2015 Legislative Report

Guideway Status

November 2015

PREPARED BY

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Cover Photos:

Northstar commuter rail train
Source: Metro Council

Green Line LRT
Source: Streets MN

Red Line BRT
Source: Metro Council

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Legislative Request

Statutory Requirement

This report is issued to comply with Minn. Stat.174.93, subdivision 2.

Subd. 2. Legislative report.

(a) By January 15, 2012, and by November 15 in every odd-numbered year thereafter, the commissioner shall prepare, in collaboration with the Metropolitan Council, and submit a report electronically to the chairs and ranking minority members of the legislative committees with jurisdiction over transportation policy and finance concerning the status of guideway projects (1) currently in study, planning, development, or construction; (2) identified in the transportation policy plan under section 473.146; or (3) identified in the comprehensive statewide freight and passenger rail plan under section 174.03, subdivision 1b.

(b) At a minimum, the report must include, for each guideway project:

(1) a brief description of the project, including projected ridership;

(2) a summary of the overall status and current phase of the project;

(3) a timeline that includes

(i) project phases or milestones;

(ii) expected and known dates of commencement of each phase or milestone; and

(iii) expected and known dates of completion of each phase or milestone;

(4) a brief progress update on specific project phases or milestones completed since the last previous submission of a report under this subdivision; and

(5) a summary financial plan that identifies, as reflected by the data and level of detail available in the latest phase of project development and to the extent available:

(i) capital expenditures, including expenditures to date and total projected expenditures, with a breakdown by committed and proposed sources of funds for the project;

(ii) estimated annual operations and maintenance expenditures reflecting the level of detail available in the current phase of the project development, with a breakdown by committed and proposed sources of funds for the project; and

(iii) if feasible, project expenditures by budget activity.

(c) The report must also include a systemwide capacity analysis for investment in guideway expansion and maintenance that:

(1) provides a funding projection, annually over the ensuing ten years, and with a breakdown by committed and proposed sources of funds, of:

(i) total capital expenditures for guideways;

(ii) total operations and maintenance expenditures for guideways;

(iii) total funding available for guideways, including from projected or estimated farebox recovery; and

(iv) total funding available for transit service in the metropolitan area; and

(2) evaluates the availability of funds and distribution of sources of funds for guideway investments.

(d) The projection under paragraph (c), clause (1), must be for all guideway lines for which state funds are reasonably expected to be expended in planning, development, construction, or revenue operation during the ensuing ten years.
(e) Local units of government shall provide assistance and information in a timely manner as requested by the commissioner or council for completion of the report.

Cost of Report

The cost of preparing this report is estimated to total approximately $25,000 for MnDOT, Metropolitan Council, transit agency and county staff to compile and analyze data, writing and document production.

Introduction

In 2010 the Minnesota Legislature adopted Minn. Stat. 174.93, which required the Minnesota Department of Transportation to prepare, in collaboration with the Metropolitan Council, a biennial report on the status of "guideway" projects in the state, with an emphasis on funding sources and project progress. In the 1st Special Session of 2011, the legislature amended the statute to require that the report take a system view as well as a project view and that it include information about uses of funds in addition to funding sources. The first report was submitted in January, 2012. The statute requires a report in mid-November of odd-numbered years. This is the 2015 Guideway Status Report.

The statute defines "guideways" as a form of transportation service provided to the public on a regular or ongoing basis that operates on exclusive or controlled rights of way. Thus, guideways include light-rail transit, commuter rail, street cars, intercity passenger rail and bus service that uses a dedicated or managed lane. The statute further requires that the report include those guideways undergoing planning, design or construction, as well as those already in operation.

The statutory definition of "guideway" is slightly narrower than the term "transitway," which is the term more commonly used by regional transit planners. In addition to LRT, commuter rail and dedicated bus rapid transit corridors, the region's 2040 Transportation Policy Plan, or TPP, includes in the definition of "transitway" those corridors with BRT operating on major arterial roadways without a dedicated or managed lane. While the term "transitway" may be used in general discussion within this report, the scope of this report is only for those corridors meeting the narrower definition of a "guideway."

Because this report is statutorily limited to guideways, it provides neither a complete overview of planned regional transit investment nor the full context of planned comprehensive transportation policy and investments.

Statewide Planning

Minnesota GO

MnDOT completed Minnesota GO, a collaborative, 50-year visioning process in November 2011. The objective of this process was to better align the transportation system with what Minnesotans expect for their quality of life, economic competitiveness and environmental health. By having an overall direction for the transportation system as a whole, policies and strategies are laid out to help determine how investments will be made and how success is measured.

The broad goals of this vision and related 20-year Statewide Multimodal Transportation Plan guide planning efforts within the state, including local and regional transportation planning, as well as intercity passenger rail.

Intercity Passenger Rail

Intercity passenger rail is a statewide issue that transcends localities and regions and is overseen by MnDOT. Federal oversight and grants for passenger rail come through the Federal Railroad Administration. The FRA currently does not have a grant program similar in scale to the Federal Transit Administration's New Starts program and is in process of formulating common guidance and criteria for states to use when implementing intercity passenger rail.

In 2008, the Minnesota Legislature required that MnDOT prepare a Comprehensive Statewide Freight and Intercity Passenger Rail Plan. This was the first plan of its kind and was completed in February 2010. It identifies rail corridors with the most potential for passenger rail development and divides them into two phases of development. Among the Phase I corridors, three stand out as having the most potential for development in the next 10 years. These corridors include the Northern Lights Express between the Twin Cities and Duluth, the Midwest Regional Rail Initiative high speed rail service between the Twin Cities and Chicago, and the Rochester ZIP Rail between the Twin Cities and Rochester. All are discussed in this report.

In addition to intercity passenger rail, MnDOT has authority to plan, develop, construct, operate and maintain Light Rail Transit and commuter rail. For commuter rail, MnDOT may delegate this authority to local entities such as the Met Council or a regional railroad authority. For LRT, both MnDOT and the Met Council have concurrent authority, and state statute requires that the Governor designate one of the agencies as the project lead. After projects are constructed, the Met Council operates and maintains LRT facilities, as well as commuter rail facilities located completely or partially within the Twin Cities metropolitan area.

Regional Planning

Metropolitan Council – 2040 Transportation Policy Plan

The vision for transitway development in the Twin Cities metropolitan area is identified in the Transportation Policy Plan. In January 2015, the Metropolitan Council adopted the 2040 Transportation Policy Plan as an update to the previous 2030 TPP. A strategy in the 2040 TPP that relates to the development of transitways reads as follows, "Regional transportation partners will invest in an expanded network of transitways that includes but is not limited to bus rapid transit, light rail, and commuter rail."[1]

This strategy establishes the basis for two investment scenarios which identify the transitways the region is planning for by the year 2040. The first scenario is called the Current Revenue Scenario, which assumes revenues the region can reasonably expect to be available based on past experience and current laws and allocation formulas. Under federal regulations, this scenario is called "fiscally constrained." The Increased Revenue Scenario assumes revenues the region might reasonably attain through policy changes, laws or decisions that increase local, state or federal funding sources.

[1] Page 164 and page 190 in the 2040 Transportation Policy Plan adopted on January 15, 2015

Under federal regulations, the programs or projects in the Increased Revenue Scenario are illustrative of what may be achieved with additional revenues, but the projects are not considered part of the approved plan. The 2040 TPP acknowledges that additional resources will be necessary to build the system of transitways that is envisioned for this region in the Increased Revenue Scenario.

The 2040 TPP also includes strategies and investment plans for the rest of the transit system beyond the transitways and the investment scenarios, including the costs of implementing transitways not covered by this report, such as arterial Bus Rapid Transit. The corridor summaries provided in this report only focus on potential guideway projects included in either the Current Revenue Scenario or the Increased Revenue Scenario, since planning for these corridors is an ongoing activity regardless of the investment realities.

Planning Process

Each of the metropolitan area transit corridors incorporated into this report is identified in the TPP as either having completed a local planning process or in the process of doing so. The planning process is designed to identify the locally preferred transit alternative for a corridor.

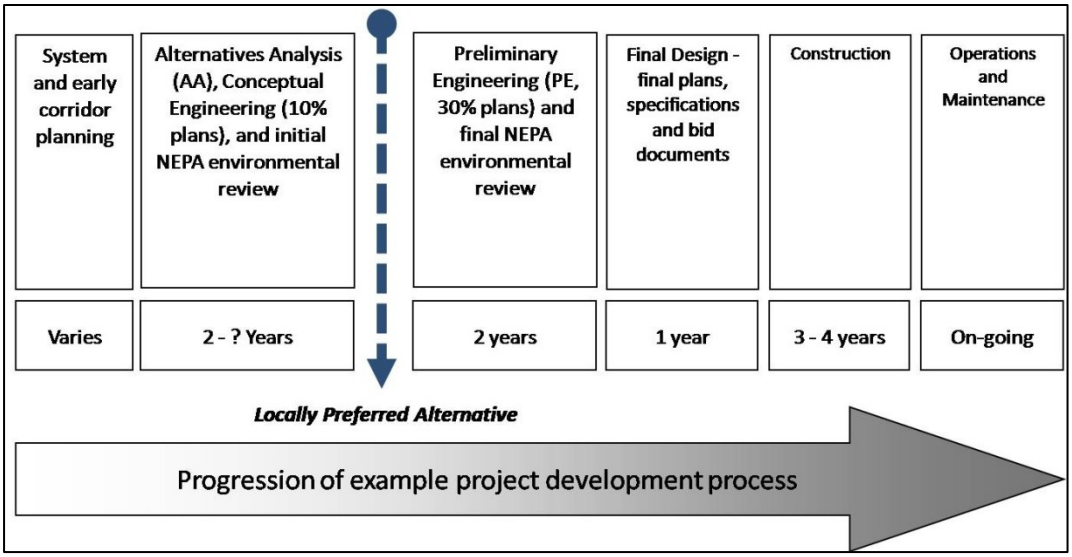
Typically, this local corridor planning process is initiated and led by the county or counties in which the corridor is located. A city may also lead a corridor study when a majority of the corridor is contained within its boundaries. In February of 2012, the Met Council adopted the Regional Transitway Guidelines to help ensure that transitway projects in the Twin Cities metropolitan area are planned and implemented in a consistent, equitable, and efficient manner regardless of the entity leading the process.

The process typically begins with system level planning—done in the TPP—which identifies the most promising transit corridors for study and development. The next step is an alternatives analysis, or corridor study, aimed at identifying the most appropriate mode and alignment or set of transitway improvements for a corridor. These studies can take two years or more, depending on the number of transit alternatives studied and the level of agreement among corridor stakeholders regarding the preferred alternative.

The alternatives analysis process ends with the selection of a Locally Preferred Alternative, which is then amended into the TPP. After a preferred alternative has been selected, planning efforts mature into a project for implementation. In the case of light rail, the Met Council will usually assume responsibility to carry the project to completion.

The graphic that follows shows the typical project development process for a corridor seeking to implement a transit option as a solution to an identified transportation need.

Transit Corridor Project Development Process



The next step is the design phase, which includes preliminary engineering, environmental review and final design. These steps involve progressively refining and documenting project details and associated project implementation plans and cost estimates. The process involves the Met Council, MnDOT, local stakeholders and other funding partners such as FTA, the Counties Transit Improvement Board, and one or more regional railroad authorities. When sufficient funding is secured, the project is designed, constructed and opened for revenue service and subsequently operated and maintained as part of the region's transit system.

Typical Funding Sources

Transit funding can come from a variety of sources. For capital projects, funding sources most often include federal grants through the FTA, state bonds, metropolitan sales tax from the CTIB, and local property taxes. For operating costs, current sources include fare revenues, state general funds, motor vehicle sales tax revenue, CTIB metropolitan sales tax revenues and federal Congestion Mitigation Air Quality revenues, which can be used in the first three years of new operations. Ongoing capital maintenance costs, on the other hand, are currently paid almost exclusively by regional federal formula funds (approximately 80 percent) and the Met Council's regional transit capital funds (approximately 20 percent), which are bond funds authorized by the legislature with the debt service paid through the Met Council's property tax levy. More detailed information about transit funding sources is available in the capacity analysis section and in Appendix A: Transit Funding Sources and Programs.

System Branding

The Met Council approved a branding framework in 2010 that unified the LRT and highway Bus Rapid Transit services in the Twin Cities region under a single system name and identity, with color names for different lines. The goal is to clearly communicate that users can expect service that it is frequent, fast and reliable, with special vehicles on dedicated corridors.

The key is that BRT service will be LRT-like in terms of service quality and service levels (daily, frequent service) and that the connected system allows users to travel throughout the network of color-coded transit lines, without needing a schedule. The system is branded the METRO system. Currently, the open lines on the METRO system include the Blue, Green and Red lines. Extensions of the Blue and Green lines are also in development along with plans for new Orange and Gold lines. The Northstar Line is not included in this system branding because the service is not available all day.

Explanation of Remaining Contents

This report has two main sections. First, it contains informational summaries for individual corridors that are undergoing study, planning, design or construction, or already are in operation as a guideway project. Following these corridor summaries, the report takes a 10-year, system-wide view of capital costs, operating costs, and maintenance costs. This part of the report, called the capacity analysis, includes only guideway projects that are in design, construction or operation because only these projects have chosen a guideway mode and have sufficient cost data to meaningfully look ahead 10 years.

Eight guideway projects meet the criteria for inclusion in the capacity analysis section of this report:

- Blue Line (Hiawatha LRT)
- Blue Line Extension (Bottineau LRT)
- Northstar Commuter Rail, Red Line (Cedar Avenue BRT)
- Green Line (Central Corridor LRT)
- Green Line Extension (Southwest LRT)
- Orange Line (I-35W South BRT)
- Gold Line (I-94 East Dedicated BRT or Gateway)

Potential guideway projects that are still in the feasibility or alternatives analysis study phase are not included in the capacity analysis. These corridors are still considering a number of transit alternatives with varying modes and alignments, leading to a wide range of potential capital and operating costs. However, the individual corridor summaries do include their potential cost ranges, if project costs have been estimated for the corridor. In addition, given that these corridors are still being studied, it is uncertain whether a guideway project will be selected as the preferred transit option for the corridor and/or whether the project will progress into design and construction during the 10-yeartimeframe of the capacity analysis.

Metropolitan area corridors in the study phase include the following:

- I-35W North
- Midtown
- Nicollet-Central Modern Streetcar
- Red Rock
- Robert Street
- Rush Line
- Riverview
- West Broadway
- Highway 169

Intercity passenger rail projects are also among the group of corridors still in the study phase. Included in the corridor summaries are the Northern Lights Express corridor from Minneapolis to Duluth, the Twin Cities to Milwaukee High Speed Rail and the Rochester ZIP Rail.

The following pages contain a brief corridor description, ridership estimate, and capital and operating cost summary for each of the guideway projects under study or in design, construction or operation.

Corridor Summaries: Corridors in Operation, Construction or Design

METRO Blue Line (Hiawatha) LRT

Corridor Description

The Blue Line is a 12-mile light-rail transit line linking downtown Minneapolis and the Mall of America via the Minneapolis-St. Paul International Airport. The corridor travels through Minneapolis and Bloomington with 19 stations, including five stations shared with the Green Line in downtown Minneapolis.

The Blue Line opened for service in 2004. It operates 24 hours a day with train frequencies every 10 minutes during rush hours and midday, every 15 minutes in the early morning and early evening hours, and less frequent service overnight. There are park-and-ride facilities at Fort Snelling and 28th Avenue Stations. Connecting bus service is available at most other stations.

In 2014, the Blue Line carried 9.5 million passengers, an average of 27,700 riders per day. The Blue Line connects directly to the Metrodome/Mall of America Field and Target Field, with connections to Northstar at the Target Field Station. The Blue Line also provides special event service.

Project Status and Timeline

The Blue Line was completed in 2004. It was extended to Target Field in 2009 to provide service to Target Field and the Northstar commuter rail line. This extension was funded as part of the Northstar project.

Progress Update

Target Field Station provides multimodal connections between the Blue Line, Green Line, and the Northstar commuter rail. Target Field Station will accommodate a future Green Line Extension, Blue Line Extension and High Speed Rail Amtrak Service. Construction was completed in 2014.

Summary Financial Plan

Capital Cost, Funding and Budget Activities

The Blue Line cost $715.3 million to construct and opened in 2004. Due in part to higher-than-anticipated demand, the following large capital improvements have been made since construction was completion:

- 31st Street park-and-ride (Lake Street Station) (no longer active as of March 2015)
- 28th Avenue park-and-ride

- American Boulevard Station
- Operating and maintenance facility expansion
- Rail Systems facility building
- Three-car train station extensions
- Three-car train sub-stations at Mall of America and Target Field
- Three-car light-rail trains
- Light rail vehicle storage building
- Light rail positive train control technology

The cost of these improvements totals approximately $106.3 million, all of which has been committed, with $101 million spent to date and the remainder to be spent in the last quarter of 2015. After combining these subsequent improvements with initial construction, the total capital cost for the Blue Line project is $821.6 million.

Blue Line Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Federal	414.1		414.1	50
State G.O. Bonds	100.0		100.0	12
State T.H. Bonds	20.1		20.1	2
Metropolitan Airport	87.0		87.0	11
Hennepin County	84.2		84.2	10
Mall of America (in-kind)	9.9		9.9	2
Total for the Initial Construction Costs	715.3		715.3	87
Federal	80.0		80.0	9
State of Minnesota	1.0		1.0	<1
Metropolitan Council	24.9		24.9	3
Other	0.4		0.4	<1
Total for Subsequent Improvements	106.3		106.3	13
TOTALS	821.6		821.6	100

Note: Spent as of July 2015

Blue Line Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
LRV procurement	74.7		74.7
Transitway design-build	269.4		269.4
Fare collection equipment	3.6		3.6
Capital and equipment	162.3		162.3
Project contingency	12.0		12.0
Airport segment	143.5		143.5
Corridor improvements	49.8		49.8
Subsequent capital improvements	101.0	5.3	111.8
TOTAL	816.3	5.3	827.1

Note: *Spent as of July 2015

Annual Operating and Maintenance Costs

When the Blue Line opened, after farebox revenue, the net operating funding was provided through a state general fund appropriation and by the Hennepin County Regional Railroad Authority. When the CTIB was formed in 2009, the Hennepin County RRA's share was shifted to CTIB. In addition, Minn. Stat. 473.4051 passed in 2009 requiring that "after operating and federal money have been used to pay for light rail operations, 50 percent of the remaining costs must be paid by the state." From 2009 to 2013, due to state budget deficits, the state general fund appropriation has been held constant and did not increase to cover additional operating costs. In fiscal year 2011 the base state general fund appropriation for the Blue Line was $5.2 million annually, or approximately 33 percent of net operating costs.

Beginning in fiscal year 2014 the state provided a general fund appropriation to cover the full 50 percent of the net operating costs, as reflected in the table below. In 2015, the proposed budget for the Blue Line is expected to be $29.6 million. With anticipated farebox and other revenues of $11.2 million, the net operating cost is expected to be $18.4 million.

2015 Blue Line Proposed Operating Budget

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	9.6		9.6	30
State	10.8		10.8	34
CTIB	10.8		10.8	34
Other revenues**	0.8		0.8	2
TOTAL	32.0		32.0	100

**Primarily from Advertising

(Note that percentages in the table above are based on total operating cost, not net operating cost.)

Capital maintenance costs are different from operating costs. Operating costs include vehicle operator salary and benefits, fuel, vehicle cleaning and maintenance and other administrative costs. Annual capital maintenance includes track maintenance, periodic vehicle overhauls, signal work and other smaller-scale capital improvements. Because such costs vary significantly year-to-year, this report takes a multi-year view.

From 2004 to 2014, the Blue Line's average capital maintenance cost was approximately $3.0 million per year. Due to continued heavy use of system equipment, the age of the equipment and periodic vehicle overhauls, the average annual average amount is estimated to increase to $9.1 million per year for the period of 2015 to 2025. After 2025, maintenance costs will continue to rise as equipment ages and vehicle and equipment overhauls are necessary. For more information about capital maintenance costs by year, see the capacity analysis portion of this report.

Other Project Information

LEAD AGENCY
Metropolitan Council (Metro Transit)

PROJECT CONTACT
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METRO Blue Line Map

Northstar Commuter Rail

Corridor Description

The Northstar commuter rail line travels 40 miles from Big Lake in Sherburne County to downtown Minneapolis, where it connects with the Blue Line and the Green Line at the Target Field Station.

The Northstar line provides 12 weekday trips. This breaks down to six inbound and six outbound trips, and one reverse commute peak hour trip each morning and afternoon. The line serves six suburban park-and-ride stations on its way to downtown Minneapolis at Big Lake, Elk River, Ramsey, Anoka, Coon Rapids, and Fridley. Three roundtrips are offered on weekends.

The Northstar line carried over 721,000 passengers in 2014, an average of more than 2,539 riders per weekday. It also provides event rides to Target Field Station for Twins and Vikings games and other special events.

Project Status and Timeline

The Northstar line was opened for service in 2009. The project included an extension of the Blue Line from the Warehouse District Station to Target Field Station, where it connects with the Northstar.

