



Appendix F

Supporting Technical Reports

F.11 Financial Analysis in Support of the FEIS



This page intentionally left blank



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway, Suite 200, Crystal, MN 55428 www.bluelineext.org

To: Paul Danielson,
Kimley-Horn

From: Jim Baker,
Connetics Transportation Group

Date: January 29, 2016

Subject: Financial Analysis in Support of the FEIS

1.0 Introduction

The METRO Blue Line Extension (BLRT) project area extends 13 miles northwest from downtown Minneapolis through the neighborhoods of north Minneapolis and into the communities of Golden Valley, Robbinsdale, Crystal, and Brooklyn Park in Hennepin County, Minnesota.

This memo documents the methodology, assumptions and results of the high-level financial analysis undertaken to support the BLRT Project's Final Environmental Impact Statement (FEIS). Costs and revenue estimates presented in this memo for capital, as well as operating and maintenance (O&M), build upon estimates recently prepared for Metropolitan Council's Southwest LRT Project. Primary references used in the development of this memo are:

- Southwest LRT Financial Analysis in Support of the FEIS (Draft) September 15, 2015
- Financial Management Plan, Southwest Light Rail Transit, Revision 02-00, August 2015, Metropolitan Council/Metro Transit Finance
- Blue Line Extension Operating Costs table developed from the BLRT Finance Team (Excel file `OperatingCosts20150910_true_JRH_R1.xlsx`)

2.0 Capital Plan

2.1 Capital Cost

In Year of Expenditure (YOE) dollars, the BLRT Project's estimated capital cost for the Locally Preferred Alternative (LPA) is \$1,496,431,000. This estimate uses the following methodology/assumptions:

- **Schedule:** Base year costs (2015) were inflated to YOE dollars based on the current project schedule. Specifically, 2018 is identified as the start year of heavy construction and 2021 as start year of revenue operations.
- **Standard Cost Categories (SCC):** Capital costs were developed using the Federal Transit Administration's (FTA's) SCCs.
- **Cost Escalation Assumption:** Costs were inflated at 3% per year.

Table 2-1 presents this information by category in base year (2015) dollars and in inflated YOE dollars.



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway, Suite 200, Crystal, MN 55428 www.bluelineext.org

Table 2-1: Capital Cost Estimates of the LPA, by FTA SCC

FTA Standard Cost Category	Base Year Costs 2015\$ (millions)	YOE Costs (millions)
10 Guideway & Track Elements	\$297.343	\$333.775
20 Stations, Stops, Terminals, Intermodal	\$65.834	\$74.875
30 Support Facilities: Yards, Shops, Administration Buildings	\$76.500	\$85.865
40 Sitework and Special Conditions	\$154.096	\$173.267
50 Systems	\$166.963	\$191.616
60 Right-of-Way, Land, Existing Improvements	\$60.312	\$66.801
70 Vehicles	\$119.779	\$136.245
80 Professional Services	\$230.009	\$245.783
90 Unallocated Contingency	\$140.500	\$158.204
100 Finance Contingency Charges	\$24.778	\$30.000
Total	\$1,336.114	\$1,496.431

Source: FTA Worksheets dated December 15, 2015 (BLRT Municipal Consent Cost Estimate)

2.2 Sources of Capital Funds

The capital cost of the project is anticipated to be funded from federal, state and local sources, as listed below. The financial analysis applied to projections of the following anticipated sources of capital funds:

