8.0 FINANCIAL ANALYSIS

This chapter presents a summary of the financial analysis for the Central Corridor Light Rail Transit (LRT) Project, a description of the Project Sponsor and local Funding Project Partners, and the capacity of the Partners to fund the project. The final financial plan incorporates the following items:

- Capital cost estimates
- Operating and maintenance cost estimates
- Farebox revenues and other income projections
- Evaluation of revenue stream required for capital costs
- Evaluation of revenue stream required for operating costs
- Evaluation of potential funding sources from federal, state, and local governments

Since publication of the AA/DEIS, the most significant change is that a new dedicated transit funding source has been approved at the state level (Motor Vehicle Sales Tax via a voter approved Constitutional Amendment) and regional level (5-county 0.25 percent sales tax dedicated to transit) resulting in 100 percent of the non-federal matching funding for the project being committed at this time. See Section 8.6.1 for more detailed information.

8.1 Summary of Financial Plan Changes and Improvements

The information presented in this chapter was prepared by the Central Corridor Project Office and submitted as part of the New Starts update on September 5, 2008. It builds on the financial plan presented in Chapter 6: Central Corridor LRT Financial Report (M-3 Project Finance Plan) of the "Draft New Starts Application & Project Management Plan – 29 June 2006."

8.1.1 Revised Assumptions and New Initiatives

While many assumptions have been retained from the 2006 Financial Plan, significant breakthroughs in transit funding have been achieved in the interim and are reflected in this Financial Plan. The State of Minnesota and the metropolitan region have enacted substantial new transit funding initiatives since the 2006 Financial Plan. These updated assumptions underlie the consistent presentation of Metropolitan Council's financial capacity to undertake the Central Corridor Project. The key variances include:

- **Capital Cost Estimate**: The capital cost estimate has been updated to reflect the completion of 30 percent design plans as part of the preliminary engineering project development phase. The year-of-expenditure (YOE) cost estimate is \$914.9 million (System Cost Categories Template, August 30, 2008) (inclusive of prior year expenditures). The capital cost estimate also includes estimated financing costs that will be incurred for bonding.
- Near-Term Infrastructure Renewal: The Financial Plan uses Metropolitan Council's 2008-2013 Capital Improvement Program (CIP) as the basis for modeling near-term capital renewal investment costs, including bus and rail fleet renewal and other non-fleet renewal costs (such as guideway maintenance, facilities maintenance, ADA improvements, and ancillary capital investments) (Metropolitan Council).
- **Commitment of State Funds:** The state remains committed to funding its share of the project with General Obligation bonds. The revised plan calls for the state to carry 10 percent of the total capital cost. The state has already authorized a total of \$83 million in three separate legislative sessions.
- **Commitment of Local Funds:** The Ramsey County Regional Railroad Authority (RCRRA) Board and the Hennepin County Regional Railroad Authority (HCRRA) Board remain committed to fund the project from their dedicated property taxes; the amount of their funding in the revised plan comes to 10 percent of the project. Regional Railroad Authorities (RRAs) have the authority to levy a property tax, which is limited to .04835 percent of the market value of all taxable property within the county. RRAs are also authorized to issue debt under Minnesota Statutes (MS) chapter 398A. The two authorities have committed a \$90.0 M share to the project. In addition, for one-year, they have committed additional funds which enable the project to achieve a 100 percent local financial commitment.
- Counties Transit Improvement Board Capital Funding: Five counties in the Metropolitan Region have united to form a Counties Transit Improvement Board (CTIB) with a 0.25 percent sales tax on sales within their boundaries dedicated to transit; a current resolution commits to fund 30 percent of the Central Corridor LRT capital cost, or \$274 million (CTIB Resolution #17) together with 50 percent of the operating deficit (CTIB Resolution #17).

- Wage Inflation Assumptions: The annual inflation rate has been revised to 3 percent for the Central Corridor LRT capital and to 3.15 percent for operating cost/Consumer Price Index (CPI) based on separate analyses of Metro Transit operating expense and labor expense history to conform to current experience; both operating cost inflation and energy costs are the subject of separate project-specific risk analyses described in Section 8.10 of this FEIS..
- Operating Funds:
 - Central Corridor LRT Operating: the implementation of the CTIB provides a source of both capital and operating funds for the additional local operating assistance required for the Central Corridor LRT; the CTIB is committing to fund 50 percent of the Central Corridor LRT operating deficit (operating cost net of farebox revenue) (CTIB Resolution #17)
 - The State will provide the other 50 percent of the operating assistance for the project, following the precedent established in the Hiawatha LRT project.
 - Other Metro Transit Operating: The constitutional amendment proposing dedicating 100 percent of the Motor Vehicle Sales Tax (MVST) revenues to transportation was passed in November 2006. With its passage, the Metropolitan Council's share of statewide MVST revenues for transit will grow from 21.5 percent in 2006 to 36 percent in 2012, or from approximately \$116 million in 2006 to \$175 million in 2012; this is the primary source for non-project operating assistance in this financial plan.
- **Projection of Future FTA Section 5307 Formula Funds**: The 2006 Plan increased Federal Transit Administration (FTA) Section 5307 Formula Funds at a fixed annual growth rate. The FY 2009 Financial Plan builds up the projected FTA Section 5307 funds from modeled data on service area population and density, bus revenue miles, fixed guideway revenue miles, and fixed guideway directional route miles. This approach directly accounts for the growth in service and population that is projected over the 30-year period of the Plan.
- Risk and Uncertainties: The FY 2009 Financial Plan includes expanded analysis and discussion of risks and uncertainties that could potentially impact the financial viability of the project. This included sensitivity analyses of revenue sources and expenses to indicate the impact of potential cost increases and revenue shortfalls. The following scenarios were tested:
 - o Higher than expected inflation
 - Higher than expected energy expense
 - o Delayed federal payments
 - Project cost overrun of 20 percent

8.1.2 Assumptions Retained from Previous Plan

The critical financial plan assumptions that have been retained include:

- **Non-farebox operating revenues:** Auxiliary sources of revenue for the Metropolitan Council including interest income and advertising.
- State and local sources:

- Motor vehicle sales tax (MVST): Motor vehicle sales tax revenues have been the largest source of operating funds for Metropolitan Council Transportation Division. The average annual growth rate of the MVST over its history from 1973 to 2007 is 4.9 percent per annum; the prospective portion of the MVST revenues has increased as described under "revised assumptions," above.
- The Metropolitan Council is a component unit of the State of Minnesota and the state has consistently provided a material part of the operating budget from general state appropriations.
- **Planned implementation schedule**: Startup of Central Corridor LRT operations is planned for 2014.
- **Baseline levels of service**: A realistic background rate of service growth is consistent with the projections in the regional travel demand model and represents an increase of approximately 10 percent by 2030.
- Fare policy and fare revenues: The Metropolitan Council's formal fare policy, to which it has adhered, maintains fares at the rate of transit cost inflation; it is implemented through a requirement for a fare increase whenever the farebox ratio drops below 28.5 percent, and that policy is replicated in the financial plan projections.

8.2 Project Sponsors and Funding Partners

The primary funding partners with the Federal Transit Administration (FTA) in this project are the Metropolitan Council, the State of Minnesota, CTIB, RCRRA, and HCRRA.

8.2.1 Project Sponsor

Metropolitan Council is the project sponsor and grant applicant for the Central Corridor LRT Project and will work in partnership with the FTA, State of Minnesota, the CTIB, Ramsey County, and Hennepin County for the successful construction and operation of the service. (HCRRA, RCRRA, and Metropolitan Council Memorandum of Understanding, August 29, 2006)

The Metropolitan Council was established by the Minnesota Legislature in 1967. The Metropolitan Council provides cost-effective transit and wastewater services, coordinates economic development, and assists communities as they plan for anticipated growth. The Metropolitan Council consists of 17 members appointed by the Governor of the State of Minnesota and develops, in cooperation with local communities, a comprehensive regional planning framework. The Metropolitan Council is the metropolitan planning organization for the Twin Cities (Minneapolis and St. Paul) region and has statutory responsibility for the formulation of the Transportation Improvement Program (TIP) and the Long Range Transportation Plan (LRTP). Counties within the jurisdiction of Metropolitan Council include Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington. Metropolitan Council responsibilities include the identification of needed transportation improvements and the determination of appropriate funds to be applied to these projects. Metropolitan Council has three major areas of responsibility: transportation, environmental services, and community planning and development. Additional areas of responsibility include public housing, regional parks, and water usage coordination.

