Dr	36th Street	Widening	0.9	Collector	2		\$5,500,000
OGDEN / LAYTON AREA ILLUSTRATIVE PROJECTS									
169	I-15	Hillfield Road (SR-232)	US-89	Widening	7.4	Freeway			Illustrative
170	Legacy Parkway	5500 South (Roy)	1200 South	New Construction	5.7	P. Arterial			Illustrative
OGDEN / LAYTON AREA PROJECTS FROM 2002 PLAN - COMPLETED, DELETED, MODIFIED, OR UNDER CONSTRUCTION									
134	Syracuse Road (SR-108)	Main Street (Clearfield)	1000 West	Widening	1.0	M. Arterial			Under Construction
137	Hill Field Road Extension	Angel Street	2200 West (Layton)	New Construction	1.0	M. Arterial			Completed
161	US-89 Interchange	@ Burke Lane		New Construction	0.0	Freeway			Under Construction
162	US-89 Interchange	@ Shepard Lane		New Construction	0.0	Freeway			Under Construction
172	2700 North (SR-134)	1900 West (SR-126)	US-89	Widening	1.1	P. Arterial			Under Construction
173	2700 North	US-89	400 East (N. Ogden)	New Construction	1.9	M. Arterial			Under Construction
182	30th Street / 31st Street	Wall Avenue	Washington Blvd.	Widening	0.4	P. Arterial			Under Construction
183	30th Street	Washington Blvd.	Harrison Blvd.	Widening	1.1	P. Arterial			Under Construction
184	40th Street	Gramercy Avenue	Harrison Blvd.	Widening	0.6	M. Arterial			Under Construction
197	1900 West (SR-126)	Weber River	12th Street	Widening	0.4	M. Arterial			Under Construction
215	200 South/Center Conn.	500 West (Clearfield)	SR-126 (Clearfield)	New Construction	0.7	Collector			Completed

The estimated total costs for all recommended 2030 LRP Update highway improvement projects are summarized in the table below. These estimated cost totals are divided into Phase 1 (2004 through 2012), Phase 2 projects (2013 through 2022), and Phase 3 projects (2023 through 2030) for both the Salt Lake and Ogden / Layton Urbanized Areas.

**LONG RANGE TRANSPORTATION PLAN UPDATE
COST SUMMARY FOR HIGHWAY PROJECTS
2004 - 2030**

Estimated Cost of all Salt Lake Urbanized Area Phase 1 Highway Projects	907,200,000
Estimated Cost of all Salt Lake Urbanized Area Phase 2 Highway Projects	2,082,000,000
Estimated Cost of all Salt Lake Urbanized Area Phase 3 Highway Projects	1,456,300,000
Total 2030 Salt Lake Urbanized Area Projects	4,445,500,000
Estimated Cost of all Ogden / Layton Urbanized Area Phase 1 Highway Projects	1,114,300,000
Estimated Cost of all Ogden / Layton Urbanized Area Phase 2 Highway Projects	1,135,300,000
Estimated Cost of all Ogden / Layton Urbanized Area Phase 3 Highway Projects	2,829,000,000
Total 2030 Ogden / Layton Urbanized Area Projects	5,078,600,000
Estimated Cost of all Wasatch Front Phase 1 Highway Projects	2,021,500,000
Estimated Cost of all Wasatch Front Phase 2 Highway Projects	3,217,300,000
Estimated Cost of all Wasatch Front Phase 3 Highway Projects	4,285,300,000
Total 2030 Wasatch Front Highway Projects	9,524,100,000



