8.0 Funding Plan

The full-build Draper Transit Corridor project (Alternative C) is estimated to cost $530.4 million in YOE dollars. UTA has adequate local funds for local capital match and operation of all its planned expansion projects, including the Draper Transit Corridor project if the cost does not exceed $250 million. Continued operation and expansion of the existing transit system is also expected. Consequently, UTA will need to phase the Draper Transit Corridor project in order to fit within the financial constraints.

Project phasing and the MOS alternative are discussed in more detail in Section 9.0, Selection of the Locally Preferred Alternative. However, in this section, the preferred full-build alternative (Alternative C) and the MOS alternative costs are presented for comparison and analysis.

On November 7, 2006, Proposition 3 in Salt Lake County, a measure to raise the local-option sales tax for regionally significant transportation projects, was passed by 64% of voters. Also passed at that time was Utah County's Opinion Question, which was designed to increase transit funding in Utah County, specifically for commuter rail. The Opinion Question was passed by 69% of Utah County voters. The specific major transit projects that will be funded in part by the new tax are Mid-Jordan LRT, West Valley LRT, Utah County Commuter Rail, Airport LRT, and the Draper Transit Corridor project.

UTA is seeking a combined $570 million in Section 5309 New Starts funding for the Mid-Jordan and Draper Transit Corridor project LRT extensions. UTA has made a commitment to build, by 2015, the West Valley City and Airport LRT extensions, as well as the FrontRunner South commuter-rail extension, as part of a package of projects funded primarily by sales tax increases. The current total capital cost estimate for the five projects in the Transit 2015 Program is $2.85 billion.

The Mid-Jordan LRT extension is currently in the final design phase, and a Full Funding Grant Agreement is expected in January 2009. The Draper Transit Corridor project, the subject of this AA, is being evaluated by FTA under Section 5309 criteria as part of the annual New Starts evaluation process. The Draper Transit Corridor project is eligible for up to 80% of the total capital cost of the project through Section 5309 New Starts funding.

This section describes the local financial commitment of UTA to the Draper Transit Corridor project and discusses the financial planning process used in the analysis to determine that commitment. The assumptions regarding sources and uses of funds are presented. The section concludes with a discussion of the risks and uncertainties that could affect the financial performance of the project.

UTA will confirm with FTA the costs and New Starts share for the Draper Transit Corridor project as part of the request to enter preliminary engineering.

8.1 Financial Planning Process and Structure

The first objective of the financial analysis was to estimate capital costs and project annual operating expenses and revenues from a base year to the design year. The analysis of the sources and uses of funds is conducted to determine whether there are funding shortfalls in either capital or operating budgets for the project. This information is necessary to establish that enough financial resources are available for each year of the planning horizon. This planning horizon period was 21 years, from 2009 to 2030.

The major elements of the financial analysis are:

- Revenue projections including increases from growth in farebox receipts and sales tax receipts
- Revenue from federal sources
- Capital costs of the transit facilities
- O&M costs
- Risk associated with revenue and cost estimates

The calculation of costs and revenues depends on assumptions related to construction scheduling and phasing and the rate of growth in transit service expansion. This analysis is conducted in YOE dollars (current or inflated dollars) so that debt financing can be accounted for.

8.2 Sources of Funds

This section describes the baseline revenues available to UTA over the 2008–2030 period for planning, design, construction, and O&M and the assumptions used in the cash-flow model and analysis. UTA receives revenues from a number of federal, state, and local sources. These include revenues that are unrestricted as to their use, revenues that are restricted to O&M, and revenues that are restricted to use for capital projects. UTA typically commits its unrestricted revenues and its revenues restricted to O&M to cover its ongoing operating costs in advance of other expenditures. Any revenues beyond those needed for O&M are considered net revenues available for debt service and capital and are used for those purposes. Section 8.2.1 and Section 8.2.2 describe some of the sources of UTA's funding.