The Metropolitan Council has staff of 3,700 and an annual operating budget of about \$700 million, 90 percent of which is funded by state appropriations and user fees such as wastewater treatment charges and transit fares. Just 10 percent comes from local property taxes. The bulk of the Metropolitan Council's employees operate the region's transit and regional wastewater treatment systems. Of its budget, the Council spends about \$80 million on grants to local jurisdictions for regional park operations and community development projects and on housing assistance for low-income families.

The operating divisions and other major units report to the Regional Administrator who, in turn, reports to the 17-member Metropolitan Council board. The Regional Administrator is responsible for ensuring that policy decisions of the Metropolitan Council are carried out, for organizing and directing the work of Metropolitan Council staff, for preparing and submitting an annual budget and for keeping the Council fully apprised of the financial condition of the Metropolitan Council.

8.2.1.1 Organization and Structure

A description of the Metropolitan Council's primary organizational divisions follows. Within these primary divisions are departments that support the day-to-day work of the Council.

The Community Development Division is responsible for the Metropolitan Council's regional growth strategy, planning, and technical assistance to local communities and parks and open space. This division also includes the Metropolitan Housing and Redevelopment Authority (Metro HRA) and the Livable Communities program.

The Metropolitan Council Environmental Services Division (MCES) collects and treats an average of 300 million gallons of wastewater each day from 104 communities, achieving near-perfect compliance with federal and state clean water standards. It also provides water resources monitoring and analysis for the region, and partners with numerous public and private groups committed to a clean environment. MCES operates and maintains approximately 600 miles of regional sewers and treats up to 300 million gallons of wastewater daily at eight regional treatment plants. Serving nearly 90 percent of the sevencounty area population, MCES provides cost-effective wastewater service to 104 communities.

The Transportation Division includes Metro Transit and Metropolitan Transportation Services.

- Metro Transit is one of the country's largest transit systems, providing roughly 95 percent of the 73 million bus trips taken annually in the Twin Cities. Each weekday customers board Metro Transit buses an average of 231,000 times. Metro Transit operates 121 routes—64 local-service routes and 49 express routes—and 8 contract service routes, using a fleet of 949 buses. Metro transit also operates the 12-mile Hiawatha light rail line, which has been in service since June 2004. The majority of the company's fleet of bus vehicles (794) is standard 40-foot buses while 155 are articulated ("accordion") buses. All Metro Transit buses are equipped with wheelchair lifts or ramps. Metro Transit will be the Northstar Corridor Commuter Rail operator when revenue service begins on that line in 2009. Metro Transit will also be the Central Corridor LRT operator.
- **Metropolitan Transportation Services:** MTS manages the contracted transit service programs in the Twin Cities metropolitan area. These programs include the following:
 - Metro Mobility: Provides paratransit service as required by the ADA to persons whose disabilities prevent them from using the regular route transit system.
 - Contracted regular route service: Regular route service is provided by twelve separate contracts with private, governmental, and non-profit organizations.
 - Community-based programs: Dial-a-ride programs are provided through eighteen contracts with private, non-profit, and governmental agencies. These programs serve primarily the elderly and persons with disabilities.
 - VanGo: MTS contracts with a company to provide vanpools. Typically these vanpools are either in areas without regular route transit service or are for individuals who work shifts outside of normal commuting times.
- **Opt-out communities:** Twelve communities have chosen to provide their own transit service (known as "opt-out" communities) and are separate transit authorities. Opt-outs provide both regular route and dial-a-ride programs. Opt-outs receive state MVST and general fund revenues through MTS (2008 Unified Operating Budget).

Capital Funding for the Transportation Division of Metropolitan Council includes federal, state, and local funding. The Metropolitan Council can issue regional bonds for transit if it receives specific authorization from the State Legislature. Within the statutory bonding authority, the Metropolitan Council issues long-term debt to finance transit projects and has generally balanced the debt service with its property tax proceeds, insulating the transit operating budget from the transit debt service. The Metropolitan Council has authorized the

Transportation Division to utilize loans from the Minnesota Public Facilities Authority to the maximum extent available to capital projects (2007-2012 Capital Improvement Plan).

Operating Funding for the rail services (Hiawatha, Northstar, and the proposed Central Corridor LRT) is drawn from the rail project partners. Operating funding for the remainder of the Transportation Division is a mix of MVST, state appropriations, federal, state, and local funding, investment earnings, and passenger fare and other revenues (2007 Unified Operating Budget).

8.2.2 Local Funding Project Partners

LRT was selected by Ramsey County and the Metropolitan Council as the locally preferred alternative (Preferred Alternative) for the Central Corridor Project in June 2006 after the publication and circulation for comment of the AA/DEIS. Funding for the project has been secured from the State of Minnesota, the Counties Transit Improvement Board, and two regional rail authorities.

8.2.2.1 State of Minnesota

The state capital funding will be provided through bonding. It is anticipated that the securities will be general obligation debt. The State of Minnesota has earned the highest ratings from the three rating services, Aa1 from Moody's, AAA from Standard and Poor's, and AAA from Fitch. The state has currently authorized \$83 million in general obligation bonds for the Central Corridor LRT project (Minnesota Session Laws 2008). Additional state funds for construction will be made available in advance of the scheduled need in 2010 and on.

8.2.2.2 Counties Transit Improvement Board

The CTIB was created in 2008 by enabling state legislation and the concurrence of five counties in the region. The board's purpose is to provide a dedicated source for capital and operating funds for transitway projects serving the five participating counties: Hennepin, Ramsey, Anoka, Dakota, and Washington. A 0.25 percent sales tax generated from the five counties and an excise tax of \$20 per motor vehicle purchased at a retail auto dealer will be used to award grants and issue bonds. CTIB is composed of two annually-appointed county commissioners from each member county and the Chair of the Metropolitan Council. Votes are allocated based on a total of 100 votes. 95 votes are allocated to counties per a weighted formula (50 percent sales tax revenue; 50 percent population). Five votes are allocated to the Chair of the Metropolitan Council. In general, CTIB actions require 63 votes and a majority of the counties in favor, except for large long-term bonds.

The issuance of large long-term bonds with maturities in excess of 5 years and amounts in excess of one year's Sales Tax revenue require 75 votes and a majority of the counties in favor. A Grant Evaluation and Ranking System Committee (GEARS) recommends grants to CTIB. GEARS committee members include one county commissioner, one elected city official per 400,000 residents in each county, and the Chair of the Metropolitan Council Transportation Committee. The criteria for grant awards include: (1) being consistent with Metropolitan Council's Transportation Policy Plan (TPP); (2) adhering to transitway purposes; and (3) granting each of its County members at least 1 percent of total sales tax proceeds for FY 2009, 2010, and 2011.

8.2.2.3 Regional Railroad Authorities (RRAs)

Regional railroad authorities are established as political subdivisions of the state under Minnesota Statutes (MS) chapter 398A. Under this chapter, RRAs have powers similar to the county for the specific purpose of providing for the planning, preservation and improvement of rail service including passenger rail service and to provide for the preservation of abandoned rail right-of-way for future transportation uses. RRAs have the authority to levy a property tax up to .04835 percent of the market value of all taxable property within the county. RRAs are also authorized to issue debt under MS 398A.

Ramsey County Regional Railroad Authority (RCRRA)

RCRRA obtains its funds from a property tax levied under the authority of MS 398A, plus interest earned on balances. This tax is distinct from the Metropolitan Council's property tax authority. The tax was levied at a rate of \$10.8 million in 2006, which is considerably less than the levy limit established in MS 398A, which would yield approximately \$20 million per year. In 2008 and 2009, the tax levy was \$19.9 million.

Hennepin County Regional Railroad Authority (HCRRA)

HCRRA obtains its funds from a property tax levied under the authority of MS 398A, plus interest earned on balances. This tax is distinct from the Metropolitan Council's property tax authority. The tax was levied at a rate of \$12.5 million in 2007 (HCRRA 2007 Budget), which is considerably less than the levy limit established in MS 398A which would yield approximately \$62 million per year.

8.3 Capacity of Partners to Fund the Proposed Project

The Central Corridor LRT is expected to cost \$914.9 million in year-of-expenditure dollars to construct, equip, and place into service. The Metropolitan Council will request FTA Section 5309 Discretionary New Starts funding for the project in the amount of \$453 million in the Full Funding Grant Agreement (FFGA). The Metropolitan Council also received \$4.5 million in prior Congestion Management and Air Quality (CMAQ) funding for Central Corridor LRT. Other project funding will come from the State of Minnesota, the Counties Transit Improvement Board, RCRRA, and HCRRA.

State bond funds in the amount of \$83 million have been secured to date. In addition, RCRRA and HCRRA have adequate cash and bond capacity to provide the remaining local share of preliminary engineering costs in 2008 and 2009. The CTIB has begun to receive a reliable stream from its sales tax revenue. The Central Corridor LRT is a priority project for the CTIB, and all of its leveraged funding capacity is potentially available to the project. The CTIB has committed to provide 30 percent of the capital funding (CTIB Resolution #17, August 20, 2008).