- Federal Funds:** It is anticipated that all Federal funding will come from Section 5309 New Starts. The BLRT Project assumes 49% Section 5309 New Starts funding, with a New Starts Full Funding Grant Agreement signed in 2018.
- State Funds:** It is anticipated that the State of Minnesota will fund 10% or approximately \$149,643,000 of the Project through bonding and supplemental appropriations. Further, to fund the State's share of the capital plan, it is anticipated that the securities will be general obligation debt and the supplemental appropriations will be general fund appropriations to fund its share of the capital plan.
- Regional Railroad Authorities (RRA):** The Hennepin County Regional Railroad Authority (HCRRRA) is anticipated to fund the project from their dedicated property taxes. The amount of their funding is 10% or approximately \$149,643,000 of the Project. HCRRRA 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 Council's property tax authority.
- Counties Transit Improvement Board (CTIB):** The CTIB is anticipated to fund 31% or approximately \$463,893,000 of the total capital costs. Each of the five counties the CTIB is comprised of is authorized to levy a 0.25% sales tax and a \$20 motor vehicle sales tax to provide capital and operating funding for transitway projects. The BLRT Project is eligible for capital and operating funding by the CTIB under its *Transitway Investment Framework*.
- Other Local Funding Sources:** The BLRT Project Office and Metropolitan Council are working with local cities, MnDOT, and Hennepin County on securing additional necessary contributions as needed through local funding agreements.



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway, Suite 200, Crystal, MN 55428 www.bluelineext.org

Table 2-2 presents capital cost funding by source.

Table 2-2: LPA Capital Cost Funding by Source (YOE \$)

Anticipated Funding Source	Share	Contribution (\$ millions)
Federal Transit Administration	49%	\$733.251
County Transit Improvement Board	31%	\$463.894
State of Minnesota	10%	\$149.643
Hennepin County Regional Railroad Authority	10%	\$149.643
Total	100%	\$1,496.431

3.0 Operating Plan

3.1 BLRT No-Build Alternative O&M Cost Estimates

The BLRT project assumes the Southwest LRT Project is already in operation as part of a “No-Build” scenario. For consistency with the Southwest LRT Project’s FEIS, that project’s Build Alternative O&M cost estimate is assumed to be the BLRT’s No-Build O&M cost estimate (since construction of the Southwest LRT Project is to precede the BLRT Project). The Southwest LRT Project’s O&M cost estimates utilized unit costs for Metro Transit bus and LRT based on 2013 actual expenditures. Specific cost methodology used in the Southwest LRT Project, and thus reflected in the BLRT’s No-Build cost estimates, are as follows:

- **Metro Transit LRT and Metro Transit/Metropolitan Transportation Services (MTS) Corridor Bus Routes:** Unit O&M costs and service plan statistics were taken from the Southwest LRT Project’s *Service Plan Updates and O&M Cost Results for the FEIS Report* (July 21, 2015).
- **Metro Transit/MTS Non-Corridor Bus Routes:** The regional travel demand model was used to estimate service statistics for non-corridor Metro Transit/MTS non-corridor bus routes. These statistics were applied to unit costs in the Southwest LRT Project’s *Service Plan Updates and O&M Cost Results for the FEIS Report*.
- **Other Providers Non-Corridor Bus Routes:** Similarly, the regional travel demand model was used to estimate service statistics for other opt-out providers in the Twin Cities region. These statistics were applied to Metro Transit unit costs.
- **Northstar, Metro Mobility and Transit Link:** Finally, to arrive at a total regional transit O&M cost, Northstar, Metro Mobility and Transit Link O&M costs were included. The 2014 Met Council Unified Budget was used to identify an annual O&M cost for each of these services.

An average inflation rate of 3.15% was used to present costs in 2015 and 2040 dollars. Table 3-1 presents projected regional transit O&M costs for the BLRT Project’s No-Build Alternative.

Table 3-1: Year 2040 Annual O&M Cost Estimates of the BLRT No-Build Alternative

Operator/Transit Service	Base Year Costs 2015\$ (millions)	YOE Costs 2040 \$ (millions)
Metro Transit Light Rail Transit	\$88.392	\$191.931
Metro Transit/MTS/Other Twin Cities opt-out providers	\$466.494	\$1,012.924
Northstar	\$18.357	\$39.859



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway, Suite 200, Crystal, MN 55428 www.bluelineext.org

Paratransit (Metro Mobility & Transit Link)	\$67.848	\$147.322
Total	\$641.091	\$1,392.036

Source: Southwest LRT Financial Analysis in Support of the FEIS (Draft) September 15, 2015

3.2 BLRT LPA O&M Cost Estimate

Annual O&M costs for the BLRT Project’s LPA are based on corridor service plans developed specifically for use and analysis in this project’s FEIS. Metro Transit bus and LRT unit costs used in the Southwest LRT Project were applied to estimates of incremental service statistic changes for BLRT service and corridor bus service. The resulting change from the No-Build Alternative in corridor O&M costs is noted below in Table 3-2.