8.2.1 Sources of Revenues for O&M

The ongoing O&M costs of the UTA system and for future expansion projects are paid from revenues from the sources described in this section.

Bus and Rail Fares

Unrestricted operating revenues are derived from farebox receipts. Currently, UTA covers about 14% of its annual operating expenses from farebox receipts. Passenger fares contributed about $25.6 million to UTA's operating revenues in 2007, while operating expenses were $195.9 million, including allowances for depreciation. The amount was up from $24.6 million in 2006 and nearly twice the farebox revenue received 10 years earlier. The projected revenue for passenger fares in 2008 is $29 million, which is an increase of 13.2% over 2007. The increase in farebox revenue is due in large part to the large increase in boardings during the preceding 10 years and fare increases due to fuel surcharges passed in 2008.

Over the 10-year period, the revenue per boarding also increased from $0.36 to $0.69. By 2030, the farebox revenue is projected to be $129.6 million. Average fare per boarding in 2030 for this scenario is $1.58. UTA's fare policy has been to move to a higher farebox recovery rate for both the bus and rail systems over time, and UTA continues to increase fares to cover both operating cost increases and to increase the percentage of operating cost supported by fare revenue.

Projections of farebox revenues are made by projecting the increase in fare per boarding and the growth in passenger boardings. Projections of passenger boardings are derived from the travel demand forecasts prepared for the long-range transportation plans and used throughout the project development process. There were over 35 million annual total system-wide boardings in 2007. About 154 million total system-wide boardings are projected for 2030.

The trend in average fare per boarding over the past 10 years has been slightly less than a 5% increase. A continuation of that trend would result in a steady increase in farebox recovery. The increase in fares is less than 1% greater than assumed increases in costs, which adds to the net revenues available for debt service and capital.

With the addition of commuter-rail services to the UTA family of services, the financial plans must acknowledge the impact of commuter rail on system revenue projections and costs. Commuter-rail ridership projections assume that average commuter-rail fares will be twice the average regular fare. The higher fare is in line with the longer-distance trips and the resulting higher operating cost per passenger. The effect on the farebox revenue projections is a slightly higher fare per boarding when commuter rail is included. The 2008 increase in average fare

per boarding reflects about $1.4 million in additional fare revenue from nearly 2 million additional commuter-rail passengers at twice the average fare. Going forward, commuter-rail fares will increase at the same rate as bus and light-rail fares.

Table 8-1 lists UTA's farebox receipts for the past 10 years and the estimate for 2008.

Table 8-1. UTA Farebox Receipts

Year	Farebox Revenue	Growth Rate (%)
2008[a]	$29,022,000	13.2
2007	$25,641,509	4.1
2006	$24,627,104	10.7
2005	$22,239,683	4.2
2004	$21,341,393	6.2
2003	$20,104,519	–4.1
2002	$20,957,983	19.4
2001	$17,559,632	5.9
2000	$16,587,921	17.3
1999	$14,146,779	5.0
1998	$13,471,758	—

Source: UTA 2008

[a] Estimated

Sales and Use Tax

The largest source of operating revenue for UTA is a local-option sales tax, which is imposed within UTA's service area. Under Section 59-12-501 of the Utah Administrative Code, sales taxes are imposed on all retail sales of tangible personal property, services, and meals purchased within each affiliated taxing district/jurisdiction, which includes Box Elder, Davis, Salt Lake, Tooele, Utah, and Weber Counties. In November 2006, the voters in Salt Lake and Utah Counties approved a ballot measure that increased the sales tax rate. The current sales tax rate is 0.55% for Weber, Utah, and Davis Counties; 0.69% for Salt Lake County; and 0.30% for Tooele and Box Elder Counties. The revenue generated from this local-option sales tax was $191.7 million in 2007.

Table 8-2 lists UTA's sales and use tax receipts for the past 10 years and the estimate for 2008.