8.4 Financial Plan Summary: Capital Funding Plan, Interest, and Operation and Maintenance (O&M) Costs

8.4.1 Central Corridor Capital Funding Plan

The estimated total cost for the Central Corridor LRT project is \$914.9 million in year of expenditure (YOE) dollars. This amount includes \$6 million in finance charges. The total cost will be funded from federal, state, and local sources.

Section 5309 New Starts funding will be provided by the FTA under an FFGA in the amount of \$453 million. State funding of \$91 million will be supplied by the State of Minnesota, which has already committed \$83 million of its entire share to the project. The region will flex \$4.5 million in CMAQ funding authorized under Federal Highway Legislation to fund this transit project. CTIB capital funds of \$274.5 million and Railroad Authority funds of \$91.5 million will provide the remainder of the necessary funds. The RRAs have committed a total of \$96.2 million for one year, enabling the project to achieve 100 percent local financial commitment. The overall capital funding plan is shown in Table 8-1.

Source of Funds	Amount	Percentage of Total		
Local Funding (50% of total)				
Counties Transit Improvement Board	\$274,465,792	30.0		
State of Minnesota Bonding	91,488,597	10.0		
Regional Rail Authorities (10% of Local Funding total				
Ramsey County Regional Rail Authority	64,042,018	7.0		
Hennepin County Regional Rail Authority	27,446,579	3.0		
FTA Funding (50% of total)				
5309 New Starts	452,942,986	49.5		
CMAQ	4,500,000	0.5		
Total Funding	\$914,885,972	100.0%		

Table 8-1 Central Corridor LRT Capital Plan Summary

Source: Metropolitan Council Engineering Services Consultant, 2008

8.4.2 Interest Expense

This plan is based on a maximum of \$95,000,000 in FFGA funding scheduled in any one year. This plan requires financing until the FFGA funding can be paid in 2015, the year following completion and startup. The Metropolitan Council or CTIB will provide this financing (shown as "Construction Commercial Paper" in the cash flows) and the responsible party or parties may request adding the final financing expense into the FFGA project cost. This plan also includes \$6 million in contingency funding for finance charges should the federal funding be delayed beyond the agreed upon federal funding schedule in the FFGA.

8.4.3 Plan for Funding CCLRT Capital, Operating and Maintenance Revenues, Sources, and Costs

Table 8-2, below, summarize the costs during prior years and during future phases including construction that are eligible to be included in the FFGA total. Prior years' expenditures for planning have been funded with a combination of non-New Starts federal funds, New Starts non-FFGA funds, state, and local funds. It includes FFGA funding for financing costs (bond issuance and interest expenditures incurred) during the construction period. FFGA New Starts funding is requested to be 49.5 percent of the total FFGA project cost.

Capital Sources of Funds	Year-o	Capital f-Expenditu	Revenue re Dollars (r	nillions)
	Prior-2010	2011–2020	2021–2030	Prior+ 2008–2030
Regional Capital Proceeds	\$137.08	\$354.03	\$398.50	\$889.60
5307 Federal Formula	0.	42.40	73.72	116.12
5309 Fixed Guideway Modernization	0	63.83	172.66	236.49
Federal Other	0	0	0	0
Federal Other CIP	187.87	548.08	779.30	1,515.25
Sec 5309 New Starts	3.51	449.44	0	452.94
CMAQ	4.50	0	0	4.50
CTIB CCLRT	274.47	0	0	274.47
State CCLRT	91.49	0	0	91.49
Local Capital Assistance	91.49	0	0	91.49
Subtotal Grants	790.39	1,457.77	1,424.18	3,672.34
Financing Program				
Construction Tax Exempt Commercial Paper	4.19	180.78	0	184.97
Total Capital Sources of Funds	\$794.58	\$1,638.55	\$1,424.18	\$3,857.32

Table 8-2 Transportation Division Financial Plan Summary	
Capital Sources of Funds	

Source: Metropolitan Council Engineering Services Consultant, 2008

Table 8-3, below, shows that operating resources for the project will come from passenger fares with forecasted fare increases according to Metropolitan Council's farebox recovery ratio policy, CTIB revenues, and state assistance.

Table 8-3 Transportation Division Financial Plan Sum	mary
Operating Sources of Funds	

Operating Sources of Funds	Operating Revenue Year-of-Expenditure Dollars (millions)				
	Prior-2010	2011–2020	2021–2030	Prior+ 2008–2030	
Fare Revenue	\$253.95	\$1,261.26	\$1,893.53	\$3,408.75	
Operation Surplus	0.00	0.00	0.00	0.00	
Motor Vehicle Sales Tax	385.85	2,042.41	3,036.22	5,464.48	
CTIB – Funding	55.65	173.95	243.73	473.33	
Other Transit Related	30.47	124.69	170.03	325.19	
Other Local Operating Assistance	8.32	8.26	11.03	27.62	
Federal Operating Assistance	100.62	385.73	502.45	988.79	
State	261.78	965.44	1,117.61	2,344.83	
Investment Income	4.25	18.50	24.18	46.92	
Total Operating Sources of Funds	\$ 1,100.88	\$ 4,980.24	\$ 6,998.78	\$13,079.90	

Source: Metropolitan Council Engineering Services Consultant, 2008

8.5 Capital Plan

8.5.1 Sources of Funds for Capital

Details of Metropolitan Transit's total capital plan are shown in Table 8-5 (page 8-16, below). The financial analysis applied projections of the following sources of project capital funds:

8.5.1.1 Federal Funding

Section 5309 New Starts: These discretionary grants are applied as a percentage of the cost of each rail construction project. While the statutory maximum federal participation for Section 5309 New Starts funds is 80 percent, the actual amount applied in recent projects has been considerably less. This is because the demand for these funds significantly exceeds the level of funding currently authorized or anticipated to be authorized in the future and projects with a lower percentage of federal participation are viewed more favorably by FTA for funding.

The financial analysis assumes 49.5 percent 5309 New Starts funds, with New Starts funding under a FFGA beginning in 2010.

Section 5309 Rail Modernization: These grants are derived by formula, a function of vehicle revenue miles and route miles. Urbanized areas with fixed guideway systems that are at least seven years old are eligible to receive fixed guideway modernization funds. The funds must be used to maintain, modernize, or improve fixed guideway systems. These funds are assumed to be leveraged to a higher degree than New Starts funding. State and local funds for capital rehabilitation and replacement, or CIP, are typically matched with federal funds equal to 80 percent of eligible expenses. The plan allocates these funds exclusively to the Metro Transit Capital Improvement Program.

Capital Improvement Program (Other CIP): As shown in Table 8-2, above, \$1,515.25 m is assumed for Other CIP from 2008 through 2030. This includes capital investments to assure that fixed assets remain in a state of good repair, the fleet is replaced in accordance with the fleet management program, technological and other improvements are made to maintain and improve operating efficiency and effectiveness, and customer service and convenience is maintained and improved. These requirements address routine renewal of fixed assets beyond the level of maintenance included in the operating budget. This typically includes maintenance actions whose cycle length is greater than every three to five years. Examples include bus replacements, facility rehabilitation, transit center rehabilitation, computer hardware investment, and small bus maintenance. These requirements include rehabilitation and replacement costs associated with the construction of the commuter rail and light rail system. The basis for these estimates is the Metropolitan Council adopted preservation program (Metropolitan Council2008-2013 Capital Improvement Program and 2008 Capital Program and Budget).

8.5.1.2 Local Funding

The State of Minnesota is fully engaged in the project and has already appropriated \$83 million in the form of General Obligation bonds to fund its share of the capital plan.

Regional Property Tax Revenue Transit Asset Program

The Metropolitan Council levies a regional property tax which is dedicated to funding a debtfinanced capital program. The outstanding debt in the program is serially refinanced and current debt service requirements are met from the property tax revenues. The net proceeds from the debt program are dedicated to funding the transit infrastructure programs, and the forecast for these net proceeds are the amounts shown in the cash flow projections as "Regional Capital Proceeds." (Metropolitan Council Financial Planning)

Counties Transit Improvement Board

The principal local funding source for Central Corridor LRT will be the CTIB. As discussed in Section 8.2.2.2, above, counties that join the board levy a 0.25 percent sales tax dedicated for transitway capital and operating funds for projects serving the participating counties. As shown in Figure 8-1, the history of the pre-existing sales and use tax, which is levied in the five counties and statewide on the identical tax base to the CTIB sales and use tax base, provides a sound basis for projecting the sales and use tax revenue.¹

The 0.25 percent rate applied to \$33.6 billion in taxable sales in 2006 would yield in excess of \$84,000,000 per annum and escalation to 2008 is expected to bring the total budget close to \$100,000,000 per year. The taxable sales in the five counties have been increasing at a 4.6 percent compound rate over the 20-year period.