APPENDIX C
LONG RANGE TRANSPORTATION PLAN UPDATE
TRANSIT PROJECTS
2004 - 2030

Description			Phase	Capital Cost
Project	Type Improvement	General Location(s)		
ALL COUNTIES				
Salt Lake - Provo Commuter Rail	New Construction	Current Union Pacific mainline ROW	1	210,000,000
Ogden-Salt Lake Commuter Rail	New Construction	Current Union Pacific mainline ROW	1	346,000,000
Park-and-Ride lots	New Construction	Three locations as needed region wide	1	10,000,000
WEBER COUNTY				
North Weber Commuter Rail	New Construction	Current Union Pacific mainline	1	81,000,000
Washington Bus Rapid Transit	New Construction	3100 No. to about Harrison Blvd.	1	96,000,000
Ogden/WSU Bus Rapid Transit	New Construction	24 th Street & Harrison Blvd. to Wash. Blvd.	1	52,000,000
North Davis (Ogden-Clearfield) Bus Rapid Transit	New Construction	Ogden Intermodal Center to Clearfield Commuter Rail Station	2	153,000,000
DAVIS COUNTY				
North Davis (Ogden-Clearfield) Bus Rapid Transit	New Construction	Ogden Intermodal Center to Clearfield Commuter Rail Station	2	153,000,000
North Davis (Layton) Bus Rapid Transit	New Construction	Clearfield Commuter Rail Station to Layton Commuter Rail Station	2	60,000,000
North Davis (Kaysville) Bus Rapid Transit	New Construction	Layton Commuter Rail Station to Farmington Commuter Rail Station	2	45,000,000
South Davis (North of Parrish Ln.) Bus Rapid Transit	New Construction	Farmington Commuter Rail Station to Parrish Lane	2	18,000,000
South Davis (South of Parrish Ln.) Bus Rapid Transit	New Construction	Parrish Lane to downtown Salt Lake City	1	82,000,000
Layton Transit Hub	Upgrade	Layton Commuter Rail Station	1	3,000,000
Woods Cross Transit Hub	Upgrade	Near 500 South and I-15	1	3,000,000
SALT LAKE COUNTY				
Airport LRT and/or BRT Line	New Construction	Downtown Salt Lake City to Salt Lake International Airport	1	298,000,000
Sugarhouse LRT Line	New Construction	Sandy LRT Line at about 2300 So. to about 1100 East	1	40,000,000
West Valley LRT Line	New Construction	Sandy LRT Line at about 2300 So. to West Valley Intermodal Ctr.	1	245,000,000
3500 South LRT Line	New Construction	West Valley Intermodal Ctr. to 8400 W. to Hwy. 201	2	439,000,000
Fort Union BRT Line	New Construction	Sandy LRT Line at about Fashion Place West to Fort Union	2	79,000,000
Mid Jordan LRT	New Construction	Sandy LRT Line at about Fashion Place West to Bangert Hwy.	1	151,000,000
Traverse East (North of 14600 So) LRT and/or BRT	New Construction	Draper LRT Line at 12300 So. to 14600 So.	2	195,000,000
Traverse East (South of 14600 So) LRT and/or BRT	New Construction	14600 So. to Utah County	3	103,000,000
Sandy LRT Line Efficacy Improvements	Upgrade	Main Street SLC to 10000 South	1	80,000,000
Draper LRT Line	New Construction	10000 South to 12300 South	1	76,000,000
1300 East (North) BRT Line	New Construction	University of Utah to Fort Union	1	71,000,000
1300 East (South) BRT Line	New Construction	Fort Union to about 12300 South	2	120,000,000

**LONG RANGE TRANSPORTATION PLAN UPDATE
TRANSIT PROJECTS
2004 - 2030
(Continued)**

Description			Phase	Capital Cost
Project	Type Improvement	General Location(s)		
Redwood (North) BRT Line	New Construction	North Temple to Mid-Jordan Line (about 8000 South)	1	107,000,000
Redwood (South) BRT Line	New Construction	Mid-Jordan Line (about 8000 South) to 14400 South	2	65,000,000
Foothill Blvd Enhanced Bus	New Construction	University of Utah to Interstate 80	1	7,000,000
Interstate 215 East Belt Enhanced Bus	New Construction	Interstate 80 to Fort Union	2	73,000,000
Mountain View (North) BRT Line	New Construction	S.L. International Airport to Mt. View Corridor to 4700 So.	2	206,000,000
Mountain View (South) BRT Line	New Construction	4700 So. to 13400 So. to Bangerter Hwy. to Traverse E. Line	2	395,000,000
Gateway Intermodal Center	New Construction	Near 600 West 200 South	1	33,000,000
Mid-Valley Intermodal Center	Upgrade	LRT / Commuter Rail Station	1	5,000,000
West Valley Intermodal Center	New Construction	Valley Fair Mall	1	3,000,000
University of Utah Transit Hub	New Construction	LRT Station	1	2,000,000
North Temple Transit Hub	New Construction	LRT Station near Redwood Road		3,000,000
Union Park Transit Hub	New Construction	Union Park Area	1	3,000,000
West Jordan Transit Hub	New Construction	Near SL Community College Jordan Campus	1	3,000,000
Sandy/South Jordan Transit Hub	Upgrade	Sandy Civic Center	1	3,000,000

* List excludes maintenance facilities that are included in the capital costs on a per new vehicle basis but of which the number and location of such facilities are to be determined.