Table 8-2. UTA Sales and Use Tax Receipts

Year	Sales Tax Revenue	Annual Growth Rate (%)	Compound Annual Growth Rate from 1998 (%)
2008[a]	$193,000,000	0.7	13.1
2007	$191,688,000	38.4	14.5
2006	$138,546,000	13.7	11.8
2005	$121,833,000	8.8	11.6
2004	$111,982,000	7.8	12.1
2003	$103,869,000	0.1	12.9
2002	$103,784,000	10.0	16.4
2001	$94,382,000	51.7	18.6
2000	$62,223,000	6.3	4.9
1999	$58,559,000	3.6	3.6
1998	$56,525,000	—	—

Source: UTA and AECOM 2008

[a] Estimated

The level of sales tax receipts depends on sales tax rates and the strength of the local economy, which can be somewhat volatile.

For example, from 1998 to 2000, UTA's sales tax revenue increased at a compound annual growth rate of 4.91%. However, the tax increase beginning in mid-2001 and calculated through 2004 increases the compound annual growth rate to 12.1%. In 2007, sales tax revenue increased 38.4% based on the increase in the rate and the general economic growth in the UTA service area. This raised the compound annual growth rate to 13.1%.

Economic growth is expected to continue at a slower pace for the next 1 to 2 years, based on national economic indicators and trends. Employment growth will decrease from 4.0% in 2007 to 0.4% in 2008, while the unemployment rate should move upward slightly from a low of 2.7% in 2007 to 3.7% in 2008. Residential construction is expected to weaken further, though overall construction employment should be buoyed somewhat by growth in nonresidential building and economic stimulus spending. For 2008, the Utah Council of Economic Advisors estimates that retail sales will increase only slightly over 2007.

For 2008, sales tax revenue is projected to increase to about $193.0 million. Beyond 2008, sales tax revenues are assumed to roughly keep pace with population and employment growth and inflation, with revenues increasing at an average of 5.5% from 2010 through 2030.

Federal Preventive Maintenance Grant Funds

For the purpose of this analysis, UTA is assumed to continue receiving federal funding for maintenance-related uses through 2030. Beginning in 1998, these funds were derived from the FTA Section 5307 (formerly Section 9) program and consisted of formula capital grant funds used for "preventive maintenance"–related activities. In accordance with FTA's direction, and as approved in UTA's 2008 projected budget, roughly $28.4 million in Section 5307 capital grant funds will be available for preventive maintenance in 2008. Beginning with the next federal transportation authorization period, Section 5307 revenues are assumed to grow at 3% per year to keep pace with the growth of formula funds.

Interest on Capital Reserves and Debt Service Reserve Fund

UTA maintains an operating reserve of 25% of estimated annual operating cost. This reserve fund accumulates interest from investments. The interest is assumed to accrue at a conservative rate of 3% from 2008 to 2030.

Other Sources of Operating Funds

Other sources of unrestricted operating funds consist of revenue from advertising, rents, and leases on right-of-way and manufacturer discounts taken. These ancillary revenues are usually small. The 2008 projection is based on a 3% increase over 2007. Other revenues will increase annually at 3% through 2030, while joint development revenues increase at 4.25% with increased adjustments for new rail lines and the revenue opportunities they provide.

At this time, other sources of revenue are not apparent that could contribute substantial sums to the construction program or help to defray operations and maintenance expense to a large extent.

8.2.2 Sources of Revenues for Capital Programs

Ongoing capital expenditures for UTA's base system are projected to be financed from the eight existing capital revenue streams discussed in this section. These are listed in addition to in-kind donation of the value of railroad corridor right-of-way already owned by UTA.

Net Revenues for Debt Service and Capital Costs and Capital Reserve

Net revenues for debt service and capital costs refer to the excess of annual operating revenues over annual operating costs. These revenues are pledged first to cover any outstanding debt service and then can be used for capital needs. Overall, throughout the 2008–2030 period, UTA will have positive net revenues

available for these purposes that will be largely derived from increases in the local sales and use tax receipts.