Progress Update

Target Field Station provides multimodal connections between the Blue Line, the Green Line, and the Northstar commuter rail. Target Field Station was built to accommodate future extensions of the Green Line, the Blue Line, and High Speed Rail Amtrak Service. Construction of the Northstar line was completed in 2014.

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

The Northstar line was constructed as a part of the FTA's program called New Starts. The initial budget was $320 million, including $2.6 million provided by the Minnesota Twins outside the full funding grant agreement. The Fridley station was built concurrently with the overall project but funded separately at a cost of $14.4 million by CTIB, Anoka County Regional Rail Authority and the city of Fridley.

Similarly, the Ramsey station was funded separately by the state of Minnesota, Metropolitan Council, CTIB, Anoka County Regional Rail Authority and the city of Ramsey. It was and completed in 2012 at a cost of $13.4 million. This brings the total capital cost for the Northstar line to $347.7 million, as shown in the Capital Funding Sources table below.

Northstar Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Initial Cost	320.0		320.0	92
FTA New Starts	161.9		161.9	46
State of Minnesota	98.6		98.6	28
Northstar Corridor Development Authority	51.0		51.0	15
Metropolitan Council	5.9		5.9	2
Other (Minnesota Twins)	2.6		2.6	1
Initial Source TOTAL	320.0		320.0	92

Separately Funded Stations				
Fridley Station	14.4		14.4	4
CTIB	9.9		9.9	3
Anoka County RRA	0.6		0.6	<1
City of Fridley	3.8		3.8	1
Fridley Station TOTAL	14.3		14.3	4

Ramsey Station	13.4		13.4	4
State of Minnesota	4.0		4.0	1
Metropolitan Council	1.5		1.5	<1
CTIB	3.0		3.0	1
Anoka County RRA	1.3		1.3	<1
City of Ramsey	3.6		3.6	1
Subsequent Improvement:				
Ramsey Station TOTAL	13.4		13.4	3

Capital Funding Sources TOTAL	347.7		347.7	99

The initial portion of the project is forecasted to come in under budget by approximately $4.5 million at closeout. This estimated unspent balance is reflected in the Capital Funding Uses table which follows.

Northstar Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Initial Cost	312.8	2.7	315.5
Construction	80.7		80.7
ROW & existing improv.	110.9		110.9
Vehicles	67.7		67.7
Professional services	49.1		49.1
Unallocated contingency	1.0	2.0	3.0
Finance charges	4.1		4.1
Initial Cost TOTAL	313.5	2.0	315.5
Separately Funded Stations			
Fridley Station	14.4		14.4
Construction	8.6		8.6
ROW & existing improv.	4.5		4.5
Vehicles			
Professional services	1.3		1.3
Unallocated contingency			
Finance charges			
Fridley Station TOTAL	14.4	0.0	14.4
Ramsey Station	13.4		13.4
Construction	6.5		6.5
ROW & existing improv.	5.0		5.0
Vehicles			
Professional services	1.2		1.2
Unalloc. contingency	0.7		0.7
Finance Charges			
Ramsey Station TOTAL	13.4	0.0	13.4
Initial Costs TOTAL	341.3	2.0	343.3

*Spent as of July 2015

Annual Operating and Maintenance Costs

Throughout the planning, construction and applications for federal funding of the Northstar, it was assumed that the Northstar's net operating costs would be funded similarly to the Blue Line. It was planned that the local entities-Anoka, Sherburne and Hennepin counties-would fund half of the cost while the state would fund the other half. With the creation of the CTIB in 2008, the Anoka County and Hennepin County shares were transferred to the CTIB to be paid using metropolitan area sales tax revenues. Due to state budget deficits since 2008, no state funding for the Northstar's operating costs has been appropriated and the states' share has been paid by the Metropolitan Council (41.95 percent) and MnDOT (8.05 percent) using motor vehicle sales tax funds. The local share of net operating costs has been shared by the CTIB (41.95 percent) and Sherburne County (8.05 percent).

In 2015, the budget for the Northstar line is expected to be $17.6 million. With anticipated farebox revenues of $2.5 million, the expected net operating cost for the line is $15.1 million.

Northstar's 2015 Proposed Operating Budget

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	2.5		2.5	14
Metropolitan Council (MVST)	6.3		6.3	36
CTIB	6.3		6.3	36
MnDOT (MVST)	1.2		1.2	7
Local (Sherburne County)	1.2		1.2	7
Other **	0.1		0.1	<1
TOTAL	17.6		17.6	100

**Primarily from Advertising

Note that the percentages in the table above are based on total operating cost, not net operating cost.

Capital maintenance costs are different from operating costs. Operating costs include vehicle operator salary and benefits, fuel, vehicle cleaning and maintenance, and other administrative costs. Annual capital maintenance includes periodic vehicle overhauls, systems upgrades, passenger stations, vehicle maintenance facility improvements and other smaller-scale capital improvements. Because such costs vary significantly year-to-year, this report takes a multi-year view.

For years 2015 to 2025, the average annual capital maintenance cost for the Northstar is expected to be approximately $2.0 million per year. These costs will continue to increase as the system ages and vehicle and equipment overhauls are necessary. For more information about capital maintenance costs by year, see the capacity analysis portion of this report.

Other Project Information

LEAD AGENCY
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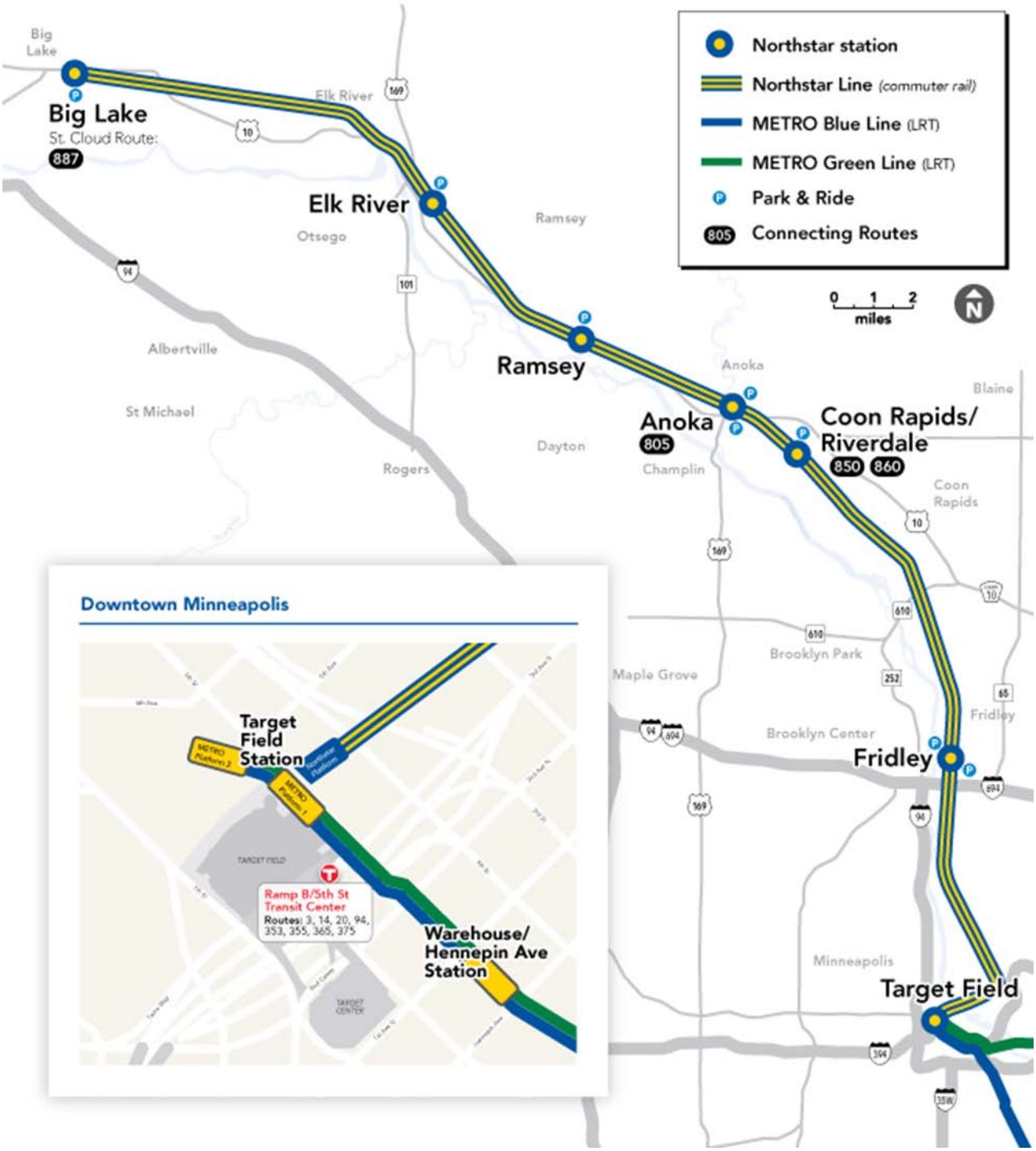
Northstar Line Map



Red Line Bus Rapid Transitway/Cedar Avenue Transitway

Corridor Description

The METRO Red Line/Cedar Avenue Transitway employs Bus Rapid Transit that extends from the Mall of America in Bloomington to 181st Street in Lakeville, connecting Bloomington, Eagan, Apple Valley, and Lakeville. Implementation of the Stage I improvements was completed and the Red Line service launched in June 2013. The Red Line includes six stations. Four stations are park and ride facilities, which are located at the Mall of America, Cedar Grove, Apple Valley Transit Station, and in Lakeville on Cedar at 181st Street. In addition to the park and ride stations, there are two walk-up stations located near 140th and 147th streets in Apple Valley.

The estimated average weekday ridership was projected to be 975 daily riders after the first year in June 2014. Ridership has been increasing since the launch of service in June 2013. As of May 2015, average daily ridership on weekdays is 850, and 500 on weekends.

In the future, Stages II and III are planned to occur from 2013 – 2030. More detailed information on these stages are published as part of the Cedar Avenue Implementation Plan adopted in December 2010 and amended in June 2011.

Red Line BRT Project Status and Timeline

Milestone	Date(s)
Locally Preferred Alternative	2004
Project Development	2006-2008
Engineering	2008-2010
UPA Investments	2008-2010
Stage I: Construction of park-and-rides	2009-2010
Stage I: Expansion of BRT express services	2009-2010
Stage I: Construction of bus shoulder lanes	2011-2013
Stage I: Construction of stations	2012-2013
Stage I: Launch of BRT station-to-station service	Jun-13
Stage II:	2013-2020
Stage III:	2021-2030

Progress Update

The Red Line began operations in June of 2013.

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

Stage I of the Transitway was recently completed at a total cost of approximately $110 million. The following figures relate to Stage II of the Cedar Avenue Transitway.

Red Line Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Other Federal	0.0	19.7	19.7	27
State of Minnesota	0.0	19.7	19.7	27
CTIB	0.0	19.7	19.7	27
Local (Counties/RRAs)	0.4	6.5	6.9	10
Local (Other)	0.0	7.4	7.4	10
TOTAL	0.4	73.0	73.4	101

Red Line Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Construction	0.0	62.9	62.9
ROW, Land, Existing Improvements	0.0	0.0	0.0
Vehicles	0.0	9.7	9.7
Professional Services	0.0	0.9	0.9
Unalloc. Contingency	0.0	0.0	0.0
Finance Charges	0.0	0.0	0.0
TOTAL	0.0	73.5	73.5

*Spent as of July 2015

Annual Operating and Maintenance Costs

Red Line Annual Operating and Maintenance Costs

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	0.2	0	0.2	6
Federal (CMAQ)	1.1	0	1.1	34
State (general fund)	0.4	0	0.4	13
CTIB	1.5	0	1.5	47
Other (advertising)	0	0	0	0
TOTAL	3.2	0	3.2	100

Other Project Information

LEAD AGENCY
Minnesota Valley Transit Authority

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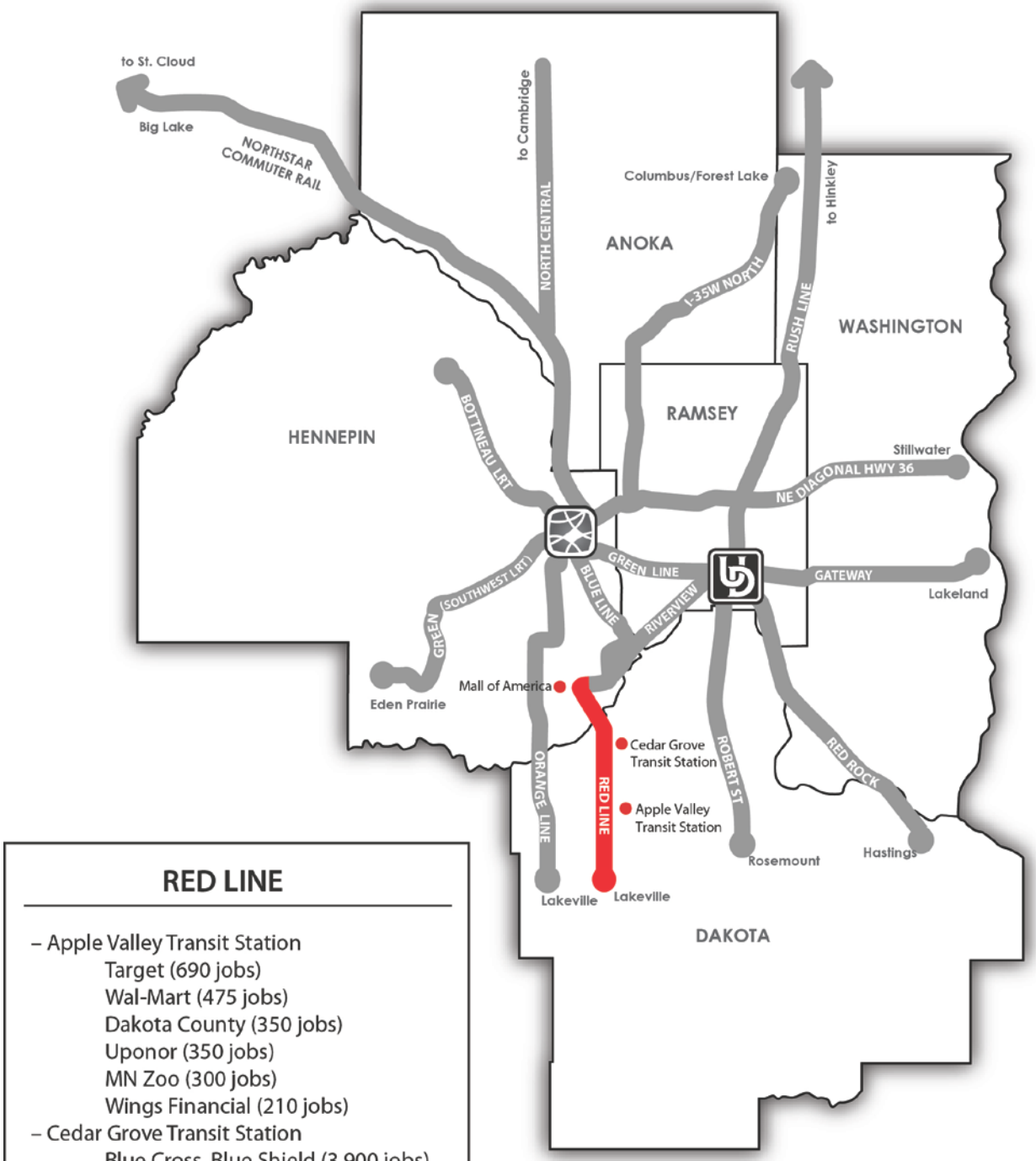
Red Line Map



RED LINE

- Apple Valley Transit Station
  - Target (690 jobs)
  - Wal-Mart (475 jobs)
  - Dakota County (350 jobs)
  - Uponor (350 jobs)
  - MN Zoo (300 jobs)
  - Wings Financial (210 jobs)
- Cedar Grove Transit Station
  - Blue Cross, Blue Shield (3,900 jobs)
  - Transport Corporation of America (350 jobs)
- Mall of America (13,000 jobs)

METRO Green Line/Central Corridor LRT

Corridor Description

The Green Line is 11 miles long and connects downtown St. Paul and downtown Minneapolis via University Avenue and the University of Minnesota. The corridor also travels through the State Capitol complex and the Midway area. The line has18 stations and shares five stations with the Blue Line in downtown Minneapolis, connecting to the Northstar commuter rail line at Target Field Station. The Green Line makes three stops in downtown St. Paul.

Projections estimated 32,390 average daily trips in 2014 and 40,940 by 2030. In 2014 with six months of operations the Green Line carried 6.5 million passengers, an average of 34,548 riders per day.

Project Status and Timeline

The Green Line was completed in June of 2014.

Progress Update

Target Field Station provides multimodal connections between the Blue Line, Green Line, and the Northstar commuter rail. Target Field Station will accommodate a future Green Line Extension, Blue Line Extension and High Speed Rail Amtrak Service. Construction was completed in 2014.

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

Green Line Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Federal Sources	478.4		478.4	50
CTIB	284.0		284.0	30
State of Minnesota	91.5		91.5	10
Ramsey County RRA	66.4		66.4	7
Hennepin County RRA	28.2		28.2	3
St. Paul	5.2		5.2	1
Central Corridor Funders Collaborative	0.5		0.5	<1
Metropolitan Council	2.6		2.6	<1
TOTAL	956.8		956.8	101

Green Line Capital Funding Uses

Budget Activity	Spent to-date ($M)*	Projected ($M)	TOTAL ($M)
Construction	506.0	13.1	519.1
ROW, land, existing improvements	31.2	7.2	38.4
Vehicles	172.6	5.7	178.3
Professional services	188.7	2.2	190.9
Unalloc. Contingency	10.5	3.2	13.7
Finance charges	0.0	16.5	16.5
TOTAL	909.0	47.9	956.9

*Spent as of July 2015

Annual Operating and Maintenance Costs

Revenue service started June 14, 2014. Operating costs for 2015, the first full year of operation, are estimated at $35.3 million. With anticipated farebox and other operating revenues of $8.89 million, the net operating cost is expected to be $26.4 million. The State of Minnesota, as required under Minn. Stat. 473.4051, and the CTIB are each expected to provide 50 percent of net operating costs. For more detail about future operations funding, see the capacity analysis portion of this report. (Note that the percentages in the table below are based on total operating costs, not net operating costs.)

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	8.9		8.9	26.0
Federal (CMAQ)	2.3		2.3	7.0
State (general fund)	11.7		11.7	33.0
CTIB	11.7		11.7	33.0
Other (advertising)	0.8		0.8	1.0
TOTAL	35.4		35.4	100.0

Note that the percentages in the table above are based on total operating costs, not net operating costs

Capital maintenance costs are different from operating costs. Operating costs include vehicle operator salary and benefits, fuel, vehicle cleaning and maintenance, and other administrative costs. Annual capital maintenance includes track maintenance, periodic vehicle overhauls, signal work and other smaller-scale capital improvements. Because such costs vary significantly year-to-year, this report takes a multi-year view.

For years 2015 to 2025, the average annual capital maintenance cost for the Green Line is expected to be approximately $3.78 million per year. These costs will continue to increase as the system ages and vehicle and equipment overhauls are necessary. For detailed information about annual capital maintenance costs, see the capacity analysis portion of this report.

Other Project Information

LEAD AGENCY
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METRO Green Line Map

METRO Green Line Extension (Southwest LRT)

Corridor Description

The proposed METRO Green Line Extension (Southwest) LRT is approximately 14.5 miles of new double track which will serve as an extension of the Green Line and operate from downtown Minneapolis through the communities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, passing in close proximity to Edina.

The proposed alignment includes 16 new stations (including Eden Prairie Town Center Station that is deferred for construction at a later date), approximately 2,500 additional park-and-ride spaces, and accommodations for passenger drop-off (kiss-and-ride), bicycle and pedestrian access, as well as new or restructured local bus routes connecting stations to nearby residential, commercial and educational destinations. This extension will connect to many major activity centers from Eden Prairie to St. Paul, including:

- Optum corporate campus
- Opus/Golden Triangle employment area
- Park Nicollet Methodist Hospital
- Minneapolis Chain of Lakes
- Downtown Minneapolis and St. Paul
- University of Minnesota
- State Capitol area, will be accessible by a one-seat ride

Passengers will also be able to connect to the greater METRO system, including the Blue Line, the Orange Line, the Northstar commuter rail, the Red Line via the Blue Line, and the planned Blue Line Extension as well as future commuter rail, and planned Arterial Bus Rapid Transit lines connecting at multiple locations on the METRO system.

Project Status and Timeline

The project received approval from the Federal Transit Administration to enter the preliminary engineering phase of development on Sept. 2, 2011. In April 2013, the FTA transitioned the project from Preliminary Engineering to Project Development in response to the implementation of MAP-21.

The following table summarizes the actual and projected achievement of key project milestones.

METRO Green Line Extension/Southwest LRT Project Status and Timeline

Project Milestone	Date(s)
Locally Preferred Alternative selected	May-10
Pre-preliminary engineering activities	2010 – 2011
Enter Preliminary Engineering/Project Development	Sep-11
Draft Environmental Impact Statement (EIS) published	Oct-12
Supplemental Draft EIS published	May-15
Complete 60% design	Q4 2015
Final EIS published	Q1 2016
FTA Record of Decision (ROD)	Q2 2016
Enter Engineering phase	Q2 2016
Full funding grant agreement	Q4 2016
Heavy construction	2017 – 2019
Revenue operations	2020

Progress Update

The project received approval, under Minnesota's municipal consent law, from all cities along proposed route and Hennepin County in August 2014.