Collection of the tax began July 1, 2008. The first reporting to the Minnesota Department of Revenue was due on August 20, 2008, and the first payment to the participating counties occurred on September 10, 2008 (Presentation to Hennepin County Board).



FIGURE 8-1 TAXABLE SALES IN FIVE COUNTIES

¹ Minnesota Department of Revenue. Data for 1997, 1999, 2001, and 2002 were not complete and were estimated by Metropolitan Council Financial Planning.

Regional Railroad Authorities

Local funding will come from the RCRRA and HCRRA. The RRAs adopted resolutions committing each partner to a portion of the total local contribution of approximately 10 percent of the net total project cost, an estimated \$91 million. These resolutions of the RRAs of Ramsey County and Hennepin County are included in the New Starts submission exhibits. Ramsey County will be responsible for 70 percent of the RRA share and Hennepin County will be responsible for 30 percent.

Ramsey County Regional Railroad Authority

RCRRA has committed to funding its share of the Central Corridor LRT project (RCRRA Resolution, July 22, 2008) and is also considering whether to issue bonds for the Central Corridor LRT project. RCRRA obtains its funds from a property tax levied under the authority of MS 398A, plus interest earned on balances. This tax is distinct from the Metropolitan Council's property tax authority. The tax is currently levied at a rate of \$10.8 million in 2006, which is considerably less than the levy limit established in MS 398A which would yield approximately \$20 million per year.

As of December 31, 2007, RCRRA had \$37,124,792 in fund balance (RCRRA). The RCRRA Board has committed funding for the project, which will be obtained either from funds on hand or by means of one or more tax-exempt RCRRA bond issues, capitalized over 15 to 20 years. At current tax- exempt rates, the year 2009 \$19.9 million annual levy would capitalize about \$260 million of debt (20-year-level debt at 4.5 percent), which is well in excess of project requirements. Increasing the levy to permissible limits would increase this capacity. The county has an AAA credit rating from Moody's, and Standard and Poor. Debt capacity roughly doubles if the RCRRA raised the levy up to the cap of \$23 million per year.

Hennepin County Regional Railroad Authority (HCRRA)

HCRRA obtains its funds from a property tax levied under the authority of MS 398A, plus interest earned on balances. This tax is distinct from the Metropolitan Council's property tax authority. The tax is currently levied at a rate of \$12.5 million in 2007 (Fact Sheets/RRA 2007budget) which is considerably less than the levy limit established in MS 398A which would yield approximately \$62 million per year.

The HCRRA Board has committed to fund the project through funds on hand or one or more tax-exempt HCRRA bond issues, capitalized over 15 years to 20 years (HCRRA, RCRRA, and Metropolitan Council Memorandum of Understanding, August 29, 2006). At current tax-exempt rates, the current \$7.5 million annual levy would capitalize about \$98 million of debt (20 year level debt at 4.5 percent). The county has an AAA credit rating from Moody's, Standard and Poor, and Fitch. The debt capacity increases more than 800 percent if the HCRRA raised the annual levy to the \$62 million cap.

8.5.2 Uses of Funds for Capital

In 2005, FTA implemented the Standard Cost Categories (SCC), to establish a consistent format for the reporting, estimating, and managing of capital costs for New Starts projects. Over the life of a project, using this consistent format makes it easier to track, evaluate, and control cost changes. Submission of capital costs to FTA in the SCC format is required at the certain project points. Table 8-4 summarizes Central Corridor project costs by SCC, as defined by the FTA. The table contains prior years' and construction years' costs to reflect total project costs.

SCC	Description	Cost Estimate (YOE dollars millions)
10	Guideway & Track Elements	\$100,038
20	Stations, Stops, Terminals, Intermodal	59,778
30	Support Facilities: Yards, Shops, Admin Bldgs	41,753
40	Sitework & Special Conditions	137,122
50	Systems	125,879
Subtotal I	nfrastructure (SCC 10 – 50)	\$464,570
60 ROW, Land, Existing Improvements		\$21,147
70	Vehicles	125,922
89	Professional Services	162,240
96	Unallocated Contingency	135,011
100 Finance Contingency Charges		6,000
Subtotal (SCC 60 – 100)	450,320
Total Capi	tal	\$914,888

Table 8-4 Project Capital Expenditure Summary

Source: Metropolitan Council Engineering Services Consultant, 2008 Note: Cost estimates do not add up to total capital due to rounding.

Light Rail Construction and Acquisition: The development costs of the Central Corridor LRT project are estimated to be \$914.9 million in YOE dollars as shown in the table above. The details of the construction cost and acquisition estimates, which includes unallocated contingency, are specified in the project description and the definition of the build alternative, which can be found in Chapter 2 of this FEIS.

8.5.3 Agency-Wide Capital Plan

Table 8-5 presents Metropolitan Council Transportation Division's capital investment plan excluding the Central Corridor LRT. The capital renewal investments for MTS services are included in "Bus Preservation" in this table. Over the 23-year period Metropolitan Council would invest over \$2.583 billion in capital investments with an average expenditure of \$562 million in capital investment every five years.

Capital Uses of Funds	Year of Expenditure Dollars (millions)					
	2008–2010	2011–2020	2021–2030	Prior + 2008–2030		
Rail Rehabilitation & Replacement	\$9.81	\$58.32	\$140.14	\$208.27		
Bus Preservation & Expansion	\$280.26	\$868.10	\$1,226.30	\$2,374.66		
Total Other Capital Programs	\$290.08	\$926.43	\$1,366.44	\$2,582.94		

 Table 8-5 Transportation Division Capital Program

Source: Metropolitan Council Engineering Services Consultant, 2008

8.5.4 Potential Responses to Capital Funding Shortfalls

In the event that Metropolitan Council does not receive federal funding appropriations according to the schedule specified in the Financial Plan, either due to congressional appropriations or other contingencies, Metropolitan Council will be able to maintain the Central Corridor LRT project's schedule through a variety of financing methods.

- Cash Reserves, Construction Contingencies, and Funding Commitments: Metropolitan Council has prepared conservative cost estimates for the project that will be achieved through rigorous construction management, project scheduling, and project budget management systems. To manage unavoidable variances from estimates, Metropolitan Council has provided unallocated contingency funds totaling approximately \$130 million dollars in the Financial Plan. Metropolitan Council's cash management processes are designed to avoid costly disruptions in the delivery of projects and services due to brief, routine emergencies in accounts receivable and collections.
- Bond Proceeds Financial Management Practices: The funding partners have recent experience though the financial plan and funding commitments that resulted in successful implementation of the Hiawatha LRT and Northstar commuter rail service which is nearing completion. RCRRA and HCRRA have property tax authority, which supports bonding. The Minnesota Legislature has enacted bonding authority, which would provide the revenue for the state portion of the non-Federal share of project capital costs. To the extent feasible, the state and local partners have their shares of the project fully committed and are prepared to schedule their contributions to accommodate the project's requirements.
- **Cost and Scope**: As with any major New Starts project, there are risks due to engineering, scope, and schedule unknowns. The project sponsors are aware of these risks, and have managed the risks through varying application of contingency factors by category of project element.
- Funding Availability: The risk of less local or state funds being available than anticipated is believed to be negligible. The assumptions underlying RCRRA taxing authority provides a constant \$10.7 million per year in nominal terms. RCRRA has substantial additional taxing authority above the current levy—up to as much as \$20 million per year. The assumptions underlying HCRRA taxing authority provides a constant \$7.5 million per year in nominal terms. HCRRA has substantial additional taxing authority above the current levy—up to as substantial additional taxing authority above the current levy—up to as much as \$62 million per year. The County has a triple-A credit rating from Moody's, Standard and Poor's, and Fitch. The State of Minnesota has a triple-A credit rating from Moody's, Standard and Poor's, and Fitch.

The CTIB will also be consulted in project financial management issues and the Metropolitan Council and CTIB will resolve any issues that are not already resolved through one of the preceding financial management methods.

These financial management practices will permit the Metropolitan Council to maintain the construction schedule in cases of lags in the anticipated delivery of federal assistance or sale of bonds.