UTA's capital reserve refers to its annual surplus of revenues over costs. For 2008, the beginning capital reserve is consistent with UTA's annual financial statements at close of business 2007. The capital reserve is computed after considering all costs and revenues.

FTA Section 5307 Capital (Formula)

Grant obligations through the FTA Section 5307 formula grant program assume first receipt of funds from UTA's existing and committed capital grants. For new FTA Section 5307 formula grant funds, three uses are assumed: (1) preventive maintenance, (2) planning for O&M-related purposes, and (3) planning for capital (the last to be funded). For the 2008–2030 period, UTA's total annual Section 5307 funding is assumed to increase annually commensurate with the estimated formula grant allocations in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005. Beyond 2008, the level of these funds is assumed to increase 3% per year for inflation.

Section 5307 formula funds also would be available to be used toward UTA's capital costs for bus replacement and bus fleet expansion at an 80% federal participation level.

FTA Section 5309 Capital for Bus and Other

FTA Section 5309 bus and other capital grants through 2007 were based on committed projects. When UTA's existing Section 5309 grants are completed, UTA assumes that it will receive, over the 2008–2030 period, a level of discretionary grant funding that is conservatively consistent with UTA's past grant levels from this program.

FTA Section 5309 Capital for LRT

FTA is authorized by Congress to fund the construction of New Starts fixed-guideway systems through the discretionary authority granted in Section 5309 of Title 49 of the United States Code (49 U.S.C. 5309). FTA has the authority to provide discretionary grants up to 80% of the total project cost for New Starts projects that have been evaluated according to criteria established by Congress under SAFETEA-LU. The criteria include measures of mobility improvements, transit-supportive land use, cost-effectiveness, and local financial commitment.

To date, UTA has received Full Funding Grant Agreements for four fixed-guideway projects: the North-South TRAX Line at $312.5 million, the University

TRAX Line at $118.5 million, the Medical Center TRAX Line at $89.4 million, and the Weber County to Salt Lake Commuter-Rail Project at $611 million.

UTA is seeking a combined $570 million in Section 5309 New Starts funding for the Mid-Jordan and Draper Transit Corridor project LRT extensions. UTA has made a commitment to build, by 2015, the West Valley City and Airport LRT extensions as well as the FrontRunner South commuter-rail extension. The current total capital cost estimate for the five projects in the Transit 2015 Program is $2.85 billion.

The Mid-Jordan LRT extension is currently in the final design phase, and a Full Funding Grant Agreement was received in January 2009. The Draper Transit Corridor project is being evaluated by FTA under Section 5309 criteria as part of the annual New Starts evaluation process.

FTA Section 5309 Capital for Fixed-Guideway Modernization

In addition to construction funds, other funds are allocated on the basis of a formula (49 U.S.C. 5309) for the modernization of existing rail systems. Federal funding through the FTA Section 5309 Fixed-Guideway Modernization Program is assumed to begin in federal fiscal year 2008 after 7 years of LRT rail service on the original North-South TRAX line. These funds are derived first by route-mile and revenue-vehicle-mile factors for Tiers 5, 6, and 7 of the 2006 fixed-guideway modernization program apportionment formula and are expected to produce about $3 million in 2009. Additional funds are assumed 7 years after each rail project is implemented.

Long-Term and Subordinate Bond Proceeds

As of January 1, 2008, UTA had seven outstanding bonded debt obligations totaling $665,642,145. These debt obligations provided financing for the acquisition of certain rail rights-of-way for corridor preservation purposes, a refunding of the 1997A bonds (which were for constructing the original North-South TRAX line), initial financing for construction of the FrontRunner commuter-rail project and other FrontLines 2015 Program financing, a partial refinancing of the 2002A bonds, and refunding the 2005B bonds. The current bond obligations have differing interest rates with maturity dates ranging from 2008 to 2035.

During 2007, UTA issued $261,124,108 series 2007A bonds for the joint purpose of providing construction funds for the FrontLines 2015 Program and other system improvements and for the early redemption of a portion of the 2005B bonds.