Stakeholder cities and Hennepin County identified a number of locally requested capital investments that fell outside the base scope of the project. Council staff worked with city and county staff to determine funding options for these items, and funding agreements were subsequently executed for several locally requested items to be constructed concurrently with the Green Line Extension project.

In May 2015, the Metropolitan Council published the Green Line Extension Supplemental Draft Environmental Impact Statement, which evaluates potential impacts in three segments of the proposed LRT route resulting from adjustments to the design of the project since publication of the Draft EIS in 2012. The Council held three public hearings on the Supplemental Draft EIS, and comments were accepted through July 2015. Responses to substantive comments will be included in the Final EIS.

In July 2015, the Metropolitan Council approved a revised scope and cost estimate for the project and announced that it would seek new approval for the project under the State's municipal consent law.

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

One-time capital costs for the project are estimated at $1.77 billion (in year-of-expenditure dollars).

Green Line Extension / Southwest LRT Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Federal Transit Administration	0.0	887.2	887.2	50
Counties Transit Improvement Board	496.0	0.0	496.0	28
State of Minnesota	27.3	138.0	165.3	9.3
Hennepin County Regional Railroad Authority	165.3	0.0	165.3	9.3
Other Local	42.5	18.0	60.5	3.4
TOTAL	731.10	1,043.20	1,774.30	100.00

Green Line Extension / Southwest LRT Capital Funding Uses

Budget Activity	Spent to date ($M)	Projected ($M)	TOTAL ($M)
Construction		958.6	958.6
ROW, land, existing improvements		207.3	207.3
Vehicles		123.5	123.5
Professional services		275.2	275.2
Unallocated contingency		154.9	154.9
Finance charges		55.0	55.0
TOTAL		1,774.5	1,774.5

Annual Operating and Maintenance Costs

The Green Line Extension is forecast to begin revenue service in 2020. Operating costs for 2021, the first full year of operation, are estimated at $28.7 million. With anticipated farebox and other operating revenues of $12.4 million, the net annual operating costs are estimated to be $16.2 million. The state and the CTIB will split the costs, as required under Minn. Stat. 473.4051) at 50 percent from each entity. For more detail about future operations funding, see the capacity analysis portion of this report. (Note that the percentages in the table below are based on total operating cost, not net operating cost.)

2021 Green Line Extension/Southwest LRT Proposed Operating Budget (first full year of operation)

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue		12.4	12.4	41
State (General Fund)		7.8	7.8	28
CTIB		7.8	7.8	28
Other revenue -Advertising		0.7	0.7	3
TOTAL		28.7	28.7	100

Note that the percentages in the table below are based on total operating cost, not net operating cost

Capital maintenance costs are different from operating costs. Operating costs include vehicle operator salary and benefits, fuel, vehicle cleaning and maintenance, and other administrative costs. Annual capital maintenance includes track maintenance, periodic vehicle overhauls, signal work and other small-scale capital improvements. Because such costs vary significantly from year to year, this report takes a multi-year view.

Maintenance costs for the Green Line Extension will be relatively small in the early years of operation but will grow as the system ages. Based on maintenance costs for the early years of the Blue Line (after adjusting for inflation and the length of the Green Line Extension), maintenance costs for the Green Line Extension line during the years 2021–2024 are expected to average approximately $2.6 million per year. For more information about capital maintenance costs, see the capacity analysis portion of this report.

Other Project Information

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Metropolitan Council (Metro Transit)

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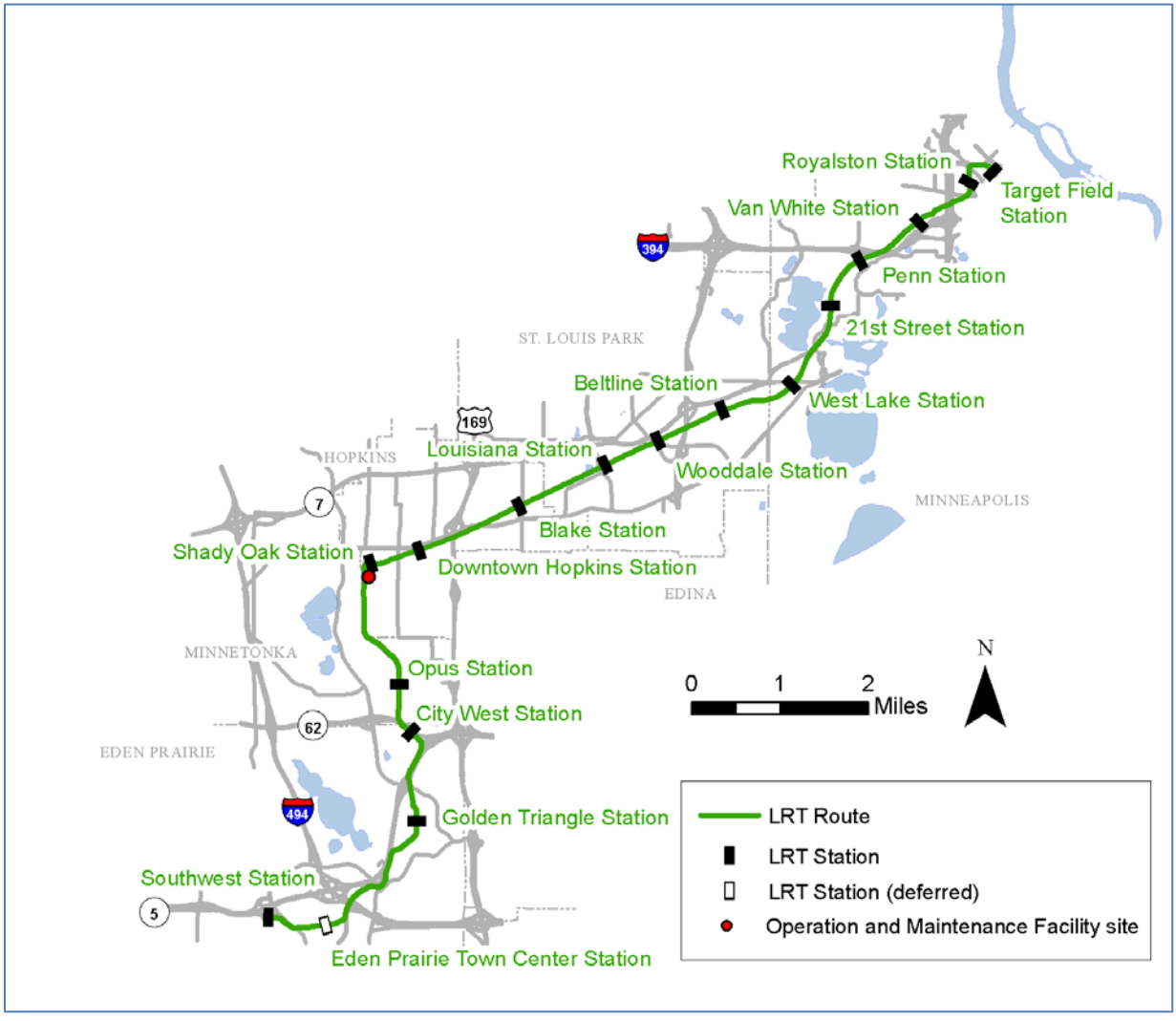
Map of METRO Green Line Extension



METRO Orange Line BRT/I-35W South

Corridor Description

The 17-mile METRO Orange Line BRT project will use e roadway improvements, upgraded transit stations, and improved bus service to provide fast, frequent, and reliable all-day transit service along I-35W. Buses will travel on Marquette and 2nd Avenues in downtown Minneapolis, utilizing congestion-free, transit-only lanes. South of downtown, the Orange Line will provide frequent, limited-stop service to upgraded stations at Lake Street and 46th Street in Minneapolis, 66th Street and 76th Street in Richfield, American Boulevard and 98th Street in Bloomington, and Burnsville near Highway 13 and Nicollet Ave. A second phase of the project could extend service and improvements to six additional miles from Burnsville to Lakeville.

Major infrastructure improvements are planned for the Lake Street and American Boulevard stations. All Orange Line stations will have upgrades in platform ticketing, information technology, and passenger amenities. Numerous investments in the I-35W south corridor have helped establish strong transit markets for both station-to-station and express BRT, and provided major station improvements that are critical to opening Orange Line service. The suite of corridor transit services will continue to benefit from shared capital improvements and complementary service planning.

Express and limited stop services in the corridor currently carry about 14,000 daily rides. Orange Line service is forecast to carry around 11,000 rides each weekday by 2040, for a corridor total of 26,000 daily rides between transitway and express service. Ridership forecasts will continue to be refined as the project progresses toward implementation.

Project Status and Timeline

BRT is the clear modal choice for this corridor due to multiple decades of bus investments, and incremental BRT implementation that has followed MnDOT's *35W Bus Rapid Transit Study* in 2005. The corridor for the Orange Line has been developed through several MnDOT projects to install HOV lanes on I-35W between Burnsville and Minneapolis. These projects include the Crosstown Commons reconstruction, concurrent with construction of the 46th Street Station (2009). Several elements of the Orange Line were advanced by the 2007 Urban Partnership Agreement grants from the USDOT and associated local match from state and local sources. The UPA funded conversion of HOV lanes to MnPASS HOT lanes, construction of four transit-only lanes on Marquette and 2nd Avenue, construction of the Kenrick park-and-ride in Lakeville, and purchase of buses for express service. The costs of these past roadway projects are not included in the overall cost of the Orange Line BRT project below.

The Orange Line Project Plan Update, adopted in July 2014, summarizes all planned components of the BRT project to date, detailing preferred station locations, routing and right of way needs, frequency of service and technology recommendations. The Project Plan also served as the basis

for entry into the Federal Transit Administration Small Starts Project Development program in November 2014.

Metro Transit continues to work on station design, as well as updating the project plan for the Orange Line. The process includes engaging community members, transit riders, employers, institutions, and other stakeholders.

Orange Line BRT Project Status and Timeline

Milestone	Date(s)
MnDOT BRT Study	January-2005
UPA/managed lane construction	2008 – 2010
Marquette and 2nd downtown transit lanes open	December-2009
Project Plan Update	January 2013 – July 2014
Project Development	2015-2016
Engineering and Land Acquisition	2016
Construction	2017 – 2019
Revenue Service	2019

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

Including potential transit-related costs of corridor roadway improvements, the Orange Line project is expected to cost $150.7 million (in 2017 dollars). Funding is anticipated from local, state and federal sources, including participation by the Counties Transit Improvement Board. The project will be applying for entry into the federal Small Starts funding program, which can have a maximum contribution of $75 million. Costs will be further refined through the Project Development phase and ongoing development of Lake/35W design.

Orange Line Capital Funding Sources (2017 dollars)

Source	Committed ($M)	Proposed ($M)	Total ($M)	Share (%)
FTA New Starts	0.0	66.5	66.5	50
Federal-Other	8.8	0.0	8.8	
State of MN	3.0	12.1	15.1	10
CTIB	6.0	39.2	45.2	30
Local	13.0	2.1	15.1	10
TOTAL	30.8	119.9	150.7	100

Orange Line Capital Funding Uses

Budget Activity (2017 dollars)	Spent to date ($M)	Projected ($M)	Total ($M)
Construction	0.0	100.1	100.1
ROW, Land, Existing Improvements	0.0	15.5	15.5
Vehicles	0.0	9.9	9.9
Professional Services & Soft Costs	0.1	13.0	13.1
Unallocated Contingency	0.0	12.2	12.2
TOTAL	0.1	150.7	150.8

Annual Operating and Maintenance Costs

A significant amount of express and limited bus service existed in the I-35W corridor prior to the UPA improvements, estimated in 2010 dollars at approximately $15.5 million annually. This service is funded through fares and the Council's general transit operating revenues. It is anticipated that most of this service and base funding will continue after full implementation of Orange Line BRT.

The Orange Line service is expected to begin in 2019. The net operating costs of this station-to-station service are expected to be shared equally between the state and CTIB. The total operating costs of the Orange Line BRT service in 2019 are estimated at $8.2 million, which includes the ongoing maintenance of stations.

2020 Orange Line Estimated Operations Costs – First Full Year of Service

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Metropolitan Council/MVST	0.0	2.8	2.8	34
Farebox Revenues	0.0	2.6	2.6	32
CTIB	0.0	2.8	2.8	34
TOTAL	0.0	8.2	8.2	100

Other Project Information

LEAD AGENCY
Metropolitan Council (Metro Transit)

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METRO Orange Line Map

METRO Blue Line Extension / Bottineau LRT

Corridor Description

The METRO Blue Line Extension is a 13-mile corridor extending northwest from downtown Minneapolis to serve Golden Valley, Robbinsdale, Crystal, and Brooklyn Park. It is also expected to serve the broader northwestern Twin Cities metropolitan area. The line will connect activity centers including the Target North campus, North Hennepin Community College, downtown Robbinsdale, Golden Valley, Courage Kenny Rehabilitation Institute, and downtown Minneapolis. It will provide a one-seat ride on the existing Blue Line to the VA Medical Center, Mall of America and Minneapolis-St. Paul International Airport, and will connect Minneapolis and the northwest communities with the region's system of transitways, including the Green Line and the proposed Green Line Extension. Ridership is estimated at 27,000 by 2030.

Ten or 11 new stations will be built. The total project cost is estimated at approximately $1 billion, funded by a combination of federal, state and local sources.

Project Status and Timeline

The project received approval from the FTA to enter the Project Development phase on Aug. 22, 2014. The following table summarizes actual and projected achievement of key project milestones.

Blue Line Extension/Bottineau LRT Project Status and Timeline

Project Milestone	Date(s)
Locally Preferred Alternative	May-2013
Project Development	2014 – 2016
Municipal Consent	Q1 2016
Enter Engineering Phase	Q1 2017
Full Funding Grant Agreement	Q1 2018
Heavy Construction	2018 – 2020
Revenue Service	2021

Progress Update

The Hennepin County Regional Railroad Authority was the project sponsor and Responsible Governmental Unit through the completion of the Draft Environmental Impact Statement for the Blue Line Extension. HCRRA published the Draft EIS on April 11, 2014 and received comments through May 29, 2014. On Aug. 22, 2014, the FTA approved the Blue Line Extension to enter the Project Development phase. RGU status was subsequently transferred to the Metropolitan Council, and the Blue Line Extension project office opened in Crystal in January 2015.
Work on preliminary design continues to progress. Issue Resolution Teams have been formed for the cities of Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park, and the Minneapolis Park and Recreation Board. Preliminary design work is progressing and consists of preparing base drawings and developing plans to advance preliminary design for Municipal Consent. Coordination with private utility providers and municipalities is underway to identify existing and future infrastructure that may be affected by the project.

The Metropolitan Council and Hennepin County are working together on the redesign of West Broadway Avenue in Brooklyn Park to accommodate LRT in the median of the reconstructed roadway. Plans call for simultaneous construction of the Blue Line Extension and reconstruction of West Broadway Avenue.

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

Blue Line Extension / Bottineau LRT Capital Funding Sources (2017$)

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
FTA New Starts		491.1	491.1	49
Counties Transit Improvement Board	27.6	283.1	310.7	31
State of Minnesota	1.0	99.2	100.2	10
HCRRA	17.4	82.8	100.2	10
TOTAL	46.0	956.2	1,002.2	100

Blue Line Extension / Bottineau LRT Capital Funding Uses (2017$)

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Construction		523.7	523.7
ROW, land, existing improvements		57.5	57.5
Vehicles		117.1	117.1
Professional services		150.9	150.9
Unallocated contingency		148.1	148.1
Finance charges		5.0	5.0
TOTAL		1,002.3	1,002.3

*Spent as of August 2015

Annual Operating and Maintenance Costs

2020 Blue Line Extension / Bottineau LRT Estimated Operating Costs – First Full Year of Operations

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue		13.5	13.5	40
Federal (CMAQ)				
State (general fund)		10.1	10.1	30
CTIB		10.1	10.1	30
Other (advertising)				
TOTAL		33.7	33.7	100

Other Project Information

LEAD AGENCY
Metropolitan Council (Metro Transit)

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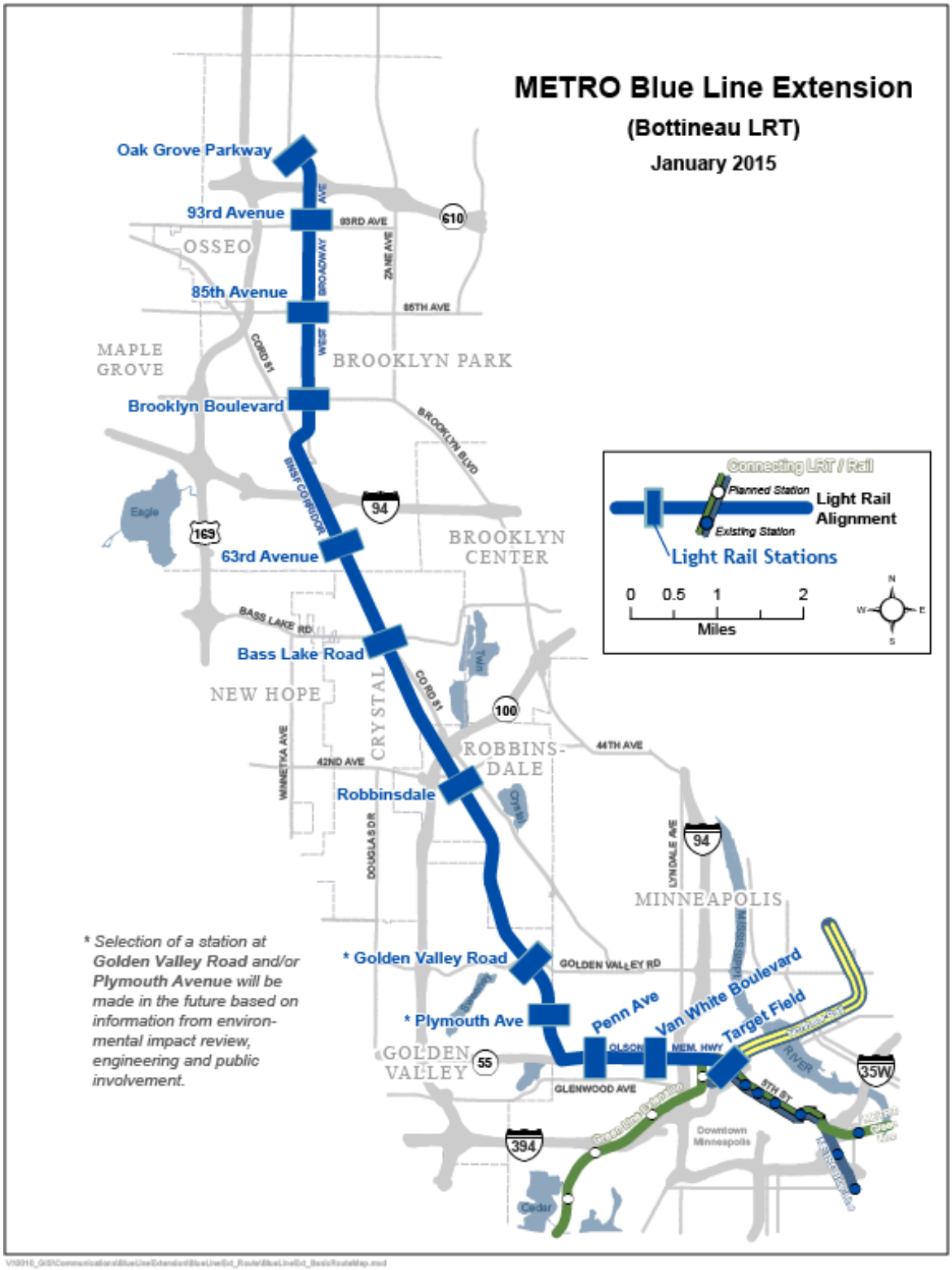
Blue Line Extension (Bottineau LRT) Map



Metro Gold Line (Gateway Corridor) BRT

Corridor Description

The Metro Gold Line, otherwise known as the Gateway Corridor, BRT is an approximately 12-mile long transitway located in Ramsey and Washington Counties. The corridor generally runs parallel to I94, connecting downtown St. Paul with its East Side neighborhoods and the suburbs of Maplewood, Landfall, Oakdale, Lake Elmo, and Woodbury. The Gold Line will connect the eastern parts of the Twin Cities Metropolitan Area to the broader regional transit system through the Union Depot multimodal transportation hub in downtown St. Paul.

The purpose of Gold Line project is to provide transit service to meet the existing and long-term regional mobility and local accessibility needs for businesses and the traveling public within the project area. Traffic congestion is expected to intensify in the Twin Cities Metropolitan Area through 2030 and beyond, and it cannot be addressed by highway construction alone. The corridor's transportation network as currently planned and programmed will be inadequate to handle future conditions. A more sustainable, multimodal transportation network is needed to provide viable travel options for people and to achieve community land use visions, support economic development, and respond to changing corridor population characteristics.