APPENDIX D

MAINTENANCE AND PAVEMENT PRESERVATION

Wasatch Front Regional Council staff sent out a memo requesting all the cities and counties financial reports on maintenance and pavement preservation. About 80 percent of the cities and counties provided financial reports to be analyzed. Costs used for maintenance and pavement preservation for the cities and counties who did not turn in reports were interpolated from lane miles. The city and county costs per lane mile were then averaged for the Wasatch Front Urban Area. The maintenance cost per lane mile is \$1,520 per mile and the pavement preservation cost per lane mile is \$4,107 per mile. There are approximately 8,875 lane miles of local, arterial and collector roads that the cities and counties in the Wasatch Front Urban Area are responsible for. The table below and on the following page summarizes the maintenance and pavement preservation costs for the Wasatch Front Urban Area.

WASATCH FRONT URBAN AREA MAINTENANCE AND PAVEMENT PRESERVATION COSTS FOR 2001

City or County	Maintenance Costs	Periodic Treatment Costs	Reconstruct Costs	Miscellaneous	Local Lane Miles	Maintenance Cost Per Local Lane Mile	Pavement Management Cost Per Local Lane Mile
Davis County	0	0	328,085	17,109	123	139	0
Bountiful City	90,000	597,798	379,000	387,000	293	1,628	1,120
Centerville City	45,200	270,000	534,887	30,800	107	711	9,139
Clearfield City	0	50,000	391,111	50,000	112	444	7,155
Clinton City	0	45,000	316,559	0	69	0	6,407
Farmington City	109,000	36,620	370,769	193,800	107	2,822	3,370
Fruit Heights City	9,000	0	198,000	19,100	31	912	13,217
Kaysville City	46,000	44,000	1,197,000	125,000	126	1,356	1,571
Layton City	30,000	700,000	1,000,000	142,000	394	437	3,152
North Salt Lake City	4,120	132,546	410,013	129,256	62	2,138	27,246
South Weber City	16,000	5,000	57,500	19,578	40	893	13,617
<i>Sunset</i>	<i>15,920</i>	<i>70,969</i>	<i>179,258</i>	<i>42,647</i>	<i>35</i>	<i>1,660</i>	<i>1,772</i>
Syracuse City	90,120	15,120	64,152	0	59	1,521	4,222
West Bountiful City	17,800	68,000	92,800	36,750	49	1,124	1,633
<i>West Point City</i>	<i>18,810</i>	<i>83,850</i>	<i>211,793</i>	<i>50,387</i>	<i>40</i>	<i>1,724</i>	<i>4,006</i>
Woods Cross City	17,000	150,000	0	120,000	55	2,478	5,348
Davis County Total	508,969	2,268,903	5,730,927	1,363,427	1,703	1,099	4,697
Salt Lake County	50,000	550,000	2,160,000	1,150,000	1,565	767	0
Bluffdale City	77,000	0	130,000	25,000	55	1,846	49,049
<i>Draper City</i>	<i>164,825</i>	<i>249,253</i>	<i>851,170</i>	<i>390,000</i>	<i>136</i>	<i>4,082</i>	<i>956</i>
Midvale City	60,000	0	141,500	18,760	83	947	13,234
Murray City	15,000	109,000	1,637,000	17,905	231	142	611
<i>Riverton City</i>	<i>152,953</i>	<i>231,300</i>	<i>789,862</i>	<i>361,909</i>	<i>192</i>	<i>2,681</i>	<i>9,093</i>
Salt Lake City	683,967	1,097,000	2,561,033	1,848,000	1,415	1,790	722
Sandy City	92,500	650,000	1,166,414	0	604	153	6,060
South Jordan City	10,000	91,000	219,000	333,392	174	1,974	10,440
South Salt Lake City	250,000	40,000	612,000	135,000	139	2,764	2,225
Taylorsville City	268,891	627,411	652,206	900,000	279	4,186	2,335
West Jordan City	130,000	167,300	2,647,533	1,096,038	302	4,064	4,242
West Valley City	1,000,000	656,572	1,692,837	716,266	612	2,805	4,600
Salt Lake County Total	2,955,136	4,468,836	15,260,555	6,992,269	5,788	1,719	3,409