8.6 Operating Plan

8.6.1 Sources of Funds for Operations

Table 8-3 (page 8-12, above) presents sources of operating funding for the Central Corridor LRT project and the Metropolitan Council Transportation Division. The financial analysis applied the following sources of operating funds for Metro Transit Operations:

- Fare (Passenger) Revenue: Fare revenues are based on the Central Corridor LRT Project projected ridership for the proposed rail line. Ridership is to grow according to the travel forecasts that react primarily to increasing population and employment. The average operating revenue per passenger including cash fare and convenience fare such as 31-day pass revenue was \$0.89 for an LRT passenger and \$1.006 for a bus passenger (including express bus premiums) in 2006, prior to the current fare increase. A 10 percent fare increase is implemented whenever the Metro Transit bus fare recovery ratio (fares/total operating expenses) falls below 28.5 percent. In October 2008, Metro Transit implemented a fare increase in accordance with this policy, and the resulting estimated average fares are the basis of the passenger revenue projections. A further fare increase is projected for 2012. Beginning in 2018, passenger revenues projections are based on a continuous application of the policy rather than assigning specific years for increases.
- Motor Vehicle Sales Tax (MVST): MVST revenues are the largest source of operating funds for the Metropolitan Council's Transportation Division, accounting for approximately 40 percent of operating expenses in 2007. Figure 8-2 shows historic total state MVST receipts from 1973 to 2007. The long-term average annual growth rate for MVST revenues over this period is 4.9 percent per year.



FIGURE 8-2 HISTORICAL STATE MVST REVENUES FISCAL YEARS 1973-2007

Beginning in 2002, the Metropolitan Council Transportation Division began receiving a share of the State MVST revenues. In 2008, 24 percent of the total MVST revenues were dedicated to transit needs in the Twin Cities metropolitan area. Based on the passage of the constitutional question to dedicate 100 percent of the MVST revenues to transportation, the Metropolitan Council's share of MVST revenues for transit will grow from 21.5 percent in 2006 to 36 percent in 2012, or from approximately \$116 million in 2006 to \$175 million in 2012. The MVST revenue forecast in the plan shows a recovery by 2013 from the downturn that began in 2003 and then a 4 percent annual increase through the remaining projection period.

- **CTIB Operating Funding:** The CTIB, as described above under the Capital Plan Sources, has agreed to provide 50 percent of the operating assistance required for Hiawatha, Northstar, and CCLRT rail services; in addition, the legislation specifies an amount for Metropolitan Council operating assistance for 2009 which is included in the 2009 cash flow forecast (CTIB Resolution #17, August 20, 2008).
- Other Transit Related: Historical revenues generated by or for the transit operation consisting of advertising revenue, contract revenue, and miscellaneous sources; these are projected in proportion to the transit operation
- Other Local Operating Assistance: Although the primary operating assistance responsibility has been shifted from the RRAs to the CTIB, the legislation provides for the limited ongoing operating assistance set out in the cash flow projections.
- Federal Operating Revenue (FTA Section 5307 urban formula grants): These formula grants are based on various demographic statistics, level of service, ridership, and operating cost variables. Factors in the formulae that allocate grants to urbanized areas were estimated based on annual growth in total SAFETEA-LU Section 5307 funds. SAFETEA-LU limits the application of these Section 5307 grants to capital purposes, but an exception is made for maintenance expenses that protect the system's assets in the operating budget. The Financial Plan assumes that these grants are applied to preventative maintenance or to the Agency Wide capital plan.
- **State General Funding:** State funding for transit operations is derived from general fund appropriations, and is appropriated by the State Legislature on a biennial basis. State funding for transit operations has grown over recent biennia.
- **Investment Income**: Based on the funds generated or the net required in the cash flow projections, income is generated at interest income rates projected by "Moody's Economy.com" based on the return from 3-month treasury bonds. Although the conservative growth plan allows for the generation of substantial additional revenue, only interest income on the policy reserve (8.3 percent of operating expense) is accumulated in this forecast.²

8.6.2 Uses of Funds for Operations

Long-term projections of the Central Corridor LRT project operating budget were made using cost allocation models, which related line-item costs to specific cost drivers.

² A working capital or policy reserve of 8.3% of operating expense is maintained by Metropolitan Council Transportation Division. If funds are generated in excess of this amount, Council would have the option of investing the surplus in additional service.

8.7 Central Corridor LRT Project Operating Costs

LRT operating costs were projected using a cost allocation model, which associated costs with the principal rail transit cost drivers (train-hours, revenue car-miles, route-miles, and stations). The LRT operations and maintenance model was based on actual operating experience of the Hiawatha LRT system, with appropriate adjustments for changes in energy prices and labor rates.

Applying the unit costs to the projected level of service of the LRT system yields the annual operating costs of \$21 million in FY 2014 dollars. Revenue service is projected to begin in early 2014.

Using the operating and maintenance (O&M) cost models for each mode (bus and rail, or LRT) annual O&M cost estimates were developed for the No Build, Baseline and Build Alternatives based on operating statistics developed for bus and LRT modes. Table 8-6 identifies annual bus and rail O&M costs for these alternatives.

Table 8-6 Annual Operating and Maintenance (O&M) Cost Estimates(2008 dollars)

Alternative	Annual Bus O&M	Annual Rail O&M	Annual Total Bus and Rail O&M
Existing Service (2008)	\$ 244,879,290	\$ 24,444,077	\$ 269,323,367
No Build	\$ 272,574,002	\$ 24,444,077	\$ 297,018,079
Baseline	\$ 278,712,494	\$ 24,444,077	\$ 303,156,571
Build	\$ 266,142,357	\$42,313,597	\$ 308,455,954

Source: Metropolitan Council Engineering Services Consultant, 2008

Overall, Metro Transit systemwide annual O&M costs for the Build Alternative are \$308.46 million, an increase of \$ 5.30 million (1.75 percent) over the Baseline Alternative. The Baseline Alternative O&M costs are \$303.16 million, an increase of \$6.14 million (2.07 percent) over the No Build Alternative. Finally, No Build Alternative O&M costs are \$297.02 million, an increase of \$27.69 million (10.28 percent) over existing 2008 service level O&M costs. Note that service levels are designed for Year 2030 and include growth systemwide.

8.8 Agency-Wide Operating Plan

The analysis in this section focuses on the ability of the Metropolitan Council to adequately fund operation of its existing bus and LRT system, and to also pay for necessary expansion of that system in the future, in accordance with growing ridership demands. As described previously, the Metropolitan Council's Transportation Division is composed of two units: Metro Transit and Metropolitan Transportation Services. The financial capacity analysis data includes operating cash flow projections for the Transportation Division to year 2030, beginning with forecasts of the existing baseline bus and LRT system. By comparing expected growth in existing revenue sources with expected increases in the costs of operating the baseline system, it can be determined whether and to what extent the system can be funded without deficit, and whether the operation of additional service can also be funded within the current funding envelope, without the introduction of any new funding sources.

As the operating cash flow projections illustrate, adequate funds are available³ to cover the existing bus and rail, Northstar, and Central Corridor LRT operating expenses and fully fund the 8.3 percent system-wide reserve requirement and provide for moderate service expansion and enhancements. With prudent funds management, the Metropolitan Council could selectively finance some additional service enhancements over the forecast period.

The baseline financial capacity analysis through the year 2030 is shown in Table 8-7, below. As shown, existing bus and LRT service is projected to increase slowly and reach the level of forecast service in 2030 as used in the project's travel demand model. Expenses are projected to increase annually at a rate of 3.15 percent. Operating (passenger) revenue increases include periodic fare increases, forecast ridership, and fare recovery increases.

Two other major sources of operating funds are MVST revenues and annual state general fund appropriations. Metropolitan Council's share of statewide MVST revenues for transit will grow from 21.5 percent in 2006 to 36 percent in 2012 of from approximately \$116 million in 2006 to \$175 million in 2012; this is the primary source for non-transitway operating assistance in the plan. This is based on the state forecast of total MVST receipts for fiscal years 2009 through 2011, and an annual growth rate of 4 percent per year in MVST revenues thereafter. This forecast is viewed as conservative for financial planning purposes because growth of MVST during the period of 1973 to 2007 averaged 4.9 percent. The Agency Wide Operating Plan assumes all MVST receipts are used for operations, but can be used in the Agency Wide Capital Plan at the direction of the Metropolitan Council.

State general funds for operations are forecast to remain relatively flat with a 1 percent annual increase for bus operations. State assistance for Northstar, Hiawatha, and Central Corridor LRT operations is planned to be shared equally with the CTIB, which is 50 percent of the operating deficit after passenger revenue. This is also conservative, because the state has an unbroken history of assisting transit in the metropolitan region.

Several other sources of funding are incorporated in the capacity analysis, including:

- Use of Section 5307 funding for preventive maintenance and rehabilitation of buses
- Other income (such as advertising revenue) and interest income based on the fluctuating balances available

³ The annual surplus reverses and becomes a deficit in 2009 and 2010; however, there is more than enough surplus in the reserve, funded by the surpluses in all the other years, to fund these four years of cash need.