In fall 2014, after an extensive technical evaluation and public outreach campaign, the six cities and two counties that will host the Gold Line adopted resolutions of support for BRT within a dedicated guideway as the Locally Preferred Alternative. This transit solution meets the established public purpose of improving mobility by providing a cost-effective, economically viable solution that promotes economic development, protects the natural environment, and preserves community quality of life and overall safety. Highlights include new, consistent, all-day service within lanes dedicated to transit that will operate alongside existing express service and will provide easier connections to key destinations within the corridor and throughout the region. Ridership estimates are 8,600 passengers per weekday on the Gold Line service and total corridor weekday ridership of 13,500.

The Draft Environmental Impact Statement for the Gold Line will be completed by the end of 2015. The next step in the development of the transitway is to conduct preliminary engineering and prepare the Final Environmental Impact Statement, which would take approximately two years to complete.

Project Status and Timeline

Metro Gold Line /Gateway Corridor BRT

Milestone	Date(s)
Locally Preferred Alternative	October, 2014
Project Development	March 2016 – March 2018
Engineering	March 2018 – March 2020
Full Funding Grant Agreement	March-2020
Construction	March 2020 – November 2022
Revenue Service	November-2022

Progress Update

Since the 2013 report, the scoping phase of the DEIS was completed and the Locally Preferred Alternative was adopted into the Metropolitan Council's 2040 Regional Transportation Policy Plan.

Summary Financial Plan

Capital Cost, Funding Sources, and Budget Activities

Gold Line / Gateway Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
FTA New Starts	0.0	218.0	218.0	45
Other Federal	0.0	0.0	0.0	0
State of Minnesota	2.0	47.0	49.0	10
Counties Transit Improvement Board	0.0	170.0	170.0	35
Ramsey County	0.0	24.0	24.0	5
Washington County	0.0	24.0	24.0	5
TOTAL	2.0	483.0	485.0	100

Gold Line / Gateway Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Construction	0.0	212.0	212.0
ROW, Land, Existing Improvements	0.0	100.0	100.0
Vehicles	0.0	24.0	24.0
Professional Services	0.0	65.0	65.0
Unalloc. Contingency	0.0	84.0	84.0
Finance Charges	0.0	0.0	0.0
TOTAL	0.0	485.0	485.0

Annual Operating and Maintenance Costs

Gold Line / Gateway Estimated Operating Costs

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	0	TBD	TBD	TBD
Federal (CMAQ)	0	0	0	0
State (general fund)	0	6	6	50
CTIB	0	6	6	50
Other (advertising)	0	TBD	TBD	TBD
TOTAL	0	12	12	100

Other Project Information

LEAD AGENCY
Washington County Regional Railroad Authority
on behalf of the Gateway Corridor Commission

PROJECT CONTACT
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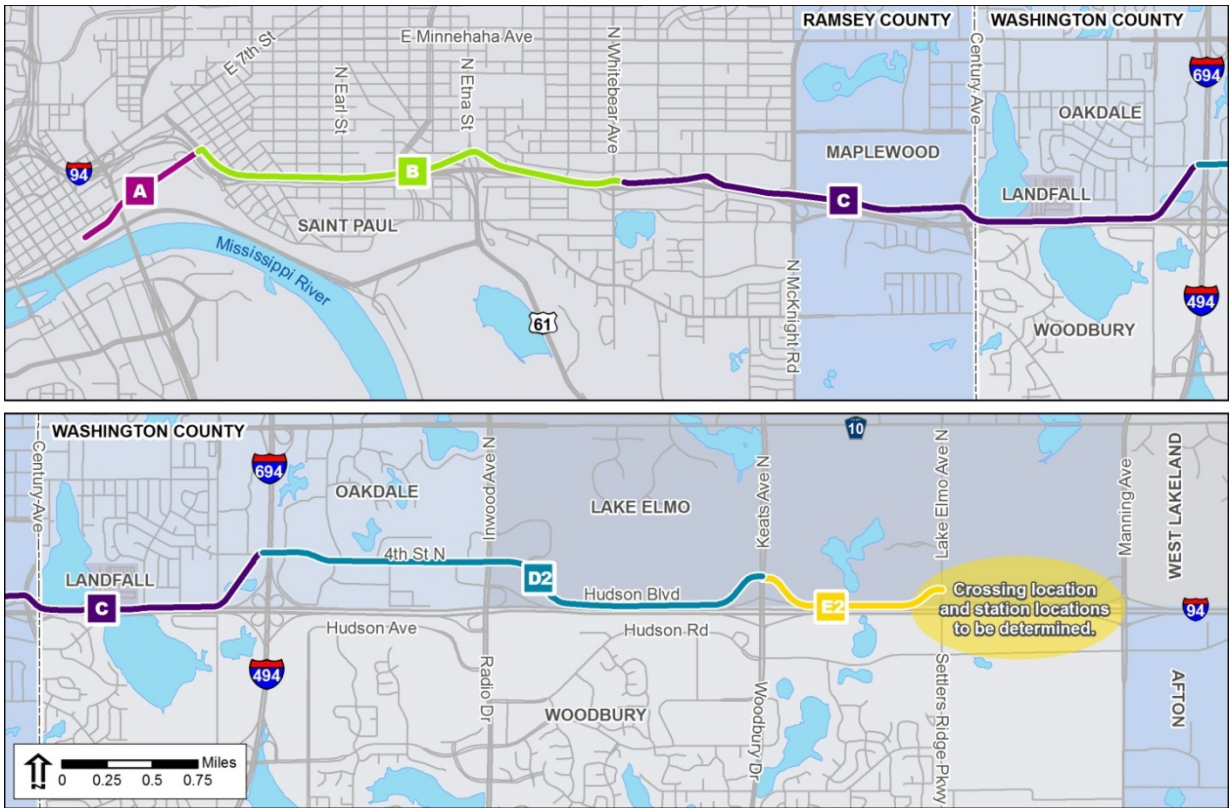
Proposed Gold Line / Gateway Route Map



Corridors in Planning or Analysis Phases

Highway 169 Transitway / MnPASS Corridor

Corridor Description

The Highway 169 corridor runs from Highway 41 in Shakopee in the south, to Highway 55 in the north. Early concepts of the corridor propose eight Highway 169 stations, three I-394 stations and an approximately 30- mile long corridor. The corridor would provide connections to the planned Green Line Extension and the planned American Boulevard arterial BRT line. It would also provide service to existing park-and-ride lots at Southbridge Crossing, Seagate Technology and Marschall Road as well as the planned park-and-ride lot at Pioneer Trail.

The Metropolitan Council recently completed the Highway Transitway Corridor Study, which examined eight highway corridors with relatively high existing peak-hour, commuter transit demand, to determine the potential success for Highway Bus Rapid Transit in these corridors. This corridor study is similar to the first two planned Highway BRT lines, the Red Line and Orange Line. The Highway 169 corridor showed high potential for BRT service.

MnDOT, Scott County, Hennepin County, Metropolitan Council and the cities of Prior Lake and Shakopee are currently developing and evaluating options through an 18-24 month long Transitway & MnPASS Managed Lane Study that will evaluate highway and transit improvements concurrently and develop alternative implementation concepts that consider travel options for all users in the corridor. This will be accomplished through the implementation of a transitway facility and service operations improvements, coordinated with MnPASS or other strategic capacity improvements along the highway.

Projected 2030 ridership along the completed Transitway according to the Metropolitan Council's Highway Transitway Corridor Study are as follows:

Projected Ridership by 2030

Existing Service (2010)	No Build (2030)	2030		
Corridor Bus Routes	Corridor Bus Routes	Station-to-Station Service*	Corridor Bus Routes	Transitway Total
2,900	3,400	78,003	4,200	12,000

*Station-to-station ridership between common stations (General Mills Blvd, Louisiana Ave, and Xenia/Park Place) was split evenly between the I-394 and Highway 169 corridors

Project Status and Timeline

Hwy 169 BRT / MnPASS Corridor Project Status and Timeline

Milestone	Date(s)
Prioritized concept in regional Highway Transitway study	May-14
Transitway & MnPASS Study Complete	March 2017 (projected)
Locally Preferred Alternative	Fall 2017 (projected)
Draft Environmental Impact Statement	2017-2019

Progress Update

This is the first report in which this corridor has been reported upon.

Summary Financial Plan

From Metropolitan Council's Highway Transitway Study:

Capital Costs (2013$)	
Cost Categories	Costs
Corridor Construction	$229,000
BRT Stations	$15,081,000
BRT Maintenance Facility	$5,100,000
Right of Way	$0
Vehicles	$10,404,000
Soft Costs	$6,337,000
25% Contingency	$9,288,000
Corridor Total Cost	$46,439,000

Operating and Maintenance Costs (2012$)	
Item	Costs
Highway BRT Station-to-Station Service	$8,895,000
Background Bus Changes (Net)	$0
Total Operating and Maintenance Costs Increase over No Build	$8,895,000

Note: Funding Sources for Capital Improvements on the Transitway will be identified in the upcoming Transitway & MnPASS Study.

Other Project Information

LEAD AGENCY
MnDOT Metro District

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MnDOT Metro District
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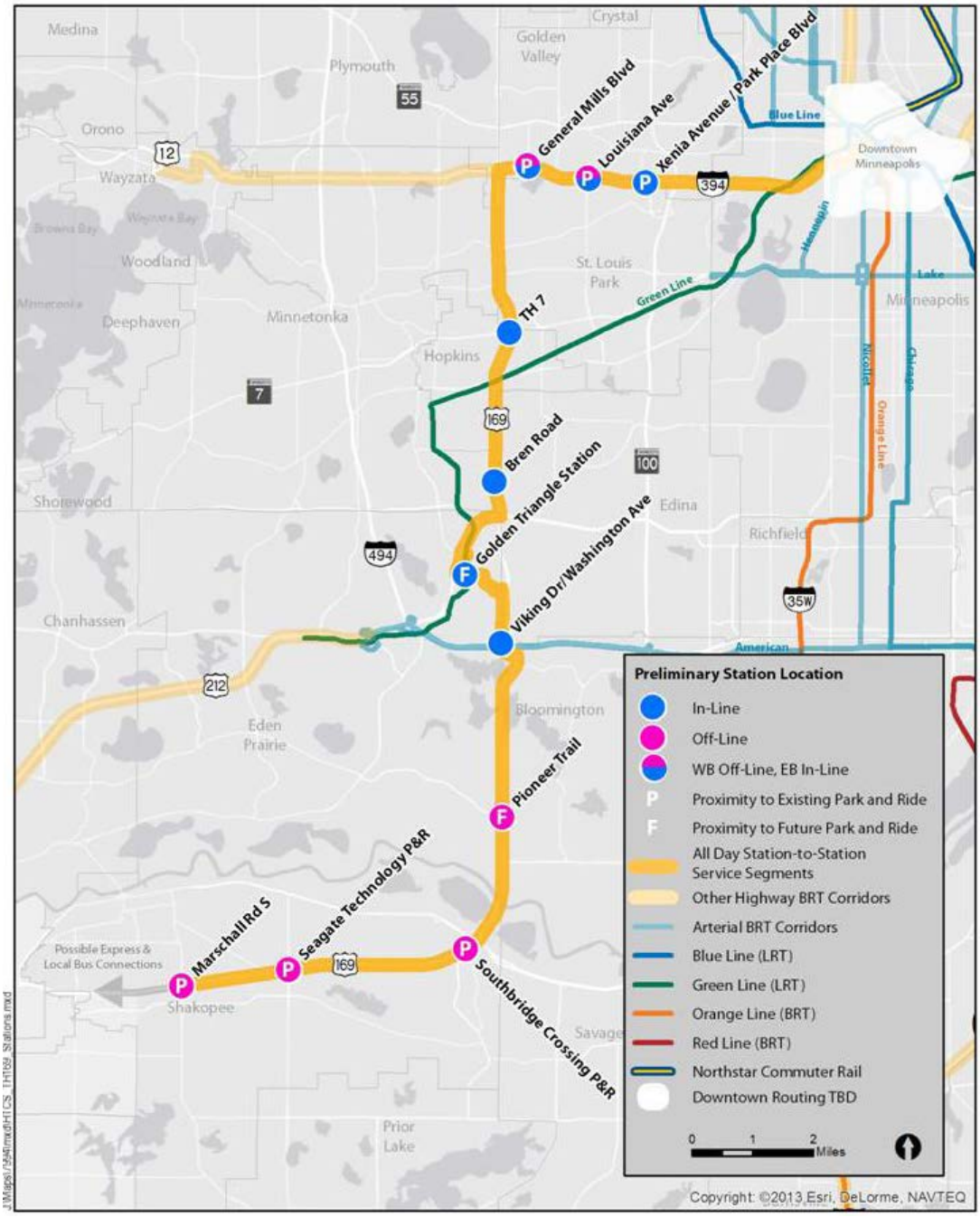
Highway 169 Corridor Map



I-35W North

Corridor Description

The I-35W North Corridor extends from downtown Minneapolis to Forest Lake. Travel in the 26-mile corridor is primarily commuter-oriented during peak hours, with highway volumes of 100,000 vehicles per day north of I-694 and more than 120,000 from Highway 36 to downtown Minneapolis. The corridor includes the communities of Columbus, Forest Lake, Lino Lakes, Blaine, Circle Pines, Lexington, Shoreview, Mounds View, New Brighton, Arden Hills, Roseville, St. Anthony, and Minneapolis.

The corridor includes a bus-only shoulder lane between downtown Minneapolis and 95th Avenue in Blaine. There are more than 5,000 daily rides on nearly 170 transit trips connecting downtown Minneapolis via I-35W North, and Forest Lake. Approximately half of these come from the vicinity of 95th Avenue and Forest Lake. The other half come from the direction of Roseville and Maplewood and access the corridor where I-35W and Highway 36 meet.

Project Status and Timeline

In fall 2015, MnDOT developed a project to perform the preliminary design for the section of I-35W from Highway 36 to Lexington Avenue in Blaine. This project was funded with $800,000 of federal funds and $1.1 million in state funds from the Corridors of Commerce program. The project will conclude April 2016 with an approved preliminary design, draft permits and environmental documents.

Currently, construction of this project is planned for 2019 and 2020. The plan has $100 million allocated; however, the most recent cost estimates indicate the project is between $120 and $180 million, so additional funding will be needed. At this time the priority is to complete the preliminary design, create more precise cost estimates, and prepare the project for an earlier letting should funding for construction become available.

Summary Financial Plan

Given the daily congestion levels and operational needs of the corridor, the study recognized that leveraging already scheduled investments for preservation and bridge replacement with safety and mobility dollars could substantially decrease the costs of providing increased benefits to corridor users compared to undertaking the suite of improvements as separate projects. This cost synergy is reflected in the table below.

The study recommended the I-35W Corridor be implemented in four phases, corresponding to the planned timing for preservation activities along the corridor. Phase One will begin with a project along Highway 36 to Highway 10. Additional feasibility studies will identify more detailed investment plans for each phase, and details for implementing BRT.

The I-35W North Managed Lanes Corridor Study estimated the following cost summary for all phases of roadway development. Although roadway improvements would be designed to make the corridor BRT-ready, capital and operating BRT costs are not included in this table.

I-35W North Managed Lanes Corridor Study Cost Summary

Source	Estimated ($M)	Share (%)
Managed lane investment	340.0	48.0
Preservation investments	250.0	35.0
Interchange improvements	90.0	12.0
Other 2013-2016 program in corridor	35.0	5.0
Corridor investments SUBTOTAL	715.0	
Less cost synergy*:	-165.0	
TOTAL	550.0	100.0

*By coordinating the schedules of the I- 35W corridor projects, a $165 M cost synergy can be achieved

Other Project Information

LEAD AGENCIES

Minnesota Department of Transportation
Metropolitan Council

PROJECT CONTACTS

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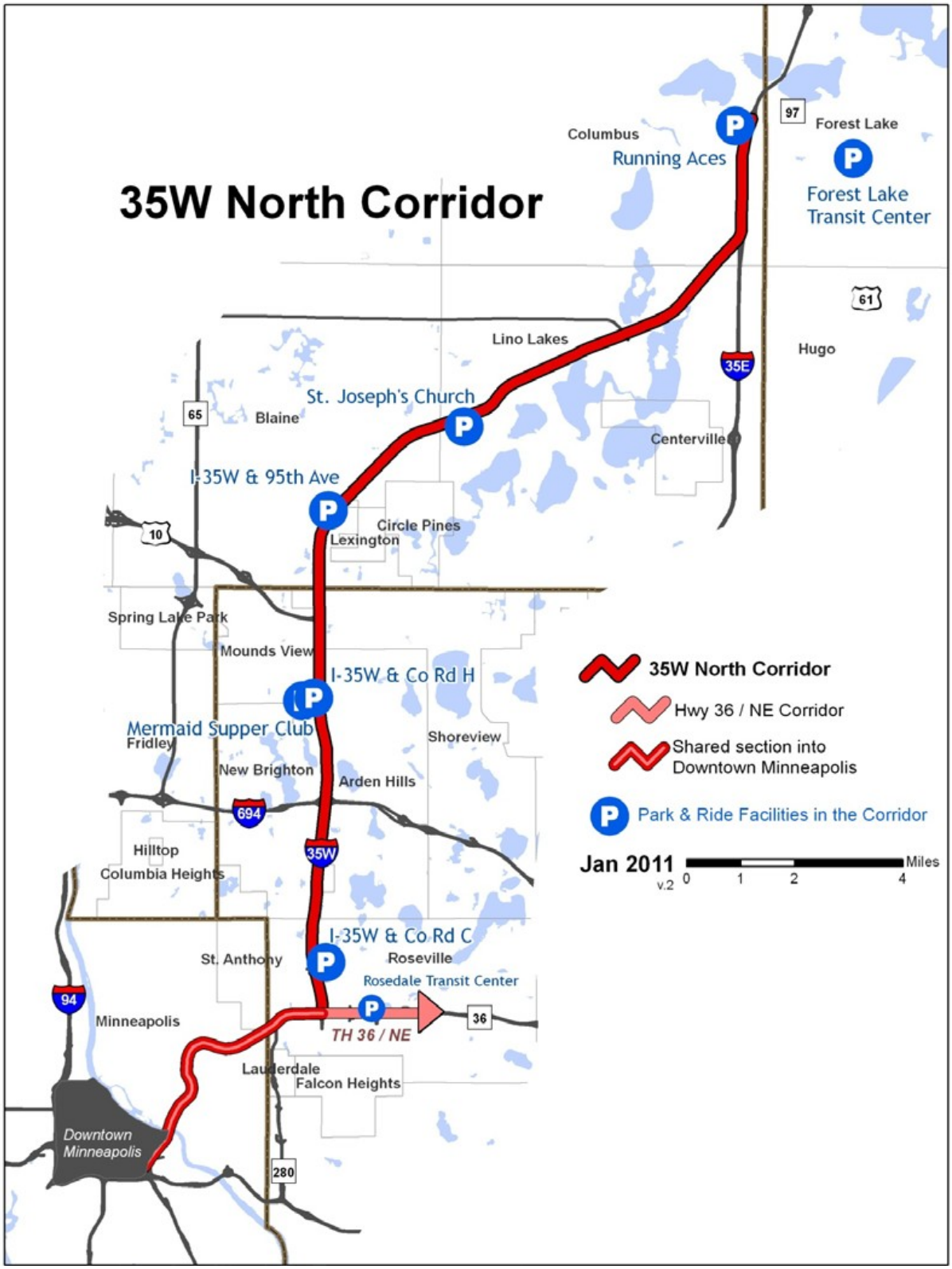
I-35 North Corridor Map



Midtown Corridor

Corridor Description

The Midtown Corridor travels 4.4 miles through the heart of south Minneapolis along the Lake Street and Midtown Greenway alignments. The corridor features dense residential neighborhoods, a thriving commercial district, several major employers and multiple connections to the regional transit network.

While the corridor is currently served by high frequency local and limited-stop bus routes, traffic congestion and high ridership make transit service very slow. An alternatives analysis completed in 2014 explored a broad range of transit improvements options in the corridor. A combination of bus and rail improvements is recommended to meet the travel needs of the Midtown corridor.

The project Alternatives Analysis concluded with a recommended Locally Preferred Alternative for arterial BRT improvements along Lake Street from West Lake Station (Green Line Extension) to Snelling Station (Green Line), and double/single track rail along the Midtown Greenway. The combined ridership of these improvements is 26,000 per weekday, with corridor ridership of 32,000 rides per weekday.

The study is complete, with future corridor progress including adoption of a Locally Preferred Alternative dependent on additional transit funding.

Project Status and Timeline

Midtown Corridor Project Status and Timeline

Milestone	Date(s)
Alternatives Analysis Study	Complete April 2014
Adopt Locally Preferred Alternative	TBD- not within the Met Council's Transportation Policy Plan Current Revenue Scenario
Environmental and Engineering	
Full Funding Grant Agreement	
Construction	
Revenue Service	

Progress Update

The Midtown Alternatives Analysis study is complete, with future corridor progress including adoption of a Locally Preferred Alternative dependent on the following:

- Resolutions of local support for the recommended LPA
- Additional transit funding to enable additional projects to be funded
- Increased definition of Midtown rail vehicle as streetcar or single-vehicle LRT

Summary Financial Plan

Planning-phase cost estimates were generated for the Midtown Corridor Alternatives Analysis recommended improvements. These preliminary assessments estimated the costs for this project at approximately $215 million-250 million for the combined BRT ($50 million) and rail improvements ($185 million -200 million). Potential sources of funding and greater definition of uses will be defined in future project phases.