**WASATCH FRONT URBAN AREA
MAINTENANCE AND PAVEMENT PRESERVATION COSTS FOR 2001
(Continued)**

City or County	Maintenance Costs	Periodic Treatment Costs	Reconstruct Costs	Miscellaneous	Local Lane Miles	Maintenance Cost Per Local Lane Mile	Pavement Management Cost Per Local Lane Mile
<i>Weber County</i>	460,521	1,592,196	1,636,489	157,302	157	3,939	0
Farr West City	120,000	0	0	11,500	26	5,065	124,372
Harrisville City	5,250	130,000	0	5,000	22	473	0
<i>North Ogden City</i>	80,716	279,066	286,829	27,570	106	1,022	1,227
<i>Ogden City</i>	321,167	1,110,395	1,141,285	109,702	552	780	1,024
Plain City	0	0	130,000	2,000	14	143	160,834
<i>Pleasant View</i>	38,617	133,515	137,229	13,191	47	1,091	2,738
Riverdale City	12,000	24,000	180,000	0	61	198	4,469
Roy City	67,500	536,000	342,000	67,500	170	794	1,200
South Ogden City	0	140,000	465,000	20,000	103	195	8,545
<i>Uintah City</i>	9,961	34,439	35,397	3,402	20	662	29,956
Washington Terrace City	129,000	313,900	0	0	59	2,197	1,190
West Haven City	0	10,000	69,000	8,000	48	167	6,548
Weber County Total	1,244,732	4,303,511	4,423,229	425,167	1,385	1,798	6,303
Total County Costs	4,708,837	11,041,250	25,414,711	8,780,863	8,875	1,520	4,107

* Italicized rows were interpolated cities and / or counties.

ADMINISTRATION, TRAFFIC OPERATIONS AND SAFETY, AND ENHANCEMENTS

Wasatch Front Region Council staff contacted three cities, two large and one medium, to gather data for analyzing the administration, traffic operations and safety, and the enhancement costs. Salt Lake City, Bountiful City, and Ogden City were contacted to provide financial information on these costs. Only Salt Lake City and Bountiful City replied with data to analyze. The administration costs were given in a percentage of all transportation funding. Their traffic operations and safety costs and enhancement costs were converted to costs per lane mile. The administration costs were approximately 15 percent of all transportation related costs. Traffic operations and safety cost per lane mile for the two cities was \$2,061 per mile, and enhancements costs were about \$410 per mile. The table below summarizes administration, traffic operations and safety, and enhancement costs for the Wasatch Front Urban Area.

**ADMINISTRATION, TRAFFIC OPERATIONS AND SAFETY,
AND ENHANCEMENT COSTS FOR 2001**

City or County	Administration Percent	Traffic Operations and Safety	Enhancements	Total Cost	Local Lane Miles	Traffic Operations and Safety Per Local Lane Mile	Enhancements Per Local Lane Mile
Bountiful City	15%	74,000	200,000	514,220	293	253	683
Salt Lake City	14%	3,445,712	500,000	5,205,783	1,415	2,435	353
Total Costs		3,519,712	700,000	5,720,003	1,708	2,061	410

APPENDIX E

FREEWAY COST ANALYSIS

Cost for freeway and highway construction were derived from previous and existing freeway and highway projects estimates. The costs for the freeway projects were as follows: \$30 million per mile for Legacy Parkway, I-80, and SR-201, \$50 million per mile for I-15 (reconstructions) and the Western Transportation Corridor (WTC), which includes interchange costs, and a flat cost of \$50 million for I-215 widening. WFRC assumed that the freeways and highways would need to be rebuilt in 20 to 30 years and not just expanded or widened. The above freeway and highway construction costs do not include any interchanges costs, except the WTC. The Utah Department of Transportation and the Wasatch Front Regional Council estimated the costs for interchanges as follows: Freeway to Freeway interchanges were estimated to be \$40 million, new interchanges are \$25 million, and any interchange upgrades were set at \$10 million. The project costs were inflated to the average year of their appropriate phase. An inflation rate of three percent per year was used on the projects.

ARTERIAL COST ANALYSIS

Wasatch Front Region Council asked UDOT to help with these costs. Engineers from UDOT Region 1 responded with a list of costs per kilometer per item. The items included in the costs Region 1 provided included: Surfacing and Excavation, Drainage, Sidewalk, Curb & Gutter, Driveways, and Landscaping. The WFRC converted the per kilometer costs to per mile costs and derived templates for specific right-of-way and lanes to be constructed. The WFRC derived a total of 12 different templates that were used in the cost estimating of the arterial roadways. These templates ranged from a right-of-way (ROW) of 110 feet with 6 lanes, a center median, and shoulders down to a 66 feet ROW with 2 lanes and a center median. Any roadway that was to be constructed in a right-of-way larger than 110 feet was computed using site-specific details and costs. After the WFRC assigned the costs to the different roadways cross sections, the templates were taken to the Salt Lake and Ogden Technical Committees for review. No changes were requested after the meetings. The templates were then used to calculate a cost for each project.