In addition to the sources and assumptions described above, another important aspect of the analysis is an operating reserve fund that the Metropolitan Council Transportation Division maintains. The policy is to keep a reserve of at least 8.3 percent of operating expenses. At the end of 2007, the reserve was a comfortable \$34.5 million. The required increases in this reserve as Northstar, Central Corridor LRT, and background bus service growth occur are reflected and fully funded in the cash flow projections.

The system-wide operating funding analysis, with the Central Corridor LRT in operation is shown in detail in Table 8-7, below. In the table, the net costs and revenues associated with the Central Corridor LRT service are superimposed on system-wide bus and rail expense and revenue flows. To highlight the ability of the existing revenue sources to fund additional operating expenditure over and above the needs of the existing bus and LRT system and the Central Corridor LRT, the last row in the table shows the annual operating surplus from these sources after covering existing bus and LRT service operations. Most of this increase is from MVST, which is a dedicated source of funding. Additional state operating funds greater than projected could also become available.

As seen in Table 8-7, the Central Corridor LRT funding plan described above will permit the Metropolitan Council Transportation Division to fully fund its existing bus and LRT system, the Central Corridor LRT, and its 8.3 percent operating reserve beginning in 2013. Relatively little funding is available for major service expansion until 2013. Moderate expansion could commence in 2012. By 2013, enough funding will become available to cover operating expenses and fully fund the system-wide reserve requirement and allow for an increase in transit service. Table 8-7 shows the data for Metro Transit Bus, Metro Transit Rail, Metropolitan Transportation Services, and the Metropolitan Council Transportation Division 23-year projection. Metropolitan Council is expected to spend over \$12 billion operating its existing assets. An average of \$2.9 billion will be spent every five years starting in 2011.

		Yea	r of Expend	diture Dollars	(millions)	
	2008	2009	2010	2011-2020	2021-2030	2008-2030
Operating Sources	s of Funds					
Fare Revenue	\$79.56	\$85.35	\$89.04	\$1,893.56	\$1,893.53	\$3,408.75
Motor Vehicle Sales Tax	131.64	114.48	139.72	3,036.22	3,036.22	5,464.48
CTIB – Funding	0	43.00	12.64	243.73	243.73	473.33
Other Transit Related	9.84	10.15	10.47	170.03	170.03	325.19
Other Local Operating Assistance	5.45	1.43	1.44	11.03	11.03	27.62
Federal Operating Assistance	34.95	32.40	33.27	502.45	502.45	988.79
State	91.61	82.60	87.56	1,117.61	1,117.61	2,344.83
Investment Income	0.74	1.05	2.45	24.18	24.18	46.92
Total Operating Sources of Funds	\$353.80	\$370.47	\$376.60	\$4,980.24	\$6,998.78	\$13,079.90

Table 8-7 Metropolitan Council Transportation DivisionOperating Cash Flow 2008-2030

		Year of Expenditure Dollars (millions)								
	2008	2009	2010	2011-2020	2021-2030	2008-2030				
Operating Uses of	Operating Uses of Funds									
Metro Transit Bus	\$244.92	\$253.92	\$263.29	\$3,166.89	\$4,506.18	\$8,435.19				
Bus Rapid Transit	0	0	0	0	0	0				
Metro Transit Light Rail	24.11	24.89	25.69	472.52	729.64	1,276.84				
MTS	81.18	83.73	86.37	1,028.41	1,402.35	2,682.04				
Northstar	0	11.22	13.06	155.55	212.12	391.95				
Total Operating Uses of Funds	\$350.20	\$373.76	\$388.41	\$4,823.37	\$6,850.29	\$12,786.02				
Net Operating Cash Flow	\$3.60	(\$3.29)	(\$11.80)	\$156.88	\$148.49	\$293.88				

Source: Metropolitan Council Engineering Services Consultant, 2008

8.8.1 Potential Responses to Operating Shortfalls

Short term shortfalls, as forecast for selected years in the cash flow projections, are covered by several sources of supplementary operating. These include:

- Metropolitan Council Transportation Division Operating Reserve: As indicated, the Metropolitan Council Transportation Division reserve at the end of 2007 is \$34.5 million and can be used to cover any deficits that might arise, with or without the Central Corridor LRT in place.
- State General Funds/State Commitments: The state's commitment to transit in the Metro region, and its specific commitment to developing LRT in the Central Corridor, may be regarded as an opportunity for financial risk management for operations. In an attempt to be conservative, the state operating funds in the baseline capacity analysis are anticipated to increase slowly from their 2006-2007 level and not increase proportionately with inflation.
- **Moderate additional fare increases:** The baseline projection included a fare increase implemented by the Metropolitan Council in fall 2008. Increases are projected to occur in 2013, 2017, 2022, and 2026, by 10 percent respectively. Fare increases could be accelerated if needed; however, transit fare increases typically result in increased fare revenues but decreased ridership.
- **Apply new operating funding sources:** This could include the implementation of new or expanded non-farebox revenue sources (e.g., expanded advertising or joint development).
- **Reduce service:** Reduce the length or number of daily trips, weekend and seasonal/holiday service, or the length of trains.
- **Apply new, non-operating sources:** Apply additional CTIB operating assistance, if available, and develop supplemental sources of state or other revenues.

The stability of Metropolitan Council's financial environment will permit managing the longterm maintenance and operation of the Central Corridor LRT project service in a wellplanned, deliberate, and financially prudent manner.

8.9 Cash Flow Analysis

8.9.1 Introduction

This section presents the findings, assumptions, conclusions, and limitations of the financial analysis presented in Table 8-8 through Table 8-19. The detailed financial analysis is presented in Appendix H for reference purposes.

8.9.2 Underlying Assumptions

The financial analysis was structured around the assumptions below with the following major considerations:

- Rail system construction and construction schedule
- Federal funding and state and local financing
- Fare increases
- Inflation and interest rates
- Bond financing

8.9.2.1 Construction Schedule

The following construction schedule was assumed:

- Final design and construction: 2008-14
- Start of operations in early 2014 (FY14)

Table 8-8 Transportation Division & CCLRT Project Cash Flows: 20 Year - FY2007 through FY 2030)
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Capital Sources Of Funds	es Of Funds Year of Expendence				nditure Dollars (millions)		
	Prior Years	2008	2009	2010	2011	2012	2013
Regional Capital Proceeds	0.00	49.54	40.07	47.47	36.41	33.34	32.27
5307 Federal Formula	0.00	0.00	0.00	0.00	0.50	3.06	3.15
5309 Fixed Guideway Modernization	0.00	0.00	0.00	0.00	1.98	4.08	4.20
Federal Other CIP ^a	0.00	74.99	26.53	86.34	71.60	28.74	24.33
Sec 5309 New Starts	1.44	2.07	0.00	0.00	95.00	95.00	95.00
CMAQ	4.50	0.00	0.00	0.00	0.00	0.00	0.00
CTIB CCLRT	0.00	0.00	72.41	202.06	0.00	0.00	0.00
State CCLRT	2.08	21.11	18.02	50.28	0.00	0.00	0.00
Local Capital Assistance	0.00	1.19	23.82	66.47	0.00	0.00	0.00
Subtotal Grants	8.02	148.90	180.84	452.63	205.49	164.22	158.96
Financing Program	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Construction Tax Exempt Commercial Paper	0.00	0.00	0.00	4.19	151.14	29.64	0.00
TOTAL CAPITAL SOURCES OF FUNDS	8.02	148.91	180.84	456.81	356.63	193.86	158.96

^a Years 2008-2013 based on approved CIP, years 2014-2030 based on forecast averages.