Capital Cost, Funding Sources, and Budget Activities

Midtown Corridor Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Unknown Future Sources	0.0	250.0	250.0	100
TOTAL	0.0	250.0	250.0	100

Midtown Corridor Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Bus Improvements	0.0	50.0	50.0
Rail Improvements	0.0	200.0	200.0
TOTAL	0.0	250.0	250.0

The Alternatives Analysis study was funded with federal planning assistance ($600,000) matched by Metropolitan Council funding ($150,000). These activities are considered pre-project development and are not included in capital budget activities or previous expenditures above.

Annual Operating and Maintenance Costs

The project's Alternatives Analysis estimated annual operating and maintenance costs in 2012 dollars. Bus operations were estimated at $7 million annually, with rail operations at $8 million annually. The combined alternative (recommended LPA) annual operating cost is $15 million.

Midtown Corridor Estimated Operating and Maintenance Costs (2012$)

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Unknown Sources	0.0	15.0	15.0	100
TOTAL	0.0	15.0	15.0	100

Other Project Information

LEAD AGENCY
Metropolitan Council (Metro Transit)

PROJECT CONTACT
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Midtown Corridor Map

Nicollet-Central Modern Streetcar

Corridor Description

The Nicollet-Central Modern Streetcar is a 3.7-mile modern streetcar line running between Lake Street and 8th Street SE on Nicollet Avenue, Nicollet Mall, Hennepin Avenue, and 1st Avenue NE. The streetcar is planned to operate as a high-frequency service, serving short trips with stops approximately every quarter mile, running in mixed traffic with cars and buses, and using modern streetcar vehicles. It will improve transit connectivity between downtown and neighborhoods north of the Mississippi River and south of I-94, while also providing improved circulation along Nicollet Mall for employees, visitors, and shoppers. The 3.7-mile modern streetcar starter line is projected to generate over 9,000 regular weekday riders.

Project Status and Timeline

An alternatives analysis for a 9-mile study corridor was completed in September 2013. The study concluded with a recommendation that the most promising initial transit improvement for the corridor was a 3.7-mile modern streetcar line running between Lake Street and at least 5th Street NE on Nicollet Avenue, Nicollet Mall, and Hennepin/1st Avenues, using the Hennepin Avenue Bridge to cross the Mississippi River. The 3.7-mile Nicollet-Central Modern Streetcar was recommended by the Minneapolis City Council as the Locally Preferred Alternative, with the support of an interagency policy advisory committee in October 2013.

Nicollet-Central Modern Streetcar Project Status and Timeline

Milestone	Date(s)
Corridor-related transit studies	2005 - 2012
Alternatives Analysis	2012 - 2013
Locally Preferred Alternative	Oct-13
Environmental Analysis	Fall 2013 – Summer 2016
Engineering	2016 - 2017
Construction	2018 – 2019
Revenue Service	2020 - 2021

Progress Update

Since the 2013 report, Minneapolis initiated the preparation of an Environmental Analysis report for the corridor in accordance with FTA regulations and requirements of the National Environmental Policy Act. This report centers on the Local Preferred Alternative identified in the Alternative Analysis and will consider the short-term and long-term effects of the project including social and economic factors, physical factors, and indirect and cumulative effects.

A majority of the technical studies and documentation have been completed, with the historical and archaeological resource (Section 106) analysis nearing completion. It is anticipated that the draft EA will be published for official public review and comment in mid-2016. As a result of additional conceptual design work and traffic operations analysis, the alignment was extended from 5th Street NE to 8th Street SE and a stop was added near Central Avenue and 8th Street SE. This change also provides a connection to a proposed non-revenue track along 8th Street SE that connects to a proposed Operations and Maintenance Facility (OMF).

Summary Financial Plan

Capital Cost, Funding Sources and Budget Activities

Capital costs to complete the 3.7-mile Nicollet-Central Modern Streetcar are estimated at $214 million (in 2018 dollars). Professional services for the work initiated to date (the alternatives analysis and environmental assessment) have been funded through a $900,000 grant through the FTA Alternatives Analysis program and $800,000 from Minneapolis.

Funding for the remaining $212 million in capital costs has not been secured; however, Minneapolis is working with regional partners to pursue the following funding sources: federal sources appropriate for streetcar projects, such as FTA Small Starts and/or the discretionary TIGER grant program; Minneapolis funds, such as the value capture district established for the Nicollet-Central streetcar project; and regional sources, such as revenue from a possible expansion of the transit sales tax

Nicollet Central Capital Funding Sources

Source	Existing ($M)	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share
City of Minneapolis-Value Capture District	0.8	25-75		25-75	12-35
Federal Grant Alternatives Analysis	0.9			0.9	<1
FTA New Starts and/or TIGER Grant			25-75	25-75	12-35
Regional Sources			75-125	75-125	35-60
TOTAL	1.7	0.0	100-200	126-276	60-100

Nicollet Central Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)**	TOTAL ($M)
Guideway		22.0	22.0
Stations/stops		5.0	5.0
Support facilities		17.0	17.0
Site work and special conditions		30.0	30.0
Systems		20.0	20.0
Right-of-way		7.0	7.0
Vehicles		59.0	59.0
Professional Services	1.7	23.0	25.0
Contingency		29.0	29.0
TOTAL	1.7	212.0	214.0

*Spent as of July 2015

**Projected costs are estimated in 2018 dollars

Annual Operating and Maintenance Costs

The estimated annual operating and maintenance cost for the 3.7-mile streetcar is $10.6 million in 2015 dollars, excluding an estimated $2.3 million reduction in corridor bus operating costs; thus, the net increase in estimated operating and maintenance costs is $8.3 million in 2015 dollars.

Other Project Information

LEAD AGENCY
City of Minneapolis

PROJECT CONTRACT
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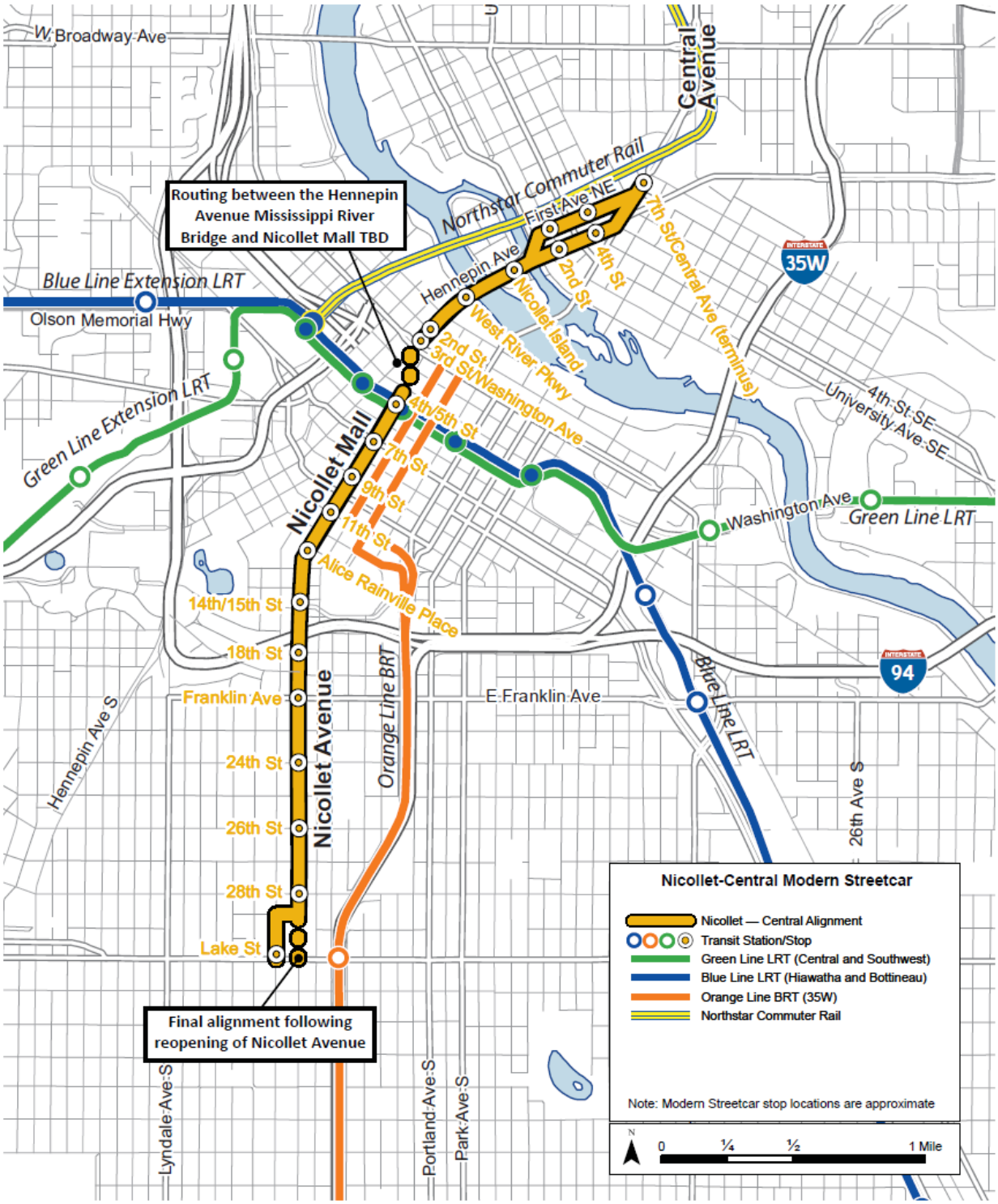
Nicollet-Central Modern Streetcar Map



Red Rock Corridor

Corridor Description

The Red Rock Corridor is a 30-mile corridor connecting Hastings, Union Depot in downtown St. Paul and downtown Minneapolis. The corridor generally follows the alignments of U.S. Highway 61 and Interstate 94 and the BNSF and CP railways. The corridor runs through the communities of Cottage Grove, Denmark Township, Hastings, Newport, St. Paul Park, St. Paul and Minneapolis.

The Metropolitan Council projections for 2030 show a growing level of congestion in the corridor. With the projected traffic growth and no planned improvements, key locations on Highway 61, including ramps and intersections, are forecast to have poor operations during both peak periods in year 2030.

The existing bus service is equally affected by congestion on Highway 61 and I-94. No transit alternative is currently available from Hastings to downtown St. Paul or downtown Minneapolis. As population and employment increase, demand for transportation also increases. Because of job growth in Minneapolis and St. Paul, increased mobility and greater access to employment is needed for both downtowns. The project would also provide system connectivity to increase transit destinations for persons using existing and planned transit systems in the Twin Cities area.

A preliminary alternatives analysis completed in 2007 recommended expanding bus service, increasing bus frequency and providing additional park and ride facilities as the first steps toward building a stronger transit base in the corridor. A commuter rail line was identified as the long-term transit option. The alternatives analysis was updated in 2014 and it was identified that commuter rail is no longer a valid option because of high cost and because the all-day transit market is becoming increasingly important. All the communities in the corridor have shifted focus to bus rapid transit. An Implementation Plan is currently underway to determine the timeline for project start, costs and funding sources. The implementation plan will be complete in early 2016.

The update to the alternatives analysis projected 2030 ridership for the bus rapid transit project at approximately 2,400 daily riders. This number will be updated to reflect 2040 data during the implementation plan.

Project Status and Timeline

An alternatives analysis update was completed in 2014 and established that an implementation plan should be completed for bus rapid transit. A Locally Preferred Alternative has not yet been selected for this corridor or included in the region's Transportation Policy Plan.

Red Rock Project Status and Timeline

Milestone	Date(s)
Original Alternatives Analysis	2007
Commuter Bus Feasibility Study	2009
Station Area Master Planning	2009-2011
Hastings Park and Pool Constructed	2012
East Metro Rail Capacity Study	2011-2012
Newport Transit Station Constructed	2014
Alternatives Analysis Update	2013-2014
Implementation Plan	2015-2016

Progress Update

The alternatives analysis has been completed and the results, which favor implementing bus rapid transit, will be assessed in 2015-2016 to determine an implementation timeline, final routing, costs, ridership and funding.

Summary Financial Plan

The alternatives analysis update estimated the bus rapid transit capital cost at approximately $46 million and operating and maintenance costs at approximately $4 million annually. Funding sources and splits will be determined in the implementation plan.

Below are the funding totals for studies, planning activities, and construction in the corridor to date including: preliminary alternatives analysis, Hastings park-and-pool, East Metro Rail Capacity Study, commuter bus feasibility study, station area master planning, Newport Transit Station, alternatives analysis update, and implementation plan.

Red Rock Corridor Funding Sources

Source	Amount ($M)
Federal sources	3.1
Red Rock Funding Partners (Dakota, Hennepin, Washington, and Ramsey County Regional Railroad Authorities)	1.14
Washington County Regional Railroad Authority	0.8
Counties Transit Improvement Board	4.46
State (general obligation bonds)*	2.8
TOTAL	12.3

*An additional $1.8 million in state G.O. bonds was allocated to the Newport Transit Station through the 2011 legislative session as part of the Metropolitan Council's Transit Capital Improvement Program ($500,000 directly and $1.3M reallocated from the Gateway Corridor at the request of Washington County).

Other Project Information

LEAD AGENCY
Washington County Regional Railroad Authority on behalf of the Red Rock Corridor Commission

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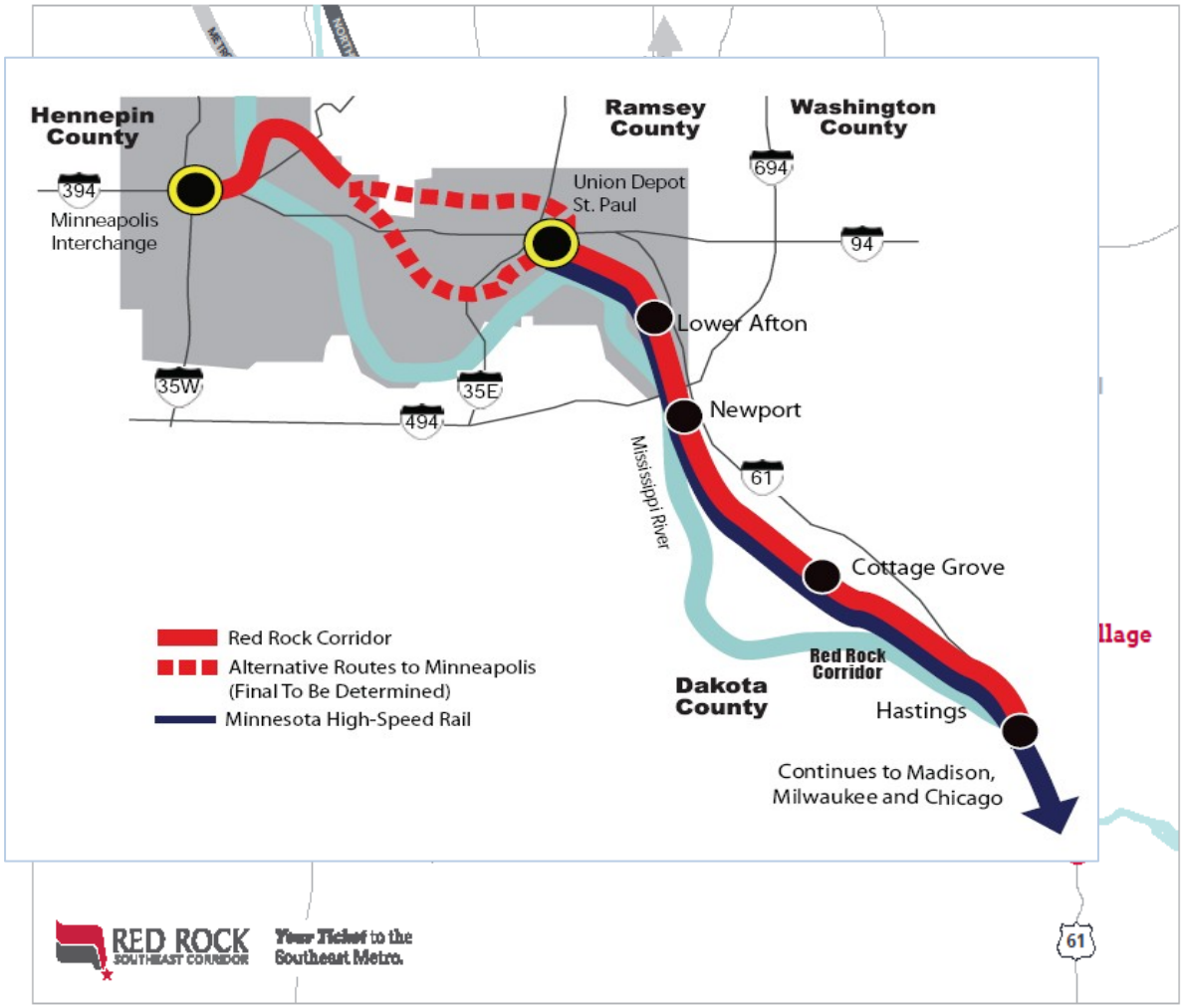
Red Rock Corridor Map



Robert Street Corridor

Corridor Description

The Robert Street Transitway, as defined by the 2030 Transportation Policy Plan, extends from downtown St. Paul, generally along the alignment of Robert Street. However, the transitway study area includes areas bounded on the north by downtown St. Paul/I-94, the Mississippi River to the east, I-35E to the west and County Road 42 to the south. The transitway study area includes St. Paul, West St. Paul, South St. Paul, Sunfish Lake, Mendota, Lilydale, Mendota Heights, Inver Grove Heights, Eagan and Rosemount.

Project Status and Timeline

The Dakota County Regional Railroad Authority completed a transit feasibility study in November 2008. In April 2012, the DCRRA and the Ramsey County Regional Railroad Authority began an Alternatives Analysis. In April 2015, this process concluded without the selection of a Locally Preferred Alternative. This decision was made to allow time for cities on the route to consider a transitway in their comprehensive plans and allow for a more informed LPA decision at a later time.

Robert St. Arterial Bus Rapid Transit

Robert St. Arterial BRT Project Status and Timeline

Milestone	Date(s)
Preliminary Engineering, Environmental Documentation	2020
Final Design and Letter of No Prejudice	2021
Construction	2022-23
Opening Year	2024

Robert St. Streetcar

Robert St. Streetcar Project Status and Timeline

Milestone	Date(s)
EIS, Preliminary Engineering	2020
Final Design and Letter of No Prejudice	2021-2022
Construction	2023-2025
Opening Year	2026

Progress Update

In April 2015, the Alternatives Analysis process concluded without the selection of a Locally Preferred Alternative. This decision was made to allow time for cities on the route to consider a transitway in their comprehensive plans and allow for a more informed LPA decision after the comprehensive neighborhood plans are submitted.