UTA's statutory debt limit is 4% of the taxable value of all the taxable property in the transit district. This bonding limit is estimated to be $3 billion. UTA's

practical capacity to bond is based on accepted ratios of current debt service payments to total sales tax receipts and to net revenue after operating costs. UTA is committed to maintaining a ratio of 3:1 for total sales tax to debt service and an index of 1.15 for funds available for debt service to debt service.

Utah Department of Transportation

Other federal programs allow states to transfer highway funds to transit agencies for certain categories of projects. About $1.5 million is transferred annually to UTA, primarily for Congestion Mitigation and Air Quality projects.

8.3 Use of Funds

The existing and projected expenditures of UTA consist of costs associated with operations and maintenance of its bus, LRT, and commuter-rail systems and its ongoing and programmed capital expenditures. Expenditure projections are based on UTA's 2008 budget; the Transportation Improvement Program adopted by WFRC; the long-range transportation plans for the Salt Lake, Provo, and Ogden areas; and most recent cost estimates for all capital projects and bus service expansions.

8.3.1 O&M Costs

O&M costs were projected for UTA's bus, light-rail, and commuter-rail services. Key assumptions with regard to these services are discussed in this section. Total UTA system operating costs in 2007 were $195.9 million, which included charges for asset depreciation. Net operating expenditures (without depreciation) were $149.9 million. The estimate of net expenditures for operations in 2008 is $176.6 million. Incremental bus and rail operating costs are based on the operating plans developed for each of the action alternatives evaluated in this AA.

Bus O&M Costs

Bus O&M costs for 2007 were $74.2 million and reflect actual costs incurred by UTA. For 2008, costs are based on the UTA budget of $80.4 million. For the 2008–2030 period, these costs are based on UTA's budget and projections of service for the Salt Lake, Provo, and Ogden service areas in future years.

UTA's cost per bus mile is based on the 2008 adopted budget and then increased at 4.0% per year for real growth and inflation. The cost per bus mile assumed in the projections is consistent with the results of the bus O&M cost modeling conducted in conjunction with the Mid-Jordan Line EIS and with past trends.

Previously, over the 1998–2008 period, UTA's O&M cost per mile increased at a compound average growth rate of 4.28% per year.

Fixed-Guideway O&M Costs

LRT O&M costs were $18.5 million in 2007 for the North-South TRAX Line and University TRAX Line (including the Medical Center TRAX Line) service. In 2008, the rail O&M costs are projected to be $31.2 million, which reflects the increased LRT mileage for the extension of the LRT to the Central Station in downtown Salt Lake City and the beginning of FrontRunner North commuter-rail service in April. As projects come online, additional O&M costs are added to the plan for each new project. The projected LRT O&M cost per daily number of trains, light-rail vehicle miles, and train hours is, based on past LRT O&M costs and service levels, increased 5.0% annually for real growth and inflation. These unit costs are then multiplied by projected service levels..

O&M costs for the final alternatives were calculated and are shown in Table 8-3. The costs assume the adoption of the recommendations of the recently concluded comprehensive operations analysis and bus system redesign that significantly modified service in the study area and relocated operating costs for the UTA fixed bus routes. Therefore, the values in Table 8-3 represent the incremental cost for each alternative.

Table 8-3. O&M Costs

	Alternative	
Description	Full Build (Alt. C)	MOS (Alt. D)
Estimated annual O&M expenditures (net of depreciation)	$7,070,000	$3,200,000

The bus and rail operating plans are expected to be refined as the project progresses through preliminary engineering and the Final EIS phase of project development. The estimated annual O&M costs for the MOS are less than 1% of the UTA annual revenue that can be allocated to O&M throughout the UTA system.