The Utah Department of Transportation was also called on to assist with the right-of-way costs. A significant issue was the variance in the cost of land. The cost of right-of-way from city to city and from street corner to street corner varied so much that it was very difficult to calculate a general cost that could be used area wide. In the urban areas the costs of right-of-way could be as high as the construction of the roadway project, but in the rural areas the right-of-way cost were relatively cheap comparatively. The cost of \$5 per square foot was decided on and was used to calculate right-of-way costs for any new project added to the plan. The project costs were inflated to the average year of their appropriate phase. An inflation rate of three percent per year was used on the projects.

FREEWAY INTERCHANGE CONSTRUCTION AND RIGHT-OF-WAY COST TEMPLATES

INTERCHANGE COST	TYPE OF IMPROVEMENT
\$ 40,000,000	Freeway to Freeway
\$ 25,000,000	New Construction
\$ 10,000,000	Upgrade
\$ 5 / ft ²	Right-Of-Way

**ROAD CONSTRUCTION PER MILE
COST TEMPLATES**

RIGHT-OF-WAY (Feet)	CONSTRUCTION (Cost Per Mile)	DESCRIPTION
110	\$ 4,500,000	6 Lanes, 1 Center or Median, and 2 Shoulders
110	\$ 4,700,000	4 Lanes, 1 Center or Median, 2 Shoulders, and 2 Sidewalks
110	\$ 4,700,000	6 Lanes, 1 Center or Median, and 2 and Sidewalks
84	\$ 3,900,000	2 Lanes, 1 Center or Median, 2 Shoulders, and 2 Sidewalks
84	\$ 3,900,000	4 Lanes, 1 Center or Median, and 2 Sidewalks
66	\$ 3,100,000	2 Lanes, 1 Center or Median, and 2 Sidewalks
66	\$ 3,500,000	4 Lanes, and 2 Sidewalks
66	\$ 3,600,000	4 Lanes, and 1 Center or Median
150+	\$ 7,100,000	8 Lanes, 2 Median, and 4 shoulders
220	\$ 5,500,000	4 Lanes, 2 Median, and 4 shoulders
125	\$ 6,100,000	6 Lanes, 1 Center or Median, 2 shoulders, and 2 sidewalks
Legacy Hwy / I-80 / SR-201	\$ 30,000,000	
I-15 (reconstruction), 5600 W. Freeway	\$ 50,000,000	

PLANNING LEVEL COST TEMPLATES

ITEMS	QUANTITY	UNIT	UNIT COST PER KILOMETER	UNIT COST PER MILE
Surfacing and Excavation	0	3.6m / 11.8 ft lanes	\$ 130,000	\$ 209,209
Drainage	0	Sides	\$ 200,000	\$ 321,860
Sidewalk	0	Sides	\$ 50,000	\$ 80,465
Curb & Gutter	0	Sides	\$ 45,000	\$ 72,419
Driveways	0	Sides	\$ 75,000	\$ 120,698
Landscaping	0	Sides	\$ 30,000	\$ 48,279
<i>Sub Total</i>				
Traffic Control	1	7.5%	\$ 0	\$ 0
<i>Sub Total</i>				
Contingency @30 %	1	30.0%	\$ 0	\$ 0
<i>Sub Total</i>				
Mobilization	1	10.0%	\$ 0	\$ 0
<i>Sub Total</i>				
Preliminary Engineering	1	8.0%	\$ 0	\$ 0
Construction Engineering	1	10.0%	\$ 0	\$ 0

APPENDIX F
UTA BUS FLEET
EXPANSION AND REPLACEMENT SCHEDULE
2004 - 2030

WASATCH FRONT URBAN AREA	2004-2012	2013-2022	2023-2030	2004-2030
Bus Fleet Expansion	112	174	160	446
Bus Vehicle Replacement	358	496	570	1,424
BRT Vehicle Expansion	44	68	0	112
BRT Vehicle Replacement	0	58	88	146
Rail Vehicle Expansion	98	4	2	104
Rail Vehicle Replacement	0	0	23	23