Summary Financial Plan

Capital Cost, Funding Sources, and Budget Activities

Robert St. Arterial Bus Rapid Transit

Robert St. BRT Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Other Federal	0.0	13.2	13.2	48
State of Minnesota	0.0	2.9	2.9	10
Counties Transit Improvement Board	0.0	8.6	8.6	31
Local (Counties/RRAs)	0.0	1.4	1.4	5
Local (Other)	0.0	1.4	1.4	5
TOTAL	0.0	27.5	27.5	99

Robert St. BRT Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Construction	0.0	15.7	15.7
ROW, Land, Existing Improvements	0.0	0.1	0.1
Vehicles	0.0	3.4	3.4
Professional Services	0.0	3.6	3.6
Unalloc. Contingency	0.0	4.9	4.9
TOTAL	0.0	27.7	27.7

*Spent as of July 2015

Robert St. Streetcar

Robert St. Streetcar Capital Funding Sources

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
FTA New Starts	0.0	178.5	178.5	48
State of Minnesota	0.0	41.7	41.7	11
Counties Transit Improvement Board	0.0	115.1	115.1	31
Local (Counties/RRAs)	0.0	19.4	19.4	5
Local (Other)	0.0	19.4	19.4	5
TOTAL	0.0	374.1	374.1	100

Robert St. Streetcar Capital Funding Uses

Budget Activity	Spent to date ($M)*	Projected ($M)	TOTAL ($M)
Construction	0.0	222.6	222.6
ROW, Land, Existing Improvements	0.0	6.1	6.1
Vehicles	0.0	29.3	29.3
Professional Services	0.0	46.5	46.5
Unalloc. Contingency	0.0	65.8	65.8
TOTAL	0.0	370.3	370.3

*Spent as of July 2015

Annual Operating and Maintenance Costs

Robert St. Arterial Bus Rapid Transit

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	1.0	0.0	1.0	23
Federal (CMAQ)	0.0	0.0	0.0	0
State (general fund)	0.0	1.2	1.2	26.5
CTIB	0.0	2.2	2.2	50
Other (advertising)	0.0	0.0	0.0	0.5
TOTAL	1.0	3.4	4.4	100

Robert St. Streetcar

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
Fare revenue	1.0	0.0	1.0	10.9
Federal (CMAQ)	0.0	0.0	0.0	0
State (general fund)	0.0	3.5	3.5	38.8
CTIB	0.0	4.5	4.5	50
Other (advertising)	0.0	0.002	0.002	0.2
TOTAL	1.0	8.002	9.002	99.9

Other Project Information

LEAD AGENCY
Dakota County Regional Railroad Authority
Ramsey County Regional Railroad Authority

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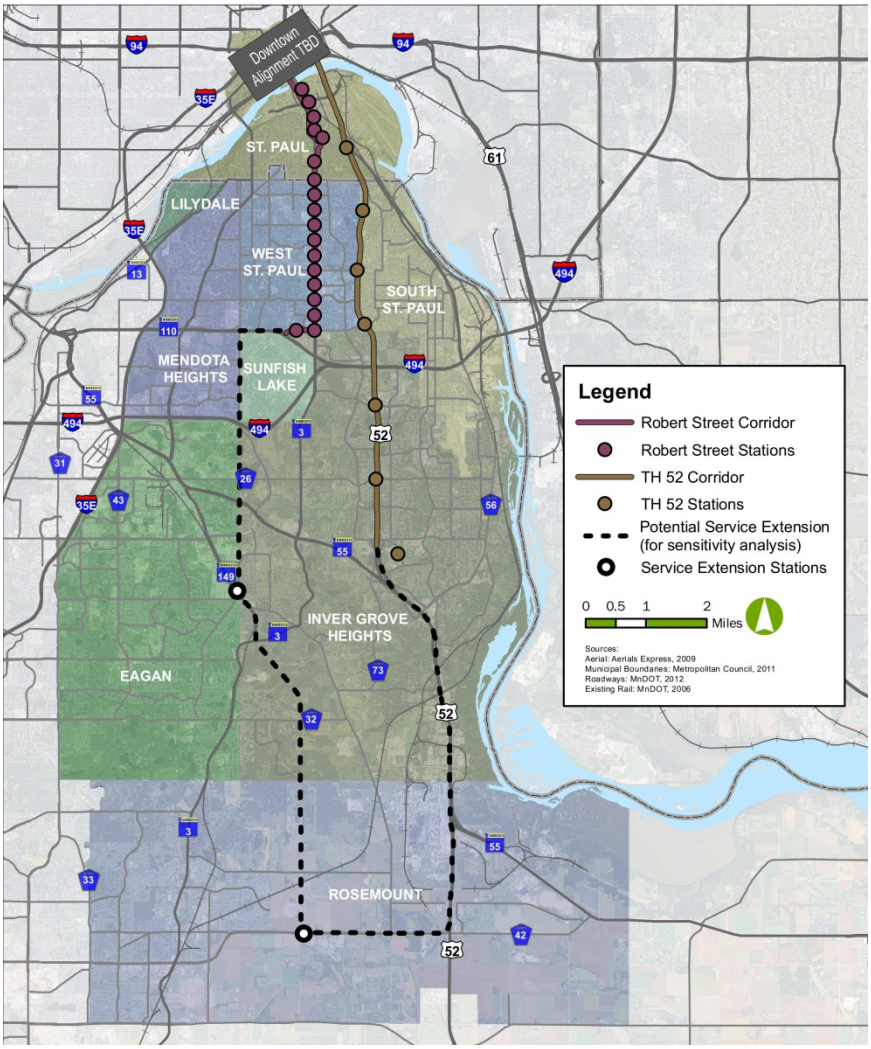
Robert Street Corridor Map



Rush Line Corridor

Corridor Description

The Rush Line Corridor is a transportation corridor extending 80 miles from Hinckley to Union Depot in downtown St. Paul, roughly following I-35 and I-35E and Highway 61. This corridor has been identified for transportation improvements by the Metropolitan Council/Metro Transit, the Minnesota Department of Transportation, the Rush Line Corridor Task Force, and the counties that encompass the corridor based on current and future population, employment and travel demand.

Based on the findings and recommendations of the 2001 Rush Line Transit Study and the 2009 Rush Line Corridor Alternatives Analysis, a Pre-Project Development Study began in March 2014. The PPD Study is focused on analyzing bus and rail alternatives within the 30-mile study area between Forest Lake and Union Depot. The PPD Study is a joint local and regional planning effort conducted by the Rush Line Corridor Task Force and led by the Ramsey County Regional Railroad Authority.

The Rush Line Corridor is currently in the Pre-Project Development phase. The Rush Line Corridor Task Force has adopted the Purpose and Need, Goals and Objectives document and is currently evaluating the Universe of Alternatives (mode and alignment). Ridership projections have not been prepared but the detailed evaluation of alternatives is scheduled for release in the winter of 2015-2016 and will produce preliminary ridership estimates for a range of modes and alternative alignments.

Project Status and Timeline

Rush Line Corridor Project Status and Timeline

Milestone	Date(s)
Transit feasibility study	2001
Alternatives analysis study	November-2009
Demonstration commuter bus	October 2010 – December 2012
Pre-project Development Study	March 2014 – Fall 2016
Locally Preferred Alternative	Fall - 2016
Draft Environmental Impact Statement	Spring 201 – Spring 2018
Project Development	Spring 2018 – Spring 2020

Progress Update

In fall 2013, the RCRRA secured federal funding in the amount of $1,189,700 (80 percent) to cover 80 percent of the Pre-Project Development PPD Study's cost. The 20 percent local match of $297,425 was provided by the following five counties in the Rush Line Corridor: Ramsey, Washington, Anoka, Chisago and Pine. On Nov. 21, 2013, the Rush Line Corridor Task Force unanimously endorsed the selection of URS Corporation to be the lead engineering firm to complete the PPD Study.

The PPD Study began in March 2014 and is scheduled to be completed in June 2016. The Rush Line Corridor Policy Advisory Committees was formed and began meeting in April 2014. The Rush Line Corridor PAC includes Rush Line Corridor Task Force members, business organizations, Metropolitan Council, Minnesota Department of Transportation and other key stakeholders in the corridor. The PAC was formed to provide policy input, direction and approval of study work efforts and will make the final recommendation to the task force on the corridor's Locally Preferred Alternative. The task force will then make a recommendation to the impacted cities and county regional railroad authorities on whether or not to adopt the LPA.

A technical advisory committee was formed in spring 2014 to be a forum for discussion of ideas, updates and to provide direct input and technical recommendations to the PAC for the PPD study. A project management team was also assembled in spring 2014 to actively manage the work of the consultant team and the PPD Study. A Public Engagement Advisory Panel was also formed to provide guidance to the project management team on public engagement strategies, materials and messages.

The transit travel market analysis was completed in August 2014. The Purpose and Need document and the draft Universe of Alternative Alignments was adopted by the Rush Line Task Force in February 2015. Public engagement activities were conducted throughout the study timeline, including several walking tours along the Ramsey County Regional Railroad Authority property in fall 2014. A summary of the first round of open house meetings, a summary of the fall 2014 walking tours and a public engagement summary report was published in April 2015. Currently, the draft Universe of Alternative routes is in the Tier 1 analysis.

Following the alternative alignment evaluation process and extensive public engagement activities, the study will identify the corridor's Locally Preferred Alternative, which will be subject to refinement and revision during the environmental review process.

Summary Financial Plan

Capital Cost, Funding Sources, and Budget Activities

The Rush Line Corridor PPD study budget is $1,487,125. As of July 2015, $464,731 of the budget amount has been spent. The Rush Line Corridor PPD has not identified a Locally Preferred Alternative, so no information is available on capital funding sources or uses at this time.

Annual Operating and Maintenance Costs

The Rush Line Corridor PPD study budget is $1,487,125. As of July 2015, $464,731 of the budget amount has been spent. The Rush Line Corridor PPD has not identified a Locally Preferred Alternative, so no information is available on annual operating and maintenance costs at this time.

Other Project Information

LEAD AGENCY
Rush Line Corridor Task Force

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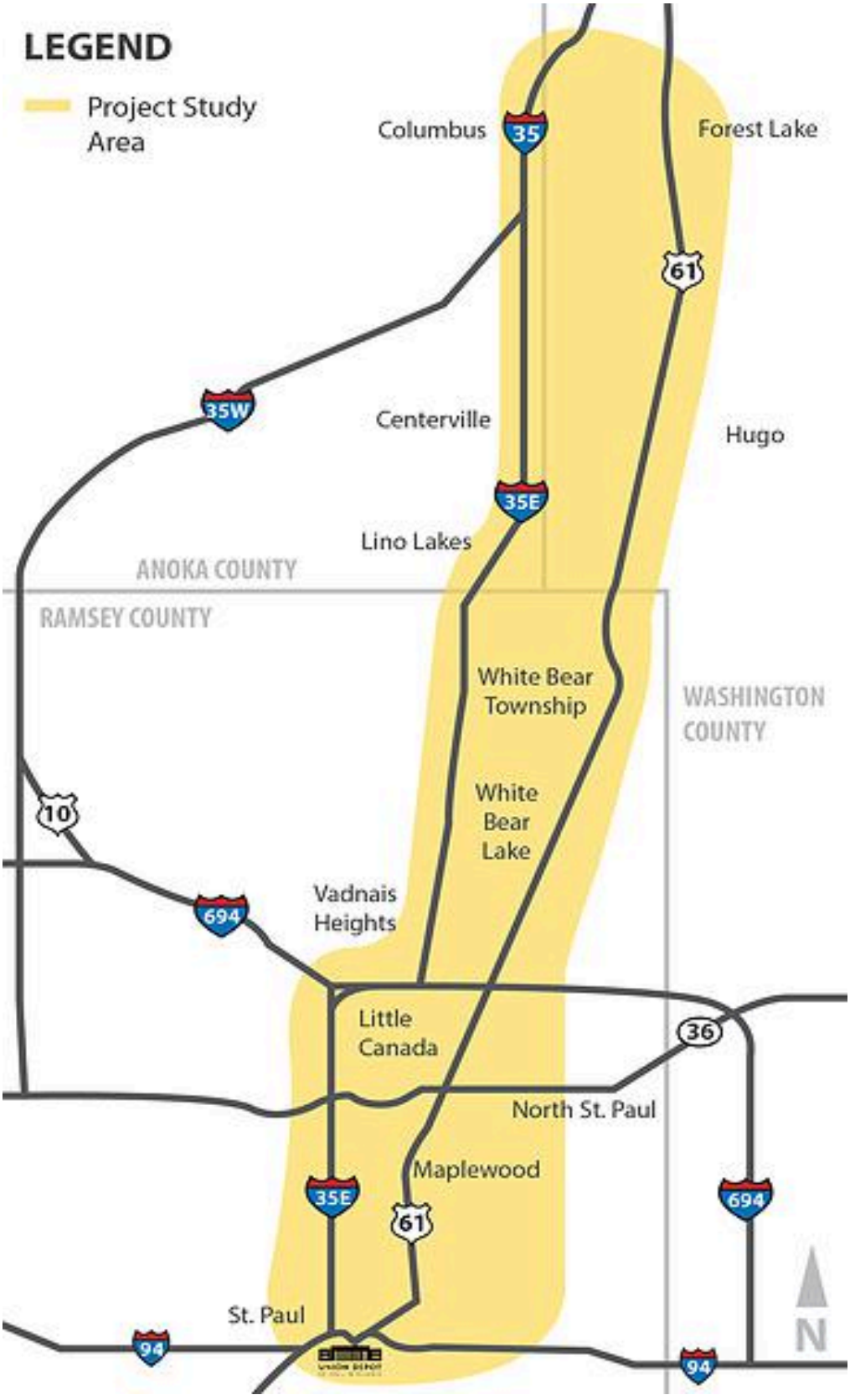
Rush Line Corridor Study Map



Riverview Corridor

Corridor Description

The Riverview Corridor is 12.3 miles long and connects downtown St. Paul to Minneapolis-St. Paul International Airport and the Mall of America. It is defined by the Mississippi River on the south, I-35E and the river valley bluff on the north, with termini at Union Depot and the Mall of America. The corridor roughly parallels West Seventh Street and the Canadian Pacific Railroad in St. Paul and Hwy 5 to the airport and Mall of America.

The Riverview Corridor Major Investment Study that concluded in July 2000 was sponsored by RCRRA and the Federal Transit Administration. The MIS did not recommend an alternative but instead provided a focused analysis and evaluation of the mobility needs in the corridor and possible solutions.

Due to significant planned and completed redevelopment, as well as increasing employment along the corridor, in 2013 corridor partners determined it was appropriate to pursue additional analysis of transitway alternatives for the corridor.

Project Status and Timeline

Riverview Corridor Project Status and Timeline

Milestone	Date(s)
Major Investment study	2000
Pre-project development study/LPA	February 2014 - September 2015
Draft Environmental Impact Statement	2015-2017

Progress Update

The Riverview Corridor has secured local funding for the pre-project development study. The study will begin in February 2014 and end in fall 2016. It is funded by RCRRA ($1,500,000). Following completion of the pre-project development study, a Locally Preferred Alternative will be selected and advanced into a draft environmental impact statement.

Summary Financial Plan

Capital Cost

Capital costs depend on potential transit routes and alignments in the transitway, as determined by the pre-project development study.

Annual Operating and Maintenance Costs

Operating and maintenance costs depend on potential transit routes and alignments in the transitway, as determined by the pre-project development study. The estimated annual operating costs for modes identified in the transit feasibility study range from $10 million to $23 million (2007 dollars). Potential funding sources include the Counties Transit Improvement Board and Metropolitan Council transit operating funds.

Other Project Information

LEAD AGENCY

Ramsey County Regional Railroad Authority

PROJECT CONTACT

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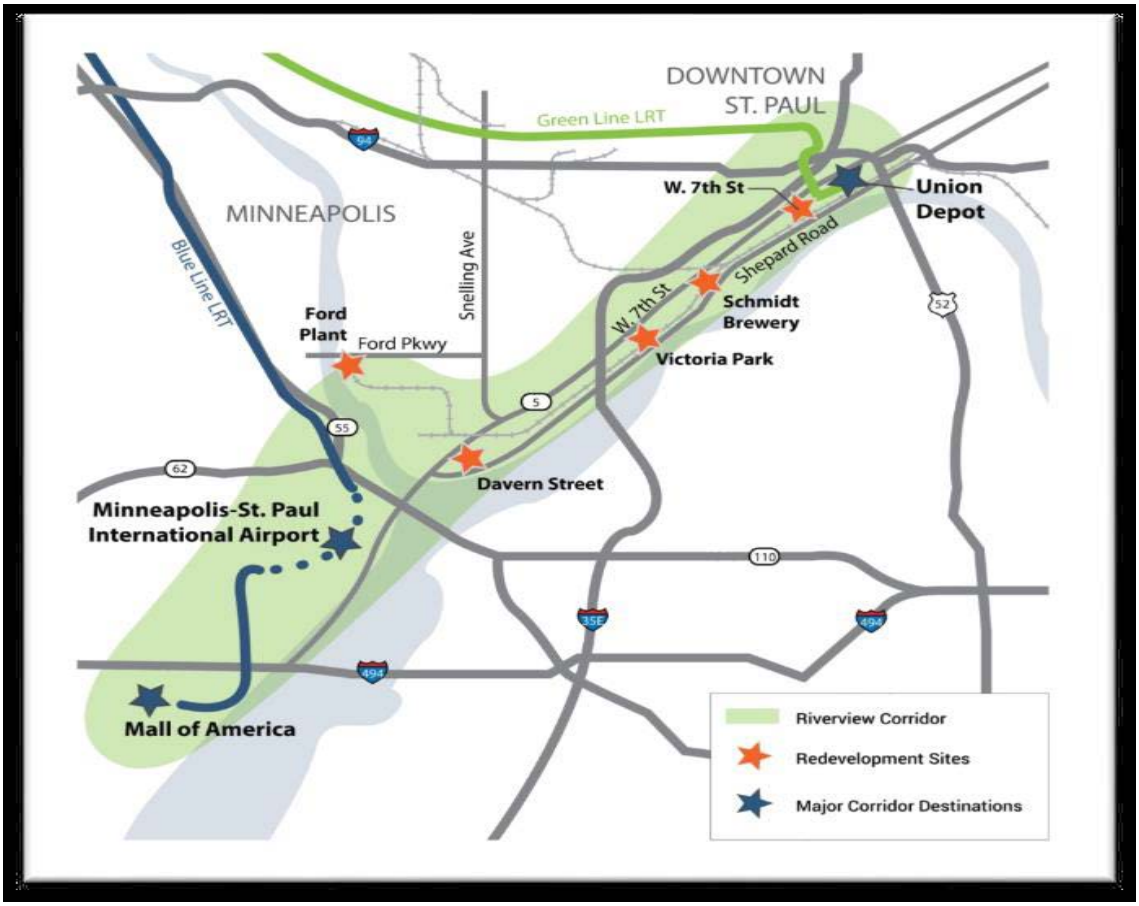
Riverview Corridor Map



West Broadway Corridor

Corridor Description

Metro Transit, in partnership with Hennepin County and the city of Minneapolis, is undertaking a transit study to identify possible transit improvements along West Broadway.

The West Broadway Transit Study will conduct a collaborative planning process to identify and evaluate potential transit improvements along Washington Avenue and West Broadway Avenue in north Minneapolis and Robbinsdale. The study will also evaluate the corridor's market potential for transit-oriented development. The intended outcome of the study is a recommended Locally Preferred Alternative for transit service improvements in the corridor.

The modes to be evaluated in the study include the modern streetcar and bus rapid transit (BRT). The study began January 2015 and is expected to be completed in December 2015. Ridership estimates will be developed through the study using past planning work that estimated daily BRT or streetcar ridership at 4,000 to 5,000 per day.

Project Status and Timeline

West Broadway Corridor Project Status and Timeline

Milestone	Date(s)
West Broadway Transit Study	Complete December 2015
Adopt Locally Preferred Alternative	TBD-Dependent on study results and future funding availability
Environmental and Engineering	
Full Funding Grant Agreement	
Construction	
Revenue Service	

Progress Update

The Broadway corridor was included in the previous Guideway report, but had just begun scoping development. Scope development and funding partnership execution was completed mid-2014; procurement for a project consultant concluded late 2014. The study began January 2015 and will be completed in late 2015 and provide technical information for a future Locally Preferred Alternative.

Summary Financial Plan

The study project will include estimated capital and operating costs for BRT and Modern Streetcar Alternatives. These estimates will be developed in fall 2015. As of June 2015, a total of 43 percent of the project's $615,000 study budget was expended.

Other Project Information

LEAD AGENCY
Metropolitan Council (Metro Transit)

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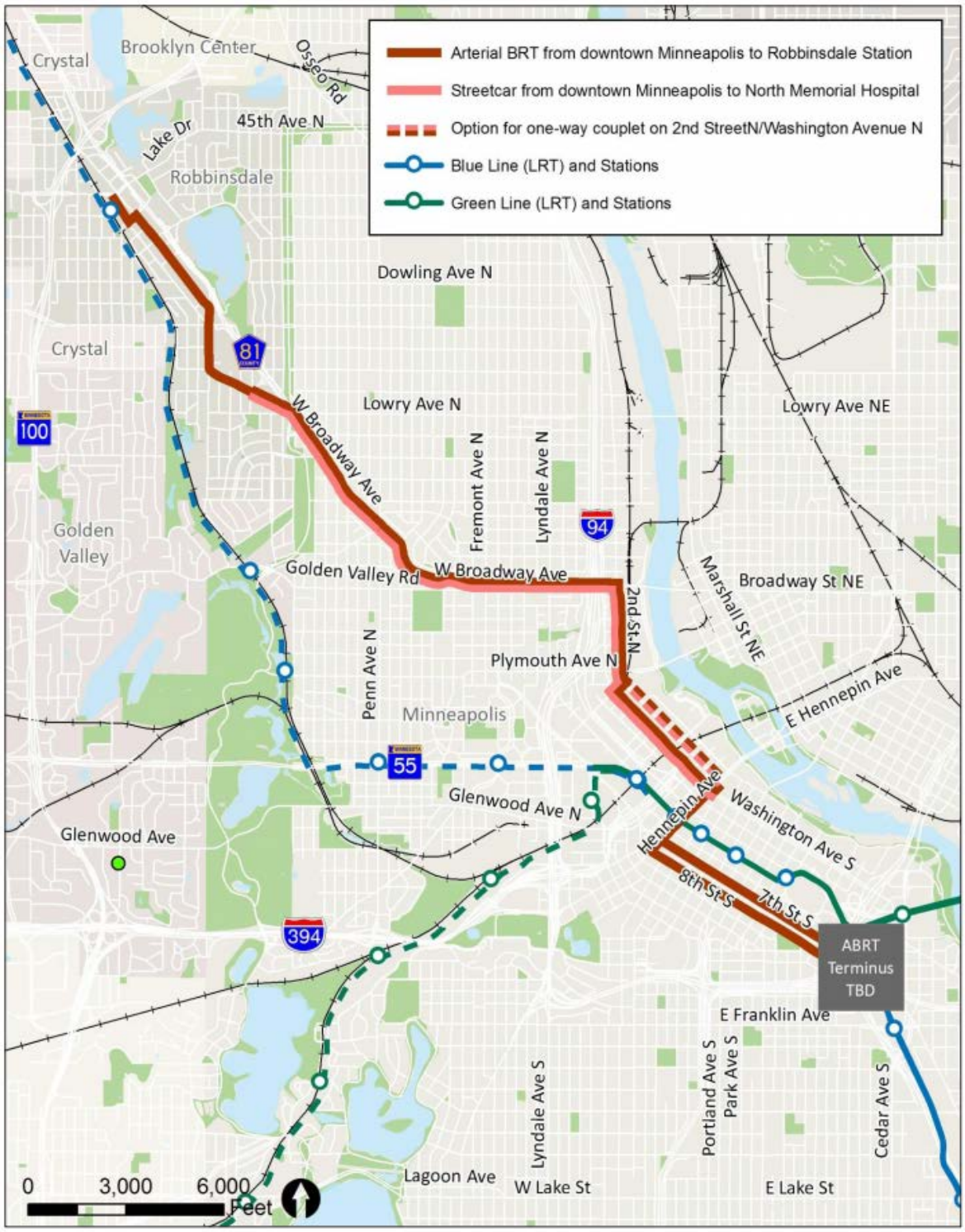
West Broadway Corridor Map



Intercity Passenger Rail Corridors

Northern Lights Express - Minneapolis to Duluth High Speed Passenger Rail

Corridor Description

The Northern Lights Express, also known as NLX, is a proposed high speed intercity passenger rail service that would operate between Minneapolis and Duluth. Terminal stations would be located in Minneapolis at Target Field Station and in Duluth at the historic downtown Depot. In Minnesota, intermediate stations are planned in Coon Rapids, Cambridge and Hinckley. There is one station proposed in Superior, Wis.