114 4.80 3.25 4.33	2015 35.20 3.35 4.46	ear of Exper 2016 35.60 5.20	2017 36.00 5.71	2018 36.40	2019 36.80	2020 37.20
3.25 4.33	3.35				36.80	37.20
4.33		5.20	5 71			
	4 46		5.71	5.88	6.06	6.24
	1.10	5.35	9.43	9.71	10.00	10.30
5.20	56.90	58.60	60.40	62.20	64.10	66.00
5.00	69.44	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.57	169.34	104.75	111.54	114.19	116.96	119.74
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.57	169.34	104.75	111.54	114.19	116.96	119.74
	55.20 5.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.2.57	95.00 69.44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	95.00 69.44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	95.00 69.44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	95.00 69.44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	95.00 69.44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Capital Sources Of Funds	Year of Expenditure Dollars (millions)						
	2021	2022	2023	2024	2025	2026	2027
Regional Capital Proceeds	37.60	38.10	38.60	39.10	39.60	40.10	40.60
5307 Federal Formula	6.43	6.62	6.82	7.03	7.24	7.45	7.68
5309 Fixed Guideway Modernization	14.37	15.58	16.05	16.53	17.03	17.54	18.06
Federal Other CIP	68.00	70.00	72.10	74.30	76.50	78.80	81.20
Sec 5309 New Starts	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CMAQ	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CTIB CCLRT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
State CCLRT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Local Capital Assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal Grants	126.40	130.30	133.57	136.96	140.36	143.89	147.54
Financing Program	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Construction Tax Exempt Commercial Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL SOURCES OF FUNDS	126.40	130.30	133.57	136.96	140.36	143.89	147.54

Financial Analysis

Capital Sources Of Funds	Y	ear of Expenditu	ure Dollars (mi	illions)
	2028	2029	2030	Prior +2008-2030
Regional Capital Proceeds	41.10	41.60	42.10	889.60
5307 Federal Formula	7.91	8.15	8.39	116.12
5309 Fixed Guideway Modernization	18.60	19.16	19.74	236.50
Federal Other CIP	83.60	86.10	88.70	1,515.23
Sec 5309 New Starts	0.00	0.00	0.00	452.95
CMAQ	0.00	0.00	0.00	4.50
CTIB CCLRT	0.00	0.00	0.00	274.47
State CCLRT	0.00	0.00	0.00	91.49
Local Capital Assistance	0.00	0.00	0.00	91.49
Subtotal Grants	151.21	155.01	158.93	3,672.34
Financing Program	0.00	0.00	0.00	0.00
Construction Tax Exempt Commercial Paper	0.00	0.00	0.00	184.97
TOTAL CAPITAL SOURCES OF FUNDS	151.21	155.01	158.93	3,857.32

Table 8-11 Transportation Division & CCLRT Project Cash Flows: 20 Year - FY2007 through FY2030

Table 8-12 Transportation Division & CCLRT Project Cash Flows: 20 Year – FY2007 through FY2030

Capital Uses Of Funds	Year of Expenditure Dollars (millions)						
	Prior Years	2008	2009	2010	2011	2012	2013
Central Corridor Light Rail Transitway							
	8.02	24.38	114.25	322.62	232.74	111.04	70.13
Other Capital Programs							
Rail Rehabilitation & Replacement	0.00	0.00	5.75	4.06	3.57	3.97	2.34
Bus Preservation and Expansion	0.00	105.39	50.41	124.46	94.16	59.14	53.51
Total Other Capital Programs	0.00	105.39	56.16	128.53	97.73	63.10	55.85
Financing Program							
Interest	0.00	0.00	0.00	0.37	13.10	13.23	11.61
Debt Issuance	0.00	0.00	0.00	0.01	0.30	0.06	0.00
Total Financing Program	0.00	0.00	0.00	0.38	13.40	13.29	11.61
TOTAL CAPITAL USES OF FUNDS	8.02	129.77	170.41	451.52	343.87	187.44	137.59
NET CAPITAL CASH FLOW	0.00	19.13	10.44	5.29	12.76	6.42	21.36

Table 8-13 Transportation Division & CCLRT Project Cash Flows: 20 Year – FY2007 through FY2030
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Capital Uses Of Funds		Year of Expenditure Dollars (millions)					
	2014	2015	2016	2017	2018	2019	2020
Central Corridor Light Rail Transitway							
	31.71	0.00	0.00	0.00	0.00	0.00	0.00
Other Capital Programs							
Rail Rehabilitation & Replacement							
Bus Preservation and Expansion	4.05	3.48	9.99	8.24	6.39	6.27	10.02
Total Other Capital Programs	86.50	89.00	91.60	94.40	97.10	99.90	102.80
	90.55	92.48	101.59	102.64	103.49	106.17	112.82
Financing Program							
Interest	7.71	7.99	0.00	0.00	0.00	0.00	0.00
Debt Issuance	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Program	7.71	7.99	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL USES OF FUNDS	129.97	100.47	101.59	102.64	103.49	106.17	112.82
NET CAPITAL CASH FLOW	62.61	68.87	3.16	8.90	10.70	10.76	6.92

Table 8-14 Transportation Div	ivision & CCLRT Project Cash Flows	s: 20 Year – FY2007 through FY2030
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Capital Uses Of Funds		١	ear of Expe	nditure Dolla	ars (millions	5)	
	2021	2022	2023	2024	2025	2026	2027
Central Corridor Light Rail Transitway							
	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Capital Programs							
Rail Rehabilitation & Replacement	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bus Preservation and Expansion	6.70	10.19	15.60	32.98	11.95	10.15	13.53
Total Other Capital Programs	106.90	110.00	113.20	116.50	120.00	123.60	127.30
	113.60	120.19	128.80	149.48	131.95	133.75	140.83
Financing Program							
Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Debt Issuance	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Financing Program	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CAPITAL USES OF FUNDS	113.60	120.19	128.80	149.48	131.95	133.75	140.83
NET CAPITAL CASH FLOW	12.60	10.11	4.77	(12.62)	8.42	10.16	6.71

Capital Uses Of Funds	Y	ear of Expenditu	re Dollars (millio	ons)
	2028	2029	2030	2008–2030
Central Corridor Light Rail Transitway				
	0.00	0.00	0.00	914.89
Other Capital Programs				
Rail Rehabilitation & Replacement	0.00	0.00	0.00	0.00
Bus Preservation and Expansion	10.92	8.79	19.32	208.27
Total Other Capital Programs	132.40	136.20	140.20	2,374.66
	143.32	144.99	159.52	2,582.94
Financing Program				
Interest	0.00	0.00	0.00	54.01
Debt Issuance	0.00	0.00	0.00	0.37
Total Financing Program	0.00	0.00	0.00	54.38
TOTAL CAPITAL USES OF FUNDS	143.32	144.99	159.52	2,637.31
NET CAPITAL CASH FLOW	7.89	10.01	(0.59)	305.12

Table 8-15 Transportation Division & CCLRT Project Cash Flows: 20 Year – FY2007 through FY2030

Table 8-16 Transportation Division 8	& CCL RT Project Cash F	Flows: 20 Year - FY200	7 through EV2030
		10WS. 20 1 Cal - 1 1 200	r unough r i zooo

Operating Sources Of Funds	Year of Expenditure Dollars (millions)						
	Fiscal	2008	2009	2010	2011	2012	2013
Fare Revenue		79.56	85.35	89.04	91.29	99.84	102.36
Motor Vehicle Sales Tax		131.64	114.48	139.72	162.10	177.68	184.78
CTIB - Funding		0.00	43.00	12.64	13.17	12.02	12.76
Other Transit Related		9.84	10.15	10.47	10.80	11.14	11.49
Other Local Operating Assistance		5.45	1.43	1.44	0.88	0.72	0.75
Federal Operating Assistance		34.95	32.40	33.27	34.15	35.07	36.00
State		91.61	82.60	87.56	88.84	88.44	89.94
Investment Income		0.74	1.05	2.45	1.60	1.51	1.88
TOTAL OPERATING SOURCES OF FUNDS	0.00	353.80	370.47	376.60	402.82	426.41	439.98
Operating Uses Of Funds							
Metro Transit Bus		244.92	253.92	263.29	272.95	282.96	293.34
Metro Transit Light Rail		24.11	24.89	25.69	26.51	27.36	28.24
MTS		81.18	83.73	86.37	89.09	91.90	94.79
Northstar		0.00	11.22	13.06	13.48	13.90	14.34
TOTAL OPERATING USES OF FUNDS	0.00	350.20	373.76	388.41	402.03	416.12	430.71
NET OPERATING CASH FLOW	0.00	3.60	(3.29)	(11.80)	0.79	10.29	9.27

Table 8-17 Transportation Division	8 CCI PT Project Cach Flower 20 V	April EV2007 through EV2020
raple 6-17 transportation Division	a COLKI Project Cash Flows: 20 1	rear – $r_1 2007$ through $r_1 2030$

Operating Sources Of Funds	Year of Expenditure Dollars (millions)						
	2014	2015	2016	2017	2018	2019	2020
Fare Revenue	126.33	129.59	132.87	137.26	142.67	144.96	154.10
Motor Vehicle Sales Tax	192.18	199.86	207.86	216.17	224.82	233.81	243.16
CTIB - Funding	16.71	19.26	19.63	19.55	19.35	20.54	20.98
Other Transit Related	11.86	12.23	12.61	13.01	13.42	13.84	14.28
Other Local Operating Assistance	0.77	0.79	0.82	0.84	0.87	0.90	0.93
Federal Operating Assistance	36.97	37.96	38.97	40.02	41.09	42.19	43.32
State	94.66	97.99	99.13	99.85	100.44	102.45	103.70
Investment Income	1.41	1.51	2.22	2.01	2.07	2.37	1.91
TOTAL OPERATING SOURCES OF FUNDS	480.87	499.19	514.12	528.71	544.72	561.05	582.38
Operating Uses Of Funds							
Metro Transit Bus	296.37	307.26	318.54	330.23	342.38	354.93	367.92
Metro Transit Light Rail	50.66	52.28	53.94	55.66	57.44	59.27	61.15
MTS	97.78	100.86	104.03	107.31	110.69	114.18	117.78
Northstar	14.79	15.26	15.74	16.23	16.74	17.27	17.81
TOTAL OPERATING USES OF FUNDS	459.60	475.65	492.26	509.43	527.25	545.64	564.66
NET OPERATING CASH FLOW	21.27	23.54	21.86	19.27	17.47	15.41	17.72