8.3.2 Capital Costs

Capital costs considered include the following:

- Bus and other capital
- LRT capital maintenance
- LRT construction
- Bond debt service
- Project preliminary engineering
- Project construction
- Repayment of subordinated bonds
- BRT capital projects
- Commuter rail
- Future capital projects

Capital costs were derived by reviewing UTA's past expenditure patterns, bus acquisition and replacement schedules, the most current light-rail projects and FrontLines 2015 Program implementation schedules, and the capital program proposed in the state Transportation Improvement Plan. Note that a base-level capital program was assumed. This capital program is consistent with the approved base bus scenarios in the long-range plans prepared and adopted by WFRC and the Mountainland Association of Governments.

In 2008, $500 million is budgeted for capital expenditures, which includes construction costs for FrontRunner South commuter-rail extension to Provo, Mid-Jordan LRT, and West Valley LRT. The balance of the capital expenditures is for currently programmed and committed capital projects in UTA's 2008 budget and in the Transportation Improvement Plan. This includes Intelligent Transportation Systems, information and communication projects, facility repairs and upkeep, intermodal centers, park-and-ride lots, and bus replacement and bus service expansion projects. Given the recent inflationary trends for project construction costs, the estimated project capital cost presented in the financial plan increases at a rate of 5%.

Bus and Other Capital

A major component of UTA's capital program is bus expansion and replacement. The analysis assumes a 13-year bus replacement cycle. In addition to bus replacement and expansion, facility and miscellaneous capital projects are based on funding approved in the Transportation Improvement Plan starting in 2008 at roughly $5 million per year escalated at 3% for inflation.

LRT Capital Maintenance

The analysis assumes that there would be additional costs for capital maintenance of the North-South TRAX Line, University TRAX Line, and Medical Center TRAX Line, including minor and major vehicle upgrades on 7-year and 15-year cycles, respectively, and annual costs for right-of-way capital maintenance.

In addition to a No-Action Alternative and a TSM Alternative, the array of possible configurations for the Draper Transit Corridor project extension of TRAX from the Sandy Civic Center Station at 10000 South was narrowed to one full-build and one MOS alternative for cost analysis. Costs are estimated in current dollars for YOE. These costs reflect all the elements associated with planning, design, and construction of the full-build and MOS alternatives and reflect the physical features associated with each alignment including number of stations, alignment length, and typical sections.

Draper Transit Corridor Capital Cost Estimate

The capital costs for the various FrontLines 2015 planned extensions were developed through an extensive cost-estimating process conducted during project development. Non-construction costs used in the capital cost estimate were developed using standard industry practice and locally gained experience for projects of this complexity. These costs include project management, project administration, design, construction management, quality assurance, quality control, business impact mitigation, property appraisal and relocation, contractor allowances, insurance, start-up and testing, project reserve, and financing.

The full-build and MOS alternatives do not include any costs for rail maintenance and storage facilities. The existing UTA Rail Service Center provides a centralized rail maintenance facility and storage yard that provides routine daily maintenance services, heavy repairs, and operations support for the TRAX light-rail transit system. UTA recently expanded this facility, which has the capacity to handle both Draper and Mid-Jordan light-rail vehicles (LRV) without further modification or expansion. The cost estimates included provisions for right-of-way acquisition. Costs are shown in Table 8-4.

Table 8-4. Capital Cost Estimates

FTA SCC Number	Description	Full Build (Alt. C)	MOS (Alt. D)
10	Guideway and track elements	$80,272,000	$18,745,000
20	Stations, stops, terminals, intermodal centers	6,539,000	3,329,000
30	Support facilities: yards, shops, buildings	0	0
40	Site work and special conditions	54,971,000	54,574,000
50	Systems	41,591,000	28,492,000
	Construction subtotal (10–50)	**$183,373,000**	**$105,139,000**
60	Right-of-way, land, existing improvements	151,922,000	61,897,000
70	Vehicles (3 LRV at opening; 10 LRV in 2030)	59,372,000	21,552,000
80	Professional services	47,089,000	21,385,000
90	Unallocated contingency (10% of categories 10–80)	44,176,000	20,997,000
	Subtotal (10–90)	**$485,933,000**	**$230,971,000**
100	Finance charges	44,433,000	23,097,000
	Total (10–100)	**$530,366,000**	**$254,068,000**

Source: AECOM 2008a

Costs are listed in YOE dollars.