The NLX Project includes planning, environmental review, engineering design and construction of the infrastructure required to implement daily intercity passenger train service at speeds up to 90 mph along a 152-mile corridor on track owned by the BNSF Railway. Also included in the project will be procurement of intercity passenger rail equipment, construction of layover and maintenance facilities, selection of an operator, development of a system safety plan and completion of all agreements necessary to operate over BNSF tracks.

The 2015 Minnesota Comprehensive Statewide Freight and Passenger Rail Plan identifies this corridor as a 'Phase I Project in Advanced Planning' for high-speed intercity passenger rail service. The NLX corridor meets the definition of 'emerging HSR' as defined in the FRA HSR Strategic Plan.

Project Status and Timeline

The NLX Service Development Plan and Tier 1 Service Level Environmental Assessment were completed in March 2013. A Finding of No Significant Impact and state Negative Declaration were issued in August 2013. The NLX Project is now in the Preliminary Engineering/NEPA phase, which includes preliminary engineering, ridership forecasts, identification of station and facility locations, a financial plan and completion of the Tier 2 Environmental Assessment. The PE/NEPA phase is expected to be completed in the second quarter of 2016. The following table summarizes the actual and projected timelines of key milestones.

Northern Lights Express (NLX) Project Status and Timeline

MILESTONE	DATE
Earlier Project Phases	
Feasibility Studies	2000 - 2007
Preferred Route Concurrence (FRA)	July-2011
Final Tier 1 EA	March-2013
Service Development Plan (SDP)	March-2013
FRA Tier 1 EA Determination/Minnesota Negative Declaration	August-2013
Current PE/NEPA Phase	
Preliminary Engineering/Tier 2 NEPA	August 2013 - June 2016
Ridership Analysis/Forecast/BCA/Financial Plan	August 2013 - December 2015
Station and Layover Facility Selection and Concept Design	December 2013 - August 2015
Tier 2 Project Level NEPA	August 2015 - June 2016
FRA Tier 2 EA Determination	June-2016

If sufficient funding is secured, final design, construction and vehicle procurement would take place upon completion of preliminary engineering and Tier 2 project level environmental review. Operations could begin in 2020.

Progress Update

As part of the current PE/NEPA phase, MnDOT is examining several alternative operating plans to optimize ridership, revenue and benefit-cost. Variables being examined include the number of round trips (four, five, six and eight), maximum speed (90 or 110 mph), station locations and facility locations. Each alternative operating plan is associated with a set of infrastructure improvements necessary to ensure schedule reliability and minimize the impact on freight operations. Concept designs have been completed for modifications to the existing Target Field Station and Union Depot in Duluth as well as for new stations in intermediate cities and layover/maintenance facilities.

Capital cost estimates, operating costs estimates, ridership forecasts and revenue projections are being prepared for each alternative operating plan under study. Capital cost estimates include station and facility construction, vehicle procurement and track improvements that are related to upgrade from Class 4 to Class 5 or 6 to accommodate higher speeds, extension of sidings to allow freight trains to pull off the main track for passenger trains, special track work such as crossovers

to improve operational flexibility and in some locations new track. In addition, all grade crossings would be provided with warning devices including flashers, gates and medians. Operating cost estimates include labor, fuel, maintenance, access fees and cyclic capital costs. Benefit cost and economic impact analyses will be prepared for the recommended operating plan.

Summary Financial Plan

The PE/NEPA phase of the NLX project is being funded by a federal grant administered by the Federal Railroad Administration. A related study, called the Hinckley Loop, is being funded by an earlier federal earmark. The table below includes federal and state shares of these two grants along with supplemental funding provided through the Passenger Rail Office.

NLX Funding

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)	Share (%)
FRA	5.5		5.5	58
State of Minnesota	3.9		3.9	42
TOTAL	9.4		9.4	100

Funding for previous project phases, including the feasibility studies, the Tier 1 EA, and the Service Development Plan is not included in the above table. Funding for final design, construction and vehicle procurement has not been identified.

Other Project Information

PARTNERING AGENCIES
Minnesota Department of Transportation
Federal Railroad Administration
Minneapolis/Duluth Passenger Rail Alliance
Wisconsin Department of Transportation

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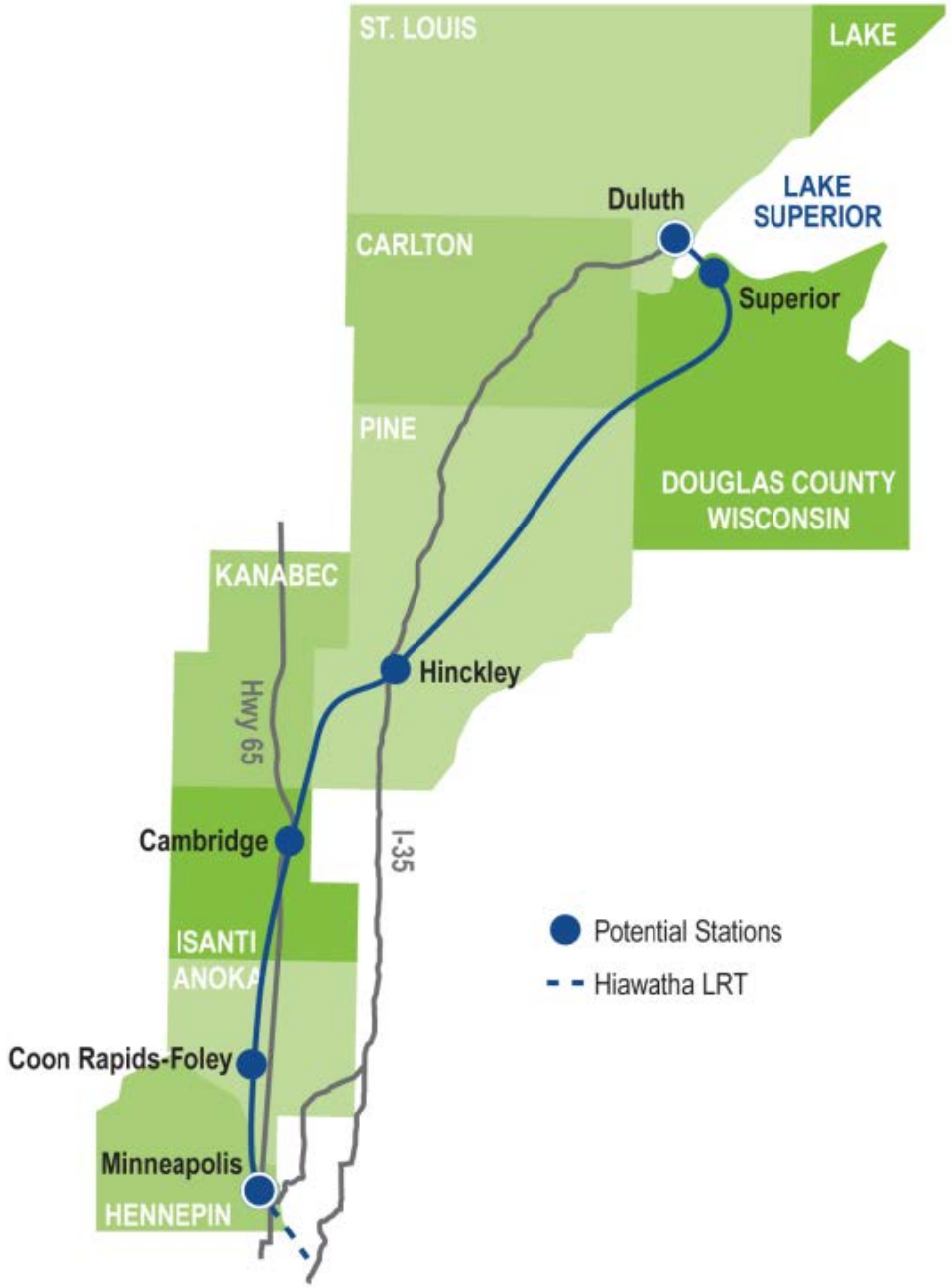
Northern Lights Express Corridor Map



Twin Cities to Milwaukee Portion - High Speed Rail Corridor to Chicago

Corridor Description

The Twin Cities to Milwaukee corridor is a segment of the approximately 435-mile high-speed passenger rail corridor between Minneapolis-St. Paul and Chicago, which in turn is part of the Chicago Hub Network. The Twin Cities to Chicago corridor is one of several major branches in the hub-and-spoke passenger rail system centered in Chicago as identified in the Midwest Regional Rail Initiative plan.

Project Status and Timeline

As part of broader MWRRI studies, the Twin Cities to Milwaukee project has recently completed an Alternatives Analysis to identify one route – the existing Amtrak route servicing Minneapolis, St. Paul, Hastings, Red Wing, Winona, La Crosse, Tomah, Portage, Watertown, and Milwaukee – as the reasonable and feasible passenger rail alternative. A Tier 1 Environmental Impact Study and Service Development Plan started in October 2011 and both are expected to be completed in early 2016. They will develop ridership estimates as well as cost estimates for capital investments and annual maintenance. The following table summarizes actual and projected timing of key project milestones.

HSR Corridor to Chicago from the Twin Cities to Milwaukee Project Status and Timeline

Milestone	Date(s)
Alternatives Analysis (MWRRI Phase 7)	2009 – 2011
Reasonable and Feasible Passenger Rail Alternative Concurrence (FRA)	November-2012
Minnesota Scoping and RTC Modeling	June 2012 - December 2015
Union Depot to MTI AA/RTC Modeling	October 2013 - December 2015
Tier 1 EIS and Service Dev. Planning	October 2011 - December 2015
Preliminary Engineering and Tier 2 EIS	2016 - 2018

If sufficient funding can be secured, final design, construction, and vehicle procurement will take place upon completion of the Tier 2 EIS. Operations could commence late 2019.

Progress Update

Since the last report, Rail Traffic Controller Modeling between Union Depot, St. Paul and Milwaukee based on requirements by the Federal Railroad Administration has been completed and the results of the modeling are being discussed with FRA and Canadian Pacific Railroad. Alternatives Analysis between Union Depot and Target Field Station has been completed and the RTC Modeling for this segment will be completed by the end of 2016. Minnesota's scoping process will begin in fall 2015.

Summary Financial Plan

Below is a breakdown of funding sources being used for the Tier 1 EIS and the Service Development Plan. The estimated $50 million needed to complete the Preliminary Engineering and the Tier 2 EIS phases has not yet been identified. Work will occur as funding is identified and made available.

HSR from Twin Cities to Milwaukee-Funding Sources for EIS and SDP

Source	Committed ($M)	Proposed ($M)	Total ($M)
FRA (Tier 1 EIS Grant)	0.60		0.60
State of Minnesota (Tier 1 EIS Grant match)	0.60		0.60
State of Minnesota (MN Scoping)	0.09		0.09
State of Minnesota (RTC Modeling)	0.22		0.22
State of Minnesota (Union Depot to MTI Alt. Analysis/RTC Modeling)	0.73		0.73
TOTAL	2.24		2.24

Other Project Information

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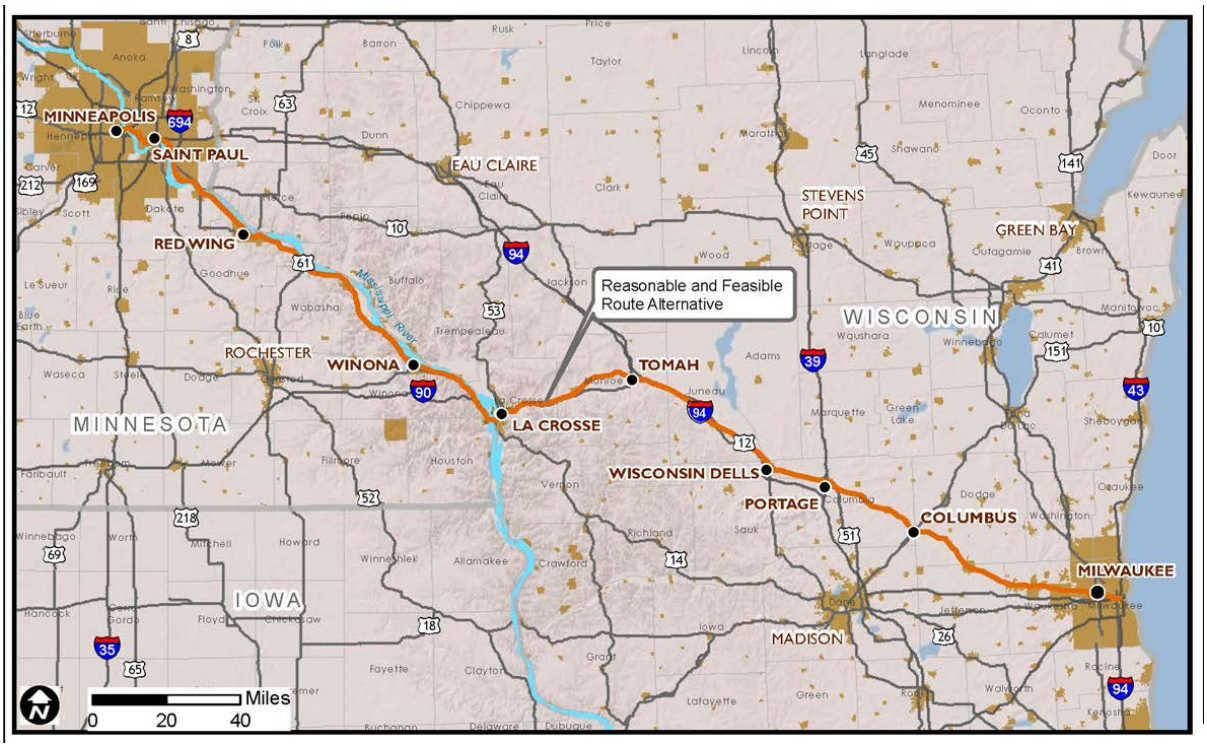
PARTNERING AGENCIES
Minnesota Department of Transportation
Federal Railroad Administration

Map of Twin Cities to Milwaukee Portion, High Speed Rail to Chicago



Zip Rail - Twin Cities to Rochester High Speed Rail Corridor

Corridor Description

Zip Rail is the proposed high-speed passenger rail service between Rochester and the Twin Cities. Traveling speeds are proposed to be 150-220 mph to provide true high-speed rail service between the Twin Cities and Rochester, the state's third largest city. Currently, there is no existing railroad in this corridor, so the project will require construction of a new "greenfield" rail line. The 2010 Minnesota Statewide Freight and Passenger Rail Plan identified the Rochester Corridor as a Phase 1 corridor.

Project Status and Timeline

Feasibility studies for this corridor were conducted from 1990 to 2010 as part of the Tri-State Studies done in cooperation with Illinois and Wisconsin. These studies were forwarded to the Federal Railroad Administration in 2011 for review and approval. A statement of work for Alternatives Analysis, Tier 1 environmental analysis and Service Development Plan was developed by Olmsted County in cooperation with MnDOT and received the FRA's approval. The study began in fall 2012 and is expected to be completed in early 2016.

HSR: Zip Rail-Twin Cities to Rochester Corridor Project Status and Timeline

MILESTONE	DATE
Feasibility Studies	1990 - 2010
Alternatives Analysis and Tier 1 EIS	October 2012 – January 2016

Upon completion of the Alternatives Analysis and Tier 1 Environmental Impact Statement, the project will be eligible to solicit federal funding. Recent discussions with Rochester area stakeholders confirm the approach of collaborating with MnDOT and FRA to pursue future funding for this project.

Progress Update

Since the last report, information on potential route alternatives between the Twin Cities and Rochester were provided to the public and the Scoping Document was completed in 2014. Evaluation criteria to conduct the route alternatives analysis was developed in cooperation with local stakeholder agencies. Alternatives analysis was completed in early 2015 which identified eight corridor alternatives along with a no-build alternative to be moved forward into the Tier 1 EIS for further analysis. Ridership analysis for the corridor is also underway.

Summary Financial Plan

Below is a breakdown of funding sources used for the Alternatives Analysis and Phase 1 Environmental Documentation. The Tier 1 EIS is $2.3 million and is being funded by Minnesota passenger rail bond funds and Olmsted County funds.

HSR: Zip Rail from the Twin Cities to Rochester Corridor Funding Sources for Alternatives Analysis and Environmental Documentation

Source	Committed ($M)	Proposed ($M)	TOTAL ($M)
State	2.0		2.0
Olmsted County	0.3		0.3
TOTAL	2.3		2.3

Other Project Information

PARTNERING AGENCIES
Minnesota Department of Transportation
Federal Railroad Administration
Olmsted County

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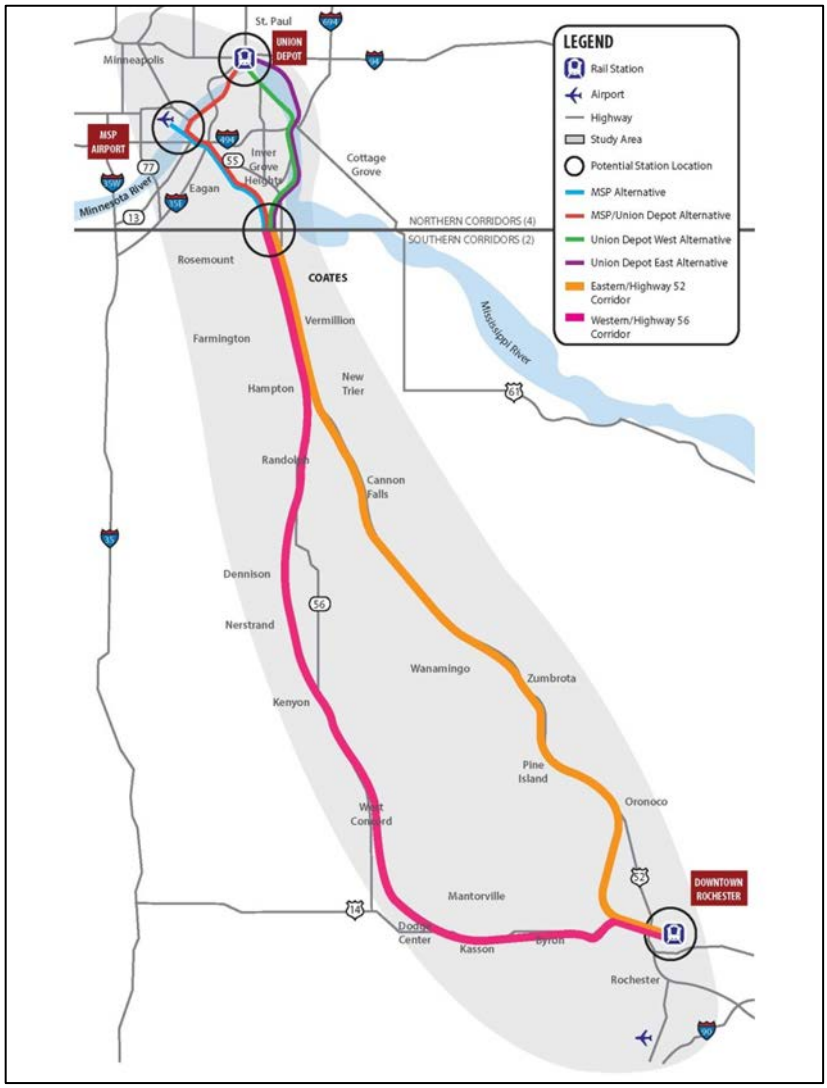
Zip Rail – Study Area Map The map shows the study area and Tier 1 EIS alternatives.



Second Daily Passenger Rail Trip between Minnesota and Chicago, IL.