Table 3-2: Year 2040 Incremental O&M Cost Estimates for BLRT Corridor Service Changes

Operator/Transit Service	Base Year Costs 2015 \$ (millions)	YOE Costs 2040 \$ (millions)
Metro Transit Light Rail Transit	\$21.772	\$47.275
Metro Transit/MTS/ Other Twin Cities opt-out providers	\$1.351	\$2.933
Total	\$23.123	\$50.208

Source: OperatingCosts20150910_true_JRH-R1.xlsx and BLRT FEIS O&M Cost Estimates Memo prepared by CTG for Kimley-Horn (Oct. 2015)

Incremental O&M cost estimates from Table 3-1 were added to No-Build Alternative O&M cost estimates (Table 3-2) to arrive at system-wide annual O&M cost estimates for the BLRT LPA, shown below in Table 3-3.

Table 3-3: Year 2040 Annual O&M Cost Estimates of the BLRT LPA

Operator/Transit Service	Base Year Costs 2015 \$ (millions)	YOE Costs 2040 \$ (millions)
Metro Transit Light Rail Transit	\$110.164	\$239.206
Metro Transit/MTS/ Other Twin Cities opt-out providers	\$467.845	\$1,015.857
Northstar	\$18.357	\$39.859
Paratransit (Metro Mobility & Transit Link)	\$67.848	\$147.322
Total	\$664.214	\$1,442.244

4.0 Regional Transit O&M Revenues

The basis of this project’s O&M revenue forecasts is a Financial Management Plan previously prepared for the Southwest LRT project, which included revenues for the BLRT Project and the Orange Line BRT Project. That document presented revenue forecasts through the Year 2035. For the Southwest LRT Project’s FEIS, those forecasts were extended to the Year 2040. Revenue assumptions identified in the Southwest Finance Assumptions Memo are noted below.

4.1 Metro Transit

Revenue assumptions for Metro Transit in the Southwest LRT Project Financial Management Plan are as follows:

- **Fare Revenue:** Fare revenues are based on projected ridership that reacts primarily to increasing population and employment. Established Metropolitan Council fare policy requires a 10% increase in average fares whenever the bus farebox recovery declines to 28.5%.



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway, Suite 200, Crystal, MN 55428 www.bluelineext.org

- **CTIB:** The CTIB has approved a resolution to commit to fund 50% of the Southwest LRT operating deficit (operating cost net of farebox revenue). It is also anticipated to provide 50% of the net operating deficit for the BLRT Project, and 41.95% for Northstar rail services.
- **State General Funding:** State general fund operating subsidies have historically grown more rapidly than inflation in recent years. However, in an attempt to be conservative, the State operating funds in the Southwest LRT financial capacity analysis assumes that the state general fund revenues grow proportionally with inflation (assumed to be 3.15% per year).
- **Motor Vehicle Sales Tax (MVST):** The primary source for non-Southwest LRT operating assistance is the statewide MVST. This financial analysis uses an average annual increase of 4.90% to project MVST revenues between 2015 and 2040.
- **Other Metro Transit Operating Revenues:** Other revenue including advertising revenue for bus and existing light rail transit services will grow at 1.0% per year from 2016 to 2040.
- **FTA Funds:** The 2015 Financial Plan forecasts FTA Section 5307 Urbanized Area Formula Funds at a fixed annual growth rate, which is approximately 2.4% after 2014 and 3.0% after 2024. Other federal revenues included in the Financial Plan include 5337 State of Good Repair, 5339 Bus and Bus Facilities and Congestion Mitigation Air Quality (CMAQ) funds.