8.4 Financial Capacity Analysis

UTA's financial capacity to undertake major expansion projects is constrained by pressures to support current operations and fund large capital investment requirements that expand and sustain existing services. The most important revenue stream is derived from the local sales and use tax levied in the UTA service area. Because of the current downturn in the national economy, current collections appear to be increasing at a rate of about 1.5% over 2007. The historical average annual growth rate averages 5.5% when factoring out the tax rate increases.

Assuming a long-range average annual growth rate of 5.5%, about 60% of UTA's operating revenues over the next 20 years (2010–2030) will be derived from sales and use tax receipts.

8.4.1 Overview of Cash-Flow Model

The cash-flow model used in the financial analysis focuses on UTA's past performance through 2005 and on the forecast period of 2010–2030. The model reflects system-wide costs and revenues for the entire UTA service area. Costs and revenues are assumed on an accrual basis in order to provide greater consistency with UTA's annual financial statements. Both costs and revenues are reported in YOE dollars and include appropriate inflation rates by category.

The model consists of four basic components: operating costs, operating revenues, capital costs, and capital revenues. Two factors of key interest for tracking UTA's financial performance are net revenues for payment of debt service and capital costs—that is, the differential between operating costs and revenues and the annual capital reserve remaining after all costs and revenues are included. The former is of particular importance with regard to debt service coverage, while the latter is of importance with regard to financial capacity for future service expansion and major capital costs. In addition to annual capital reserve, UTA has established policy mandates regarding the protection of restricted reserve accounts for its debt service reserve, working capital reserve, and risk reserve. Thus, UTA's policy mandates require that sufficient capital reserves be available annually to provide for UTA's restricted reserve requirements.

8.4.2 Financial Capacity

The cash-flow model summarizes and contrasts annual O&M costs to annual O&M revenues between 2009 and 2030. The model also indicates the net revenues available for debt service and capital. Also indicated is the level of coverage that gross sales tax revenues would provide for the annual financing costs that UTA is required to pay for its outstanding bonded indebtedness.

The strongest influences on UTA's future fiscal capacity are its operating costs and sales and use tax revenues. The inflation-sensitive sales and use tax yields about $191.7 million per year in revenues. UTA's inflation-sensitive operating costs account for about 73% of outlays over the next 20 years (2010–2030). About 25% of outlays during this period will be for ongoing capital replacement and depreciation-related investments to preserve existing transit services.

About 15% of UTA's operating costs are attributable to farebox receipts. Ridership has increased in recent years due to the opening of the FrontRunner North commuter-rail line and redesigned bus service delivery strategies. Average fare yields are presently about $0.69 (for all modes combined) and are not keeping pace with inflation due to liberalized pass and transfer policies that are increasing ridership without necessarily generating additional revenues. Previously, UTA's fare revenues have grown at a compounded annual rate of about 2%. Fare increases must keep pace with inflationary pressures to maintain the fare recovery ratio or improve it.

UTA's long-term fiscal capacity is based on future operating unit costs being constrained to growth levels below 3.5% or the assumed growth in sales tax receipts on annual basis. A key factor in testing these relationships will be in the area of cost containment. UTA has been reinvesting productivity gains in expanding services throughout the service area. Future depreciation-related

capital projects also will need to be controlled in order to assure adequate fiscal capacity through scope phasing and budget restraints.

Sales and use tax revenues are unlikely to grow fast enough to sustain total operating cost escalation at previous rates. Growth in unit costs, increase in the volume of service provided, and high outlay requirements for capital investment have combined to constrain use of future sales tax revenue unless more stringent constraints on total operating outlays are considered. UTA needs to restrain the growth in unit operating costs below the rate of inflation, especially in this emergent era of higher fuel and material costs.