APPENDIX G FINANCIAL PROJECTIONS

ASSUMPTIONS	ASSUMP	2004-2012	2013-2022	2023-2030	TOTAL 2004-2030
Motor Fuel - gallons sold	3.00%	10,466,546,900	15,410,422,802	16,064,642,399	41,941,612,100
Special Fuel - gallons sold	3.00%	3,713,118,707	5,467,011,206	5,699,102,559	14,879,232,472
STATE OF UTAH					
HIGHWAY FUNDS					
FEDERAL REVENUE					
UDOT Administered Programs	2.00%	1,292,972,516	1,730,986,319	1,653,978,448	4,677,937,283
UDOT Special Programs	2.00%	91,366,404	122,318,141	116,876,469	330,561,013
State Match		149,819,870	222,396,535	212,502,590	584,718,996
MPO Administered Programs	2.00%	293,160,694	392,473,270	375,012,975	1,060,646,939
JHC Administered Programs	2.00%	75,945,030	101,672,546	97,149,352	274,766,928
Federal Funds - CHF	2.00%	-135,840,000	0	0	-135,840,000
Total Federal Revenue		1,767,424,514	2,569,846,811	2,455,519,834	6,792,791,159
STATE REVENUE					
1/16 cent sales tax - B&C, park access, corridor preservation		168,687,000	187,430,000	149,944,000	506,061,000
Motor fuel tax	MIXED	3,048,314,974	5,730,274,330	7,169,530,048	15,948,119,353
Special fuel tax	MIXED	1,122,720,932	2,059,712,900	2,613,775,412	5,657,764,770
Vehicle Control Fees	3.00%	44,904,210	66,114,725	68,921,497	179,940,432
Motor vehicle registration	3.00%	295,077,242	434,457,048	452,901,079	1,182,435,369
Proportional Registration	3.00%	125,723,395	185,108,870	192,967,308	503,799,573
Temporary Permits	3.00%	4,325,349	6,368,429	6,638,788	17,332,566
Special Transportation Permits	3.00%	62,846,384	92,531,888	96,460,149	251,838,421
Highway Use Tax	3.00%	63,808,349	93,948,238	97,936,628	255,693,214
Safety Inspection & Misc. Fees	3.00%	17,351,184	25,547,019	26,631,569	69,529,772
To Centennial Program - Dept. Efficiencies	-	-24,000,000	0	0	-24,000,000
To Centennial Program	3.00%	-666,434,009	-454,423,217	0	-1,120,857,227
Gross Free Revenue		4,263,325,010	8,427,070,229	10,875,706,478	23,566,101,716
Miscellaneous Other Revenue	-	54,000,000	60,000,000	48,000,000	162,000,000
Subtotal Free Revenue and Other		4,317,325,010	8,487,070,229	10,923,706,478	23,589,657,242
STATE OPERATING COSTS					
UDOT Operations	2.00%	1,528,356,743	2,050,305,637	1,959,091,933	5,537,754,313
Transfers Appropriated to other State Agencies		132,500,000	161,000,000	142,000,000	435,500,000
Corridor Preservation from 1/16th cent sales tax		5,060,610	5,622,900	4,498,320	15,181,830
State Park Access Roads from 1/16th cent sales tax		5,060,610	5,622,900	4,498,320	15,181,830
B&C Roads Fund Allocation	25.00%	1,321,708,785	2,309,450,061	2,786,887,980	6,383,435,707
State Match F.A.	12.00%	149,819,870	222,396,535	212,502,590	584,718,996
Subtotal State Operating Costs		3,142,506,618	4,754,398,033	5,109,479,143	12,971,772,676
Available State Funds (Revenues less Operating Expense)		1,174,818,391	3,732,672,195	5,814,227,336	10,617,884,566
CENTENNIAL FUND - BONDS & OTHER REVENUES					
Dedicated Sales Tax (3% growth after 2007) - CHF	3.00%	52,311,200	35,880,924	0	88,192,124
Dedicated Registration Fees - CHF	200k/yr	173,700,000	212,000,000	184,000,000	569,700,000
State General Fund - CHF		738,360,000	1,000,000,000	800,000,000	2,538,360,000
Bonding - CHF		592,000,000	0	0	592,000,000
From Free Rev. (includes dept. efficiencies) - CHF		690,434,009	454,423,217	0	1,144,857,227
Bond Debt Service Interest - CHF		-468,097,000	-72,166,000	0	-540,263,000
Bond Debt Service Principal -CHF		-876,087,000	-821,798,000	0	-1,697,885,000
Local Governments / Misc / Other -CHF		1,953,000	0	0	1,953,000
Federal Funds - CHF		135,840,000	0	0	135,840,000
Centennial Revenue Subtotal		1,040,414,209	808,340,141	984,000,000	2,832,754,350
Centennial Project Expenditures		-968,458,000	0	0	-968,458,000
Net Centennial Available		71,956,209	808,340,141	984,000,000	1,864,296,350
Total State Revenue		1,246,774,601	4,541,012,336	6,798,227,336	12,482,180,917
TOTAL FEDERAL & STATE REVENUE					
		3,014,199,114	7,110,859,147	9,253,747,170	19,274,972,076