Table 8-18 Transportation Division & CCLRT Project Cash Flows: 20 Year – FY2007 through FY2030

Operating Sources Of Funds	Year of Expenditure Dollars (millions)							
	2021	2022	2023	2024	2025	2026	2027	
Fare Revenue	156.56	166.41	169.04	179.67	182.49	193.94	196.96	
Motor Vehicle Sales Tax	252.89	263.01	273.53	284.47	295.85	307.68	319.99	
CTIB - Funding	21.94	21.44	22.79	23.27	24.35	24.85	24.88	
Other Transit Related	14.73	15.19	15.67	16.17	16.68	17.20	17.74	
Other Local Operating Assistance	0.96	0.99	1.02	1.05	1.08	1.12	1.15	
Federal Operating Assistance	44.48	45.67	46.89	48.15	49.44	50.77	52.13	
State	105.49	105.81	108.00	109.33	111.27	112.63	113.54	
Investment Income	1.55	2.42	2.27	2.41	2.79	2.11	2.05	
TOTAL OPERATING SOURCES OF FUNDS	598.59	620.93	639.21	664.50	683.95	710.29	728.44	
Operating Uses Of Funds								
Metro Transit Bus	381.43	395.37	409.82	424.78	440.34	456.39	473.02	
Metro Transit Light Rail	63.10	65.11	67.19	69.33	71.54	73.82	76.17	
MTS	121.49	125.31	129.26	133.33	137.53	141.86	146.33	
Northstar	18.38	18.95	19.55	20.17	20.80	21.46	22.13	
TOTAL OPERATING USES OF FUNDS	584.39	604.75	625.82	647.61	670.21	693.53	717.66	
NET OPERATING CASH FLOW	14.20	16.18	13.39	16.89	13.73	16.76	10.78	

Table 8-19 Transportation I	Division & CCLRT Project Cash	h Flows: 20 Year – FY2007 through FY2030

Operating Sources Of Funds	Ye	Year of Expenditure Dollars (millions)				
	2028	2029	2030	2008–2030		
Fare Revenue	209.30	212.54	226.63	3,408.75		
Motor Vehicle Sales Tax	332.79	346.10	359.94	5,464.48		
CTIB - Funding	25.79	27.01	27.43	473.33		
Other Transit Related	18.30	18.88	19.47	325.19		
Other Local Operating Assistance	1.19	1.22	1.26	27.62		
Federal Operating Assistance	53.53	54.96	56.44	988.79		
State	115.32	117.44	118.76	2,344.83		
Investment Income	2.91	2.78	2.89	46.92		
TOTAL OPERATING SOURCES OF FUNDS	759.12	780.93	812.83	13,079.90		
Operating Uses Of Funds						
Metro Transit Bus	490.24	508.15	526.63	8,435.19		
Metro Transit Light Rail	78.60	81.10	83.68	1,276.84		
MTS	150.94	155.70	160.60	2,682.04		
Northstar	22.83	23.55	24.29	391.95		
TOTAL OPERATING USES OF FUNDS	742.61	768.50	795.21	12,786.01		
NET OPERATING CASH FLOW	16.51	12.43	17.62	293.88		

8.9.2.2 Federal Funding

The following levels of federal funding are assumed:

- Section 5309 New Starts: 49.5 percent federal participation. The estimated project cost of \$914.9 million excludes items ineligible for the FFGA. Because the state and local partners are willing to fund a majority of the project cost from other sources, the plan is based on a total of \$452.9 million in New Starts funding.
- Section 5307 Preventative Maintenance: Grants were projected based on the federal FY07 federal funding formula and are applied to preventative maintenance. A modest increase was assumed after the expiration of the current authorization based on the long term historical trend in federal formula funding. Increases also reflect the startup of Northstar and Central Corridor LRT service, and the consequent generation of additional section 5307 funding.
- Section 5309 Rail Modernization: The financial analysis model projects rail modernization funds based on the projected rehabilitation and replacement investments for the LRT line and are assumed to begin seven years after the completion of construction and the line begins revenue service. These are dedicated to the CIP program and grouped with CIP revenue sources.

8.9.2.3 Fare Increases

Fare increases that keep passenger fare revenues on pace with inflation will be required to support future operations. Because costs are inflating, the operating deficit would rapidly escalate to unacceptable levels if fares do not keep pace with costs. In accordance with Metropolitan Council policy, the financial analysis assumes that fares will increase by 10 percent whenever the farebox ratio falls below 28.5 percent.

8.9.2.4 Inflation and Interest Rates

A general assumption of 3.15 percent annual inflation was applied to operating and CIP costs throughout the model. Based on current local experience, 3 percent was applied to Central Corridor LRT construction costs from 2008 through year of expenditure. A comprehensive set of projections were applied throughout the financial analysis model. The projections were developed by Moody's www.economy.com through the application of an integrated, long-range national macroeconomic model, which includes factors such as monetary policy, fiscal policy, U.S. Dollar condition, and energy prices. These projections were used for investment income rates and for some of the risk analyses described below.

8.9.3 Projections

The cash flow table above and presented for reference in Appendix I summarizes the results of the financial analysis. The table is in the form of a sources and uses of funds analysis that projects the annual capital and operating programs.

8.10 Risk Analysis

Decision makers committing public resources to large-scale infrastructure investments must be informed as to the likely range of financial results that may occur. For this reason, a risk analysis is undertaken as part of the financial analysis to explore the range of possible outcomes. Fluctuating economic conditions and future events cannot be assured and will affect the ability of any agency to meet its financial projections.

A number of variables that cannot be directly controlled by management and government bodies are cause for uncertainty. These include inflation, interest rates, construction costs, ridership, and federal, state, and local grant funding levels. A risk analysis reveals the potential for Metropolitan Council and the Project Partners to meet financial projections and project commitments under pessimistic circumstances.

The four scenarios in Appendix H were tested to determine the ability of the region to withstand negative circumstances during the construction of the Central Corridor LRT Project. The Appendix contains detailed cash flows. These can be compared to the base financial plan projection in Table 8-19.

The four scenarios are briefly described below.

- Scenario One tested higher than expected operations inflation. This sensitivity analysis showed that at the end of 2030 the surplus generated by operations is \$114 million lower than in the base case, but revenues still exceed expenses by \$180 million.
- Scenario Two assumed that federal payments are delayed. The analysis showed that this amount is well within the capacity of either CTIB or Metropolitan Council to fund.
- Scenario Three assumed that the project cost exceeded budget by 20 percent, resulting in a project cost of \$1,057 million. The analysis showed that although the RRAs have the capacity to generate these funds directly or issue additional general obligation bonds, an overrun this high would trigger significant project oversight to minimize the additional cost.
- Scenario Four tested 15 percent higher energy costs (fuel and electrical power) for operations. The analysis showed that, if necessary (that is, if the projected reserve had been exhausted), this amount would be funded through negotiations with the state and other local partners.

8.11 Financial Evaluation and Conclusions

The combination of funding from the State of Minnesota, CTIB, RCRRA, and HCRRA provides a solid basis for developing a financial plan for the Central Corridor LRT Project. Even at this early stage of project development, when the RRA commitments for one year are considered, an amount equal to 100 percent of the state and local share of the project cost has been committed to the project. The project sponsor, Metropolitan Council, is experienced in managing projects of this nature and magnitude, and is fully aware of the risks involved. The risk analysis in this plan demonstrates sufficient local resources and commitment to manage these risks. The operating surplus and capital renewal surplus from the regional funding program are based on conservative cost and revenue assumptions that will withstand any future financial risks or uncertainties.

8.11.1 Limitations of this Report

Uncertainties associated with fluctuating economic conditions and other factors may cause Metropolitan Council's revenues and expenditures to vary from the projections in the financial plan, and the variations could be material.

The financial results presented in this report are intended to chart a general course of action for project implementation, transit service expansion, and initiation of activities to establish new funding and financing approaches, as well as approaches to the specified deviations in assumptions. The financial analysis results should not be applied or referred to any party in connection with the issuance of securities.

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