8.4.3 Projected Annual Debt Service Coverage

UTA continues to easily meet the debt-service-coverage ratio minimum of 3:1 as required by the bond indenture for the sales tax and transportation revenue bonds. UTA projects that this will continue to be the case for the foreseeable future.

UTA has a variety of debt-related obligations. The 20-year cash flow analysis assumes that about 12% of future outlays will be used to pay for debt service on outstanding bonds. The use of a long-term cash flow projection permits total revenues and total outlays to be compared in order to determine if deficits are chronic (in which case debt will not correct any temporary imbalances) or if there are annual surpluses sufficient to reduce the need for debt. The scenario tested indicates that revenues and outlays are roughly in balance over the entire period with early deficits offset by future surpluses. In this scenario, some form of cash flow management, either through bonds or leases, will be needed to balance annual results.

8.5 Risk and Uncertainty

The financial analysis determined that UTA has the capacity to undertake major investments. Strong fiscal discipline, restraint in expanding service and overhead, and other management measures to smooth cash flows over the next 20 years are some strategies that can provide the funding for UTA to support the construction, operation, and maintenance of the FrontLines 2015 Program of expansion projects. The financial analysis also assumes substantial federal participation in the construction of preferred build alternatives. The magnitude of the investment requires UTA to ensure that the federal participation levels necessary to achieve program goals and objectives are attainable.

Although the financial analysis has defined a likely future based on previous funding trends, there are operating and capital risks associated with this project that could affect a financial plan. Some additional risks related to UTA fiscal-capacity are described in the following sections.

8.5.1 Operating Risks

The operating-cost projections assume that UTA will continue to contain unit-cost growth, particularly in the area of fuel and materials. If the assumed operating efficiencies are not realized, the system-wide operating costs could be higher than those shown in the fiscal capacity analysis, and UTA's long-term ability to balance its costs and revenues could be negatively affected.

Changes in fares, fare policy, and fare structure affect ridership. Downtown parking costs affect ridership. Downtown employment levels affect ridership. Ridership affects fare revenue and cost recovery. Ridership also affects service levels, which in turn affect capital and operating costs. Emphasis on maximizing ridership and improving fare recovery, including minimizing fare evasion or token and ticket fraud, are important elements of ensuring fiscal capacity.

8.5.2 Capital Cost Risks

There remain considerable uncertainties in the capital cost estimates for the Draper Transit Corridor project build alternatives because of limitations noted in the Capital Cost Methodology and Estimates Report (AECOM 2008). This is not unusual at the conceptual level of planning. A more refined cost estimate will be required during preliminary engineering as the project is advanced to the 30% design stage. Some of the uncertainties noted include the following:

- At this AA phase, UTA has not appraised each parcel that would need to be acquired. A flat percentage of construction costs have been used to budget needed property acquisitions.
- Broad unit costs have been applied for key elements rather than estimates based on specific designs. Site-specific design will occur in the future engineering phases.
- No specific allowances have been provided for utilities, environmental or cultural mitigation, or other special site conditions.

Many of these costs were accounted for in unallocated broad contingency categories. As the design becomes more refined, these costs could be either more or less than the allowed contingency.

The rate of inflation could increase when this project is advancing to the construction phase, and this would raise all material and labor costs. Financial risks and interest rates could increase as capital markets respond to changes in the financial market and global economy. Sales and use tax receipts could fall below forecast levels if the economy slows.

8.5.3 Risk-Management Strategies

As the Draper Transit Corridor project advances, the following strategies can be used to address the identified risks:

- Constructing the project in phases
- Slowing the growth in system operating costs
- Reinvesting productivity gains in the capital improvement fund rather than in expanded services
- Raising fares
- Using short-term debt to smooth cash flows

8.6 Financial Analysis Conclusion

UTA does not have adequate resources to build and operate the preferred alternative without adversely affecting the existing bus or rail systems. Therefore, a phased approach to project development must be considered. Consequently, UTA examined an MOS that falls within or near the available budget of $220 to $250 million.