4.2 BLRT Revenues vs. Cost Analysis

As noted earlier, O&M revenue forecasts for the Southwest LRT Project’s Financial Management Plan already include anticipated revenues for the BLRT Project. Table 4-1 presents a comparison of annual system-wide costs to revenues for the year 2040. Total O&M cost figures for both the No-Build and Build Alternatives are from Section 3.0 of this memo. Revenue figures for the BLRT Build are consistent with those previously developed for the Southwest LRT FEIS, since those figures already took into account Blue Line revenues. For the No-Build Alternative, revenues were reduced, based on documentation in the Southwest LRT Financial Management Plan which presented 2035 BLRT revenues, and 2035 to 2040 revenue growth assumptions used in the Southwest LRT FEIS. As shown in this table, system-wide O&M costs are not anticipated to exceed system-wide revenues.

Table 4-1: Annual System-wide O&M Costs and Revenues in 2040: No-Build and LPA (2040 dollars, in millions \$)

Costs/Revenue Source	SW LRT Build / BLRT No-Build	BLRT Build
Total O&M Costs	\$1,392.036	\$1,442.242
Revenues		
Fares	\$337.998	\$354.544
Motor Vehicle Sales Tax	\$804.036	\$804.036
CTIB	\$86.722	\$101.813
Other Revenue	\$17.112	\$17.659
Local Operating Assistance	\$5.254	\$5.254
Federal Operating Assistance	\$15.245	\$15.245
State Operating Assistance	\$206.460	\$221.551
Interest on Operation Balance	\$1.133	\$1.133
Total Revenues	\$1,473.960	\$1,521.235

Sources: Southwest LRT Financial Management Plan, Revision 02-00, August 2015, Southwest LRT Financial Analysis in Support of the FEIS (Draft) September 15, 2015.



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway, Suite 200, Crystal, MN 55428 www.bluelineext.org

4.3 Potential Responses to Operating Shortfalls

Short term shortfalls, forecasted for selected years in the cash flow projections, are covered by the operating reserves. In the longer term, Metro Transit relies on the MVST growth and its fare policy. Presently, nearly 46% of the Metropolitan Council Transportation Division's operating funds are obtained from the statewide MVST revenues. MVST is the Council's single largest source of transit operating funding. The baseline forecast assumes significant real growth over the long run from this source as a result of passage of the November 2006 referendum. The MVST revenues are projected to increase at a rate of 4.90% per year in the long run. This forecast is viewed as conservative for financial planning purposes as historical trended MVST receipts for the period of 1973 to 2014 averaged 5.10%. The fare policy is an even stronger guarantee of sustainability, because it assures that passenger revenue will grow with operating costs. This policy recommends a 10.0% increase in average fares whenever the bus farebox recovery ratio declines to 28.5%. The Metropolitan Council had their last fare increase in 2008.

Several sources of supplemental operating funding could be made available to Metropolitan Council's Transportation Division in the event that MVST revenues do not grow as expected.

These sources include:

- **Metropolitan Council Transportation Division Operating Reserve:** The Metropolitan Council Transportation Division reserve at the end of 2014 is \$120.19 million and can be used to cover any deficits that might arise with or without the BLRT Project in place.
- **State General Funds/State Commitments:** The State's commitment to transit in the Metro region, and its specific commitment to developing the BLRT Project, may be regarded as an opportunity for financial risk management of operations. State general fund appropriations for transit operating subsidies have historically grown more rapidly than inflation in recent years. However, in an attempt to be conservative, the State operating funds in the baseline capacity analysis are anticipated to increase slowly from their 2015-2016 level at 3.15% proportionately with inflation.
- **Moderate Additional Fare Increases:** Under the baseline projection by the Metropolitan Council, a fare increase was implemented in 2008. Fare increases could be accelerated if needed. Transit fare increases typically result in increased fare revenues but decreased ridership.
- **Apply New Operating Funding Sources:** New operating funding sources 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 long-term maintenance and operation of the BLRT Project's service in a well-planned, deliberate and financially prudent manner.