FINANCIAL PROJECTIONS
(Continued)

ASSUMPTIONS	ASSUMP	2004-2012	2013-2022	2023-2030	TOTAL 2004-2030
ANNUAL FUNDING TOTALS					
Available State Funds		1,174,818,391	3,732,672,195	5,814,227,336	10,617,884,566
Federal Program (non-CHF, excludes MPO and JHC Funds)		1,398,318,790	2,075,700,995	1,983,357,507	5,457,377,292
CHF Totals (net)		71,956,209	808,340,141	984,000,000	1,864,296,350
Total All Funding Sources		2,645,093,390	6,616,713,331	8,781,584,842	17,939,558,209
CUMULATIVE FUNDING TOTALS					
Available State Funds		5,351,208,892	29,547,508,491	64,150,378,762	97,813,454,215
Federal Program (non-CHF, excludes MPO and JHC Funds)		7,509,738,338	26,272,028,645	37,480,255,141	71,262,022,124
CHF Totals (net)		11,887,202,868	59,484,447,734	112,728,507,916	182,864,516,588
Total All Funding Sources		24,748,150,098	115,303,984,870	214,359,141,819	351,939,992,928
PRESERVATION OF STATE SYSTEM					
Contractual Maintenance		490,000,000	625,000,000	560,000,000	1,675,000,000
Signals, Spot Improvement, Lighting, Barrier	3.00%	117,344,565	180,675,992	190,283,691	488,304,248
Bridge Preventive Maintenance	3.00%	125,828,033	248,786,950	274,848,319	649,463,302
Bridge Rehabilitation / Replacement	3.00%	85,761,258	132,151,104	137,761,323	355,673,684
Highway Rehabilitation / Replacement	3.00%	380,659,630	745,083,085	901,080,061	2,026,822,777
Hazard Elimination, Safety, Enhancements	3.00%	78,479,095	115,548,714	120,454,110	314,481,919
Region / Department Contingencies		34,700,000	45,000,000	40,800,000	120,500,000
Annual System Preservation		1,312,772,581	2,092,245,844	2,225,227,504	5,630,245,930
Cumulative Total		7,223,053,288	25,191,683,989	37,846,138,977	70,260,876,255
Annual Differential of Funding less System Preservation		1,332,320,809	4,524,467,487	6,556,357,338	12,309,312,279
WASATCH FRONT REGIONAL COUNCIL ***HIGHWAY FUNDS***					
REGIONAL UDOT REVENUES					
WFRC portion UDOT funds - Balance Available for New Projects	55.00%	732,776,445	2,488,457,118	3,605,996,536	6,770,121,753
WFRC portion of CHF funding		635,139,000	0	0	635,139,000
REGIONAL REVENUE					
STP @ 100% of Total (60% State, 40% Local)	0.00%	130,350,744	144,834,160	115,867,328	391,052,232
CMAQ @ 60% of Total (50% State, 10% Local)	0.00%	41,066,217	45,629,130	36,503,304	123,198,651
Salt Lake County 1/4 of 1/4 sales tax	6.00%	135,573,357	262,723,532	353,297,143	751,594,032
TOTAL REGION REVENUE FOR NEW PROJECTS		248,005,651	387,648,303	453,236,960	1,088,890,913
LOCAL REVENUE					
B & C Funds	41.25%	545,166,022	952,580,264	1,149,509,371	2,632,979,588
General Fund Contributions	3.00%	861,265,784	1,268,084,881	1,321,918,964	3,451,269,629
Innovative Financing		84,375,000	93,750,000	75,000,000	253,125,000
TOTAL LOCAL REVENUE		1,490,806,806	2,314,415,145	2,546,428,335	6,337,374,217
LOCAL EXPENDITURES					
Administration	15.00%	232,468,721	356,993,050	389,828,873	977,149,233
Maintenance	3.00%	181,174,794	293,357,625	334,118,124	808,650,543
Pavement Preservation	3.00%	489,529,526	792,644,583	902,778,380	2,184,952,488
Traffic Operations and Safety	3.00%	245,658,717	397,769,780	453,037,799	1,096,466,296
Enhancements	3.00%	48,869,517	79,129,359	90,123,968	218,122,844
Subtotal of Total Local Expenditures		1,197,701,275	1,919,894,396	2,169,887,143	5,285,341,404
LOCAL BALANCE AVAILABLE FOR NEW PROJECTS		352,090,198	460,059,268	428,972,007	1,228,986,814
BALANCE AVAILABLE FOR NEW CAPACITY IMPROVEMENTS					
		1,968,011,294	3,336,164,689	4,488,205,502	9,723,138,481

FINANCIAL PROJECTIONS ASSUMPTIONS

The Utah Department of Transportation Statewide Planning Division, with the help of Wasatch Front Regional Council planners and engineers, developed the financial projections table on the previous page in 2003. The table is a summary of the existing plan starting in 2003, as the base year, and ends in 2030. The Utah Department of Transportation researched the actual costs for all federal revenue, state revenue, statewide operating costs, Centennial Fund, and the preservation of the statewide system in 2003. These costs, in most cases, were rounded to the nearest thousand dollars and used as the base line costs. The rates of growth assumptions were calculated from actual rates in previous years. These growth rates are consistent with the current rates of growth for each of the federal revenue, state revenue, statewide operating costs, Centennial Fund, and the preservation of the statewide system.

The regional revenue includes several sources. The estimate for federal sources is based on actual 2003 STP and CMAQ funds apportioned for the Wasatch Front Region. The Salt Lake County 1/4 of 1/4 percent sales tax was updated based on the sales tax collected in 2002.

The local revenue was derived at the same time as federal revenue, state revenue, statewide operating costs, centennial fund, and the preservation of the statewide system. Local expenditures come from a survey the WFRC conducted in Salt Lake, Davis, and Weber counties. (The cost per city and/or county can be found in Appendix D.) These expenditures were increased at the same rate as the UDOT expenditures, including a growth rate for the lane miles.

APPENDIX H

UTAH DEPARTMENT OF TRANSPORTATION AND WASATCH FRONT REGIONAL COUNCIL DIFFERENCES IN FINANCIAL PLANS

UDOT	WFRC
<p><u>Assumptions</u> Gas Tax Increased by \$.05/Gallon • 2005,2011,2017,2023,2029 General Fund • \$59.59 Million/Year*, 2008-2017 • \$595.9 Million • \$0/Year, 2018-2030 • \$0 *\$59.59 Million/Year until 2017 for bond payments only – will not fund any new projects.</p> <p><u>Phasing</u> Project Phases • 2008-2010 • 2011-2020 • 2021-2030</p> <p><u>Revenue Estimates</u> Total UDOT Funds for Statewide Capacity Improvements, 2008-2030 • \$10,669 Million UDOT Projection of Funds for the Wasatch Front Region, 2008-2030 (55% of UDOT Available Funds for Congestion Relief) • \$5,868 Million</p>	<p><u>Assumptions</u> Gas Tax Increased by \$.05/Gallon • 2006,2012,2018,2024,2030 General Fund • \$59.59 Million/Year*, 2004-2007 • \$238.4 Million • \$100 Million/Year*, 2008-2030 • \$2,300 Million *\$59.59 Million/Year until 2017 for bond payments only – will not fund any new projects.</p> <p><u>Phasing</u> Project Phases • 2004-2012 • 2013-2022 • 2023-2030</p> <p><u>Revenue Estimates</u> Total UDOT Funds for Statewide Capacity Improvements, 2004-2030 • \$12,309 Million WFRC’s portion of UDOT Funding, 2004-2030 (55% of UDOT Available Funds for Congestion Relief) • \$6,770 Million WFRC portion of the CHF Program, 2004-2007 • \$635 Million Regional and Local Funding – STP, CMAQ, Salt Lake ¼ of ¼ cent Sales Tax, 2004-2030 • \$2,318 Million WFRC Total 2004-2030 • \$9,723 Million</p>

UTAH DEPARTMENT OF TRANSPORTATION AND WASATCH FRONT REGIONAL COUNCIL COMPARISON FOR WFRC FUNDING

	UDOT, 2008-2030 (Million)	WFRC, 2008-2030 (Million)	WFRC, 2004-2030 (Million)
WFRC Portion	\$5,868	\$6,657	\$6,770
CHF Projects in WFRC Region			\$ 635
Regional and Local Funds Available		\$2,067	\$2,318
Total Funds Programmed for WFRC	\$5,868	\$8,724	\$9,723