Corridor Description

National Railroad Passenger Corporation (Amtrak) conducted a feasibility study for the provision of one additional state-sponsored intercity passenger rail service in the Chicago, Ill. – Milwaukee, Wis. - St. Paul, Minn. - Minneapolis, Minn. - St. Cloud, Minn. corridor for MnDOT and WisDOT. With a few moderate exceptions, the route studied essentially follows that of Amtrak's current Empire Builder trains between Chicago, Ill. and St. Cloud, Minn.

The study assumed that east of St. Paul, the station stops will be the same as the current stops for the Empire Builder service. However, within the Twin Cities area and to St. Cloud, four different termini (St. Paul, Minneapolis, St. Cloud via Minneapolis, and St. Cloud via Fridley) were studied to reflect a different combination of station stops. The study analyzed schedules, infrastructure requirements, operating costs, and rolling stock. Ridership and revenue forecasts were developed based on current timetable speeds up to 79 mph, where practical.

Project Status and Timeline

The feasibility study was completed in July 2015.

Second Daily Trip between Minnesota and Chicago Project Status and Timeline

Project Phase	Date(s)
Began feasibility study	May-2012
RTC modeling task added	April-2013
Completion date	July-2015

When Congress passed the Passenger Rail Improvement and Investment Act of 2008 it changed the way that passenger rail service is funded. Services that are not "long distance" trains (500 plus miles and not part of Amtrak's core network) are the states responsibility to capitalize and to provide operating subsidies. Minnesota, Wisconsin and Illinois will be responsible for a portion of capital costs, and operations costs not generated by revenue.

Progress Update

The feasibility study concluded that the route between St. Paul and Chicago is the most feasible for initial service with potential extensions to Minneapolis and St. Cloud. It recommended an environmental review of the project, which would have a robust public involvement component and provide eligibility for federal funding.

Annual ridership on the additional daily train, with a morning departure from Chicago and a mid-day departure from St. Paul, was estimated at about 155,000 passengers. This is an increase over the current Empire Builder ridership of approximately 104,000 between St. Paul and Chicago, with departures from St. Paul in the morning and Chicago in the afternoon.

Capital investment costs for infrastructure capacity improvements were anticipated, with a planning level cost estimate of approximately $95 million for the Chicago to St. Paul scenario. The St. Cloud and Minneapolis scenarios had higher infrastructure costs. If new equipment is used, there would be an additional $46.4 million cost.

The study estimated annual state operating support (the difference between ticket revenue and operating and capital equipment costs) for the Chicago to St. Paul initial service would be approximately $6.6 million. The cost share among the funding parities for the service would be determined at a later date. Current federal regulations limit Amtrak participation to covering the first 15 percent of the operating cost. Estimates developed were in 2014 dollars.

Summary Financial Plan

Below is a breakdown of funding sources used for the feasibility study.

Second daily Trip between Minnesota and Chicago Funding Sources for the Feasibility Study

Source	Committed	Committed (for RTC modeling task)	TOTAL
Minnesota DOT	$25,000	$37,500	$62,500
Wisconsin DOT	$20,000	$37,500	$57,500
LaCrosse County, WI	$5,000		$5,000
TOTAL	$50,000	$75,000	$125,000

Cost estimates for the environmental analysis and RTC modeling for the 2nd train next phase are in the $750,000 to $900,000 range. MnDOT, WisDOT and local stakeholders are determining how to fund the next phase.

Other Project Information

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Map of the Route from the Twin Cities to Chicago with Possible Stations

Capacity Analysis

The capacity analysis portion of the report seeks to aggregate and synthesize information about individual project finances, providing an overall view for the guideways that the corridor summaries do not provide alone.

General Approach

The capacity analysis looks at regional guideway funding needs and sources related to capital, operating and capital maintenance costs for the next 10 years. Consequently, the capacity analysis consists of tables of anticipated project expenditures for each of these three categories of costs.

Costs in each category are shown in the anticipated year of expenditure. Since funding requests precede anticipated project expenditures, some of the funds shown in 2016 and future years, while not yet expended, have already been secured through previous funding requests and are "committed" to the project(s). In other instances, funds shown in the future years are anticipated funding requests from the identified funding sources but are not yet committed. The text for each of the cost categories seeks to indicate the level of funding that has been previously committed and those funds that have yet to be secured. The individual corridor summaries (in previous sections) also provide information about funds committed to a given project.

As previously noted, due to the high uncertainty and large range of cost estimates for projects still in the planning phase, the capacity analysis section includes only those guideway projects that have an adopted Locally Preferred Alternative and are in preliminary engineering, design, construction or operation. This includes eight corridors:

- Blue Line (Hiawatha LRT)
- Northstar Commuter Rail
- Red Line (Cedar BRT)
- Green Line (Central Corridor LRT)
- Green Line Extension (Southwest LRT)
- Orange Line (I-35W South BRT)
- Blue Line Extension (Bottineau LRT)
- Gold Line (Gateway BRT)

For past expenditures, any figures shown represent actual expenditures; for future expenditures, although the numbers shown are the best estimates currently available, they should still be viewed as estimates that may change over time.

Capital Cost Analysis

Guideway project capital cost estimates are shown in Table 1 at the end of this chapter. The capital cost table is organized by anticipated expenditures. Capital costs include design and construction costs to build a guideway project, as well as costs for subsequent major, one-time capital improvements that are planned to occur after the initial project construction. An example is expanding station platforms or purchasing additional vehicles as demand for service increases. At this time, such subsequent capital cost expenditures are anticipated to occur only for some of the guideway projects currently operating (i.e., Blue Line, Northstar, Red Line and Green Line).

Total estimated capital cost for the eight guideway projects is about $5.6 billion. This total includes a substantial amount of funding that has already been spent or committed. All capital funding for the initial portions of four of the projects – Blue Line, Northstar commuter rail, Red Line Stage 1, and Green Line– has been identified and is either spent or committed.

Projected sources to complete the Green Line Extension include $887 million from the federal New Starts program, $165 million in state bonds, $496 million from CTIB, $165 million from the Hennepin County Regional Railroad Authority, and $61 million from other local sources. This anticipated funding split was the result of a negotiation as project costs increased during design and is a slight departure from the funding formula for Green Line, with 50 percent from the New Starts program, 30 percent from CTIB, 10 percent from the state, and 10 percent from local sources. The primary change was an increase in local funding participation.

Capital funding needs for the Blue Line Extension project have been estimated at $1,002 million and is based on a sharing of costs similar to the formula for Green Line (see above) except a slightly lower federal New Starts share (49 percent) to increase the project's competitiveness for federal funding. The CTIB share would be increased to 31 percent to balance the project costs.

Capital funding needs for the Orange Line project have been estimated at about $151 million and the funding shares are estimated based on receiving a federal Small Starts grant with about 50 percent from federal sources, 10 percent from state sources (a portion of which may be trunk highway bonds for roadway-related project elements), 30 percent from CTIB, and 10 percent from a combination of local sources.

Stage II of the Red Line BRT project extends from 2013 - 2020, with capital expenditures of $73.5 million anticipated. Stage III is slated to begin in 2021.

Capital funding needed for the Gold Line project have been estimated at about $485 million and the funding shares are estimated based on received a federal New Starts grant with about 45% from federal sources, 10% from state sources, 35 percent from CTIB, and 5 percent each from Washington and Ramsey counties.

Based on the assumptions in this report, from 2015 to 2023, the expected state share of the as-yet-uncommitted capital costs of the guideway projects that are operational or in construction or design totals $316 million.

Operating Cost Analysis

Operating costs include annual vehicle operator salaries and benefits, fuel, vehicle cleaning and other administrative costs. The estimated operating costs for those guideway projects expected to be in operation by 2025 are shown in Table 2 at the end of this chapter. Operating costs are typically paid first through fares and any operating revenue generated by the guideway project, such as advertising revenue. The remaining operating costs are referred to as the net operating costs or subsidy, which is typically paid from a combination of state, CTIB, Met Council, and federal revenues.

For light rail transit projects, Minnesota Statutes 473.4051 states that, "after operating and federal money have been used to pay for light rail operations, 50 percent of the remaining costs must be paid by the state." In line with state law, this capacity analysis assumes that after 2014, net operating costs for Blue Line, Green Line, Green Line Extension, and Blue Line Extension will be shared 50 percent by the state and 50 percent by CTIB. In the capacity analysis table, these operating revenues are shown as "state (M.S. 472.4051 obligation)." Any other expectation of state funding for guideway operations that does not fall under this statutory requirement is shown in the table as "state (additional request)."

When the Blue Line first opened in 2004, the state provided a 50 percent share for the net operations. However, over the years the appropriation was not increased. In fiscal year 2011, the Met Council's transit general fund appropriation included a base appropriation of approximately $5.2 million for Blue Line, covering approximately 33 percent of the net costs. For fiscal years 2012 and 2013, the Met Council's general fund appropriation for Blue Line was reduced as described further below. For fiscal years 2014 and 2015, the state did provide the full 50 percent of net operations funding for both the Blue Line and Green Line, which opened in the summer of 2014.

This capacity analysis includes an assumption that the state will continue fully funding its 50 percent share of the Blue Line and Green Line, followed by a 50 percent contribution to the net operations of the Green Line Extension when it opens in 2020 and the Blue Line Extension when it opens in 2021.

The Green Line opened in 2014 and the first three years of operations the Green Line has received a Congestion Mitigation and Air Quality (CMAQ) grant that will contribute $2.3 million each year in federal funds, thereby reducing the expected operating cost contributions from both the state and CTIB in 2016 and approximately half of 2017. In calendar year 2016, the states expected contribution is $11.5 million.

The Green Line Extension is expected to open in 2020, with 2021 its first full year of operation. The estimated state funding share for 2021 is $7.9 million. The Blue Line Extension is expected to open in 2021, with its first full year of operation in 2022; the state funding share for 2022 is estimated to be $9.6 million.

By 2022, four LRT services will be in full operation. The 50 percent state share of net operating costs will total approximately $46.3 million.

There is no state statute that speaks to how the operating costs for commuter rail are to be funded. The financial analysis section of the Northstar Commuter Rail New Starts application showed that the net costs were assumed to be paid 50 percent from the state and 50 percent from local sources. However, no state appropriation has yet been made for Northstar operations. To date, the assumed 50 percent state share has been funded using motor vehicle sales tax funds contributed from Met Council and MnDOT sources. This capacity analysis assumes these sources will continue to be used to fund a state 50 percent share of Northstar's net operating costs, estimated to be $8.1 million in 2016, growing to $10.5 million for 2025.

The Red Line BRT service has secured federal CMAQ grant funding of $1.1 million per year for 2014 and 2015, decreasing to $0.1 million in the final grant year, 2016, with remaining costs distributed between CTIB and the Met Council. From 2017 forward, net operating costs are presumed to be split equally between the Met Council and CTIB; these shares are estimated to be $2.5 million for each organization starting in 2017.

The funding shares for the Orange Line station-to-station BRT service are expected to parallel the LRT cost shares; so, for these services it is expected that the net operating costs will be shared equally between CTIB and the state. State costs for the Orange Line's net operating in 2020 are estimated to be $2.8 million, increasing to $3.3 million for 2025.

The funding shares for the Gold Line station-to-station BRT service operating costs are anticipated to be split equally between the Met Council and CTIB; these shares are estimated to be $5.8 million for each organization starting in 2023.

In 2025, the state share of the seven fully operational LRT and BRT guideway projects will total approximately $53.2 million.

Capital Maintenance Cost Analysis

Capital maintenance includes ongoing capital costs typically included in an annual capital budget, such as track maintenance, periodic vehicle overhauls, signal work and other smaller-scale capital improvements. These maintenance costs can vary significantly from year-to-year depending on the needed maintenance; accordingly, this capacity analysis uses costs averaged over time.

In addition, capital maintenance costs start out low as a new corridor is opened, but grow over time as the line ages and more ongoing maintenance is required. As rail corridors come on-line, the federal transit formula funding allocated to the metropolitan region typically increases due to the added guideway mileage and service. It is expected that this will continue to occur and that additional federal funds will be available to pay 80 percent of the annual capital maintenance costs of the guideways in the future. The Met Council, using its RTC property tax-backed bonds, would be responsible for the remaining 20 percent of capital maintenance costs.

The estimated capital maintenance for the guideway projects, 2015 through 2025, is shown in Table 3. For three corridors, the Red Line, the Orange Line, and the Gold Line BRT services, the annual capital maintenance costs are included within those corridors' annual operating costs, estimated in the Table 2.

The Blue Line corridor has been operating for the longest period of time and has the best historical data from which to calculate annual capital maintenance costs. The capital maintenance costs for the Green Line, the Green Line Extension, and the Blue Line Extension are modeled after the experience with the Blue Line. Northstar costs are estimated based on the limited experience to-date for that corridor.

In 2016, capital maintenance costs for the Blue Line are estimated at $11 million, $1 million for Northstar, and $2 million for the Green Line. At the end of the analysis period, 2025 capital maintenance costs are estimated to total $34.6 million for the system of four LRTs and Northstar Commuter Rail, but the figure does fluctuate year-to-year based on maintenance schedules.

Other Financial Notes

ROUNDING: As with the corridor summaries, the capacity analysis rounds estimated expenditures to the nearest $100,000. This causes some rows and columns to add imperfectly, but sums should differ by no more than $100,000 ($0.1M).

INFLATION: To facilitate meaningful comparison, the capacity analysis inflates cost estimates to the estimated year of expenditure using a capital cost inflation rate of 3.5 percent and an operating cost inflation rate of 3.15 percent. These rates were approved by the FTA and are used in the financial analysis for the Green Line New Starts full funding grant application.

CASHFLOW: As shown in the capital cost tables for the Green Line, the Green Line Extension, and the Blue Line Extension LRT systems (Central Corridor, Southwest and Bottineau, respectively) federal payments for New Starts projects often do not begin until after construction has commenced, and payments typically continue for a few years after the project has been completed. To meet cash flow needs, this requires heavy front-end funding by the state, CTIB and local funding sources along with borrowing by the Met Council against future federal payments once a full funding grant agreement has been issued by the FTA. The financing costs necessary for such borrowing are accounted for in project capital cost estimates, and the associated cash flow adjustments are shown in the capacity analyses for the Green Line and the Green and Blue Line Extensions.

Table 1: Estimated Guideway Capital Expenditures ($ millions)

Blue Line	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	414.1	414.1										
Federal (Other)	84.1	84.1										
State (G.O. Bonds)	101	101										
State (T.H. Bonds)	20.1	20.1										
Metropolitan Airport	87	87										
Hennepin County	84.2	84.2										
Mall of America (in-kind)	9.9	9.9										
Metropolitan Council (RTC)	26.3	26.3										
Other	0.4	0.4										
Total	827.1											

NOTE: Capital Expenditures post 2014 are based on an actual completed forecast through year 2037

Northstar	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	159.7	159.7										
State (G.O. Bonds)	102.6	102.6										
Metropolitan Council (RTC)	5.9	5.9										
Northstar Corridor Development Authority	50.2	50.2										
CTIB	12.9	12.9										
Local	9.4	9.4										
Other (Minnesota Twins)	2.6	2.6										
Total	343.3											

NOTE: Capital Expenditures post 2014 are based on actual completed forecast through year 2037

Table 1: Estimated Guideway Capital Expenditures ($ millions)

Red Line	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)	19.7	5.5	5.7	0.7	6.1	1.7						
State	19.7	5.5	5.7	0.7	6.1	1.7						
CTIB	19.7	5.5	5.7	0.7	6.1	1.7						
Local (Counties/RRAs)	7.0	2.2	1.9	0.2	2.0	0.6						
Local (Other)	7.5		3.1			4.3						
Total	73.6											

Green Line	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	478.4		478.4									
State (G.O. Bonds)	91.5		91.5									
Hennepin County	28.2		28.2									
Mall of America (in-kind)	66.4		66.4									
Metropolitan Council (RTC)	2.7		2.7									
CTIB	284		284									
Local	5.2		5.2									
Other	0.5		0.5									
Total	956.9											

NOTE: Capital Expenditures post 2014 are based on an actual completed forecast through year 2037

Table 1: Estimated Guideway Capital Expenditures ($ millions)

Green Line Extension	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	887.2			150	100	100	100	100	100	150	87.2	
State (G.O. Bonds)	165.4	14.3	31.6	51.8	31	26.7	10					
Hennepin County	165.3	25.4	33.1	50.2	31	15.6	10					
Metropolitan Council (RTC)	13	11.5	1.5									
CTIB	496	74.8	99.3	153.7	130.2	19	19					
Local	47.6			33.2	3.2	3.2	8					
Other (Council cash flow adjustments)				89.5	212.5	140	-4.8	-100	-100	-150	-87.2	
Total	1774.5											

NOTE: Capital Expenditures post 2016 are based on an actual completed forecast through year 2037

Orange Line	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	66.6				33.3	33.3						
Federal (Other)	8.8	0.6	1.3	7.0								
State (G.O. Bonds)	2.0	0.8	1.0	0.3								
State (General Fund Appropriation)	1.0	0.5	0.5									
State	12.1		2.4	8.6	1.1							
Metropolitan Council (RTC)	0.2	0.2										
CTIB	45.1	3.0	12.3	26.7	3.1							
Local- HCRRA	12.8		2.7	7.7	2.5							
Local- DCRRA	2.1		0.4	1.2	0.4							
Total	150.6											

Table 1: Estimated Guideway Capital Expenditures ($ millions)

Blue Line Extension	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	491.1				100.0	100.0	100.0	100.0	91.1			
State (G.O. Bonds)	100.2	1.0		30.0	35.0	34.2						
Hennepin County	100.2	10.7	12.3	30.0	27.0	20.2						
CTIB	310.7	18.3	17.8	90.0	93.0	91.7						
Total	1002.3											

NOTE: Capital Expenditures post 2016 are based on an actual completed forecast through year 2037

Gold Line	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	218.3							45.0	67.5	67.5	38.3	
Federal (Other)	0.3	0.3										
State	48.5	0.2	1.8	1.5	1.5	4.0	4.0	10.0	15.0	10.5		
Metropolitan Council (RTC)	0.2	0.2										
CTIB	172.5	3.4	5.4	4.5	4.5	12.0	12.0	35.0	52.5	43.3		
Local (Counties/RRAs)	49.8	1.5	1.8	1.5	1.5	4.0	4.0	10.0	15.0	10.5		
Total	489.5											

Table 1: Estimated Guideway Capital Expenditures ($ millions)

Total Capital	Total by Source	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	2715.3	573.8	478.4	150.0	233.3	233.3	200.0	245.0	258.6	217.5	125.5	
Federal (Other)	112.9	90.4	7.0	7.7	6.1	1.7						
State	80.3	5.7	9.9	10.8	8.7	5.7	4.0	10.0	15.0	10.5		
State (General Fund Appropriation)	1.0	0.5	0.5									
State (T.H. Bonds or G.O. Bonds)	582.8	239.8	124.1	82.1	66.0	60.9	10.0					
Metropolitan Airport	87.0	87.0										
Hennepin County	377.9	120.3	73.6	80.2	58.0	35.8	10.0					
Mall of America (in-kind)	76.3	9.9	66.4									
Metropolitan Council (RTC)	48.3	44.1	4.2									
Northstar Corridor Development Authority	50.2	50.2										
CTIB	1340.9	117.9	424.5	275.6	236.9	124.4	31.0	35.0	52.5	43.3		
Local	141.2	13.1	15.1	43.8	9.6	12.1	12.0	10.0	15.0	10.5		
Other	3.5	3.0	0.5	89.5	212.5	140.0	-4.8	-100.0	-100.0	-150.0	-87.2	
Total	5617.7	1355.6	1204.1	739.7	831.0	613.9	262.2	200.0	241.1	131.8	38.3	

Table 2: Estimated Guideway Operating Expenditures ($ millions)

Blue Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox	9.6	10.2	11.3	11.4	11.5	12.8	13.0	13.1	14.5	14.7	14.8
State	10.8	11.5	11.3	11.8	12.3	12.3	12.9	13.4	13.3	13.9	14.5
CTIB	10.8	11.5	11.3	11.8	12.3	12.3	12.9	13.4	13.3	13.9	14.5
Other	0.8	0.9	1.3	1.2	1.3	1.2	1.2	1.2	1.2	1.3	1.3
Total	32.1	34.1	35.2	36.3	37.5	38.7	39.9	41.1	42.4	43.8	45.1

Northstar	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox	2.5	2.4	2.6	2.6	2.6	2.9	3.0	3.0	3.3	3.4	3.4
Metropolitan Council (MVST)	6.3	6.8	6.9	7.1	7.4	7.5	7.8	8.1	8.2	8.5	8.8
CTIB	6.3	6.8	6.9	7.1	7.4	7.5	7.8	8.1	8.2	8.5	8.8
Greater MN MnDOT	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Local (Sherburne County)	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Other	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Total	17.6	18.7	19.1	19.7	20.3	20.9	21.8	22.4	23.1	23.8	24.6

Red Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal Funds (CMAQ)		0.5									
Metropolitan Council (MVST)		0.9	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Farebox		0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Other		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CTIB		1.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Total		3.1	5.6	5.6	5.6	5.6	5.6	5.6	5.7	5.7	5.7

Green Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox	8.9	10.7	11.9	12.0	12.1	13.4	13.6	13.7	15.2	15.4	15.5
State	11.7	11.5	12.2	13.3	13.9	13.8	14.4	15.0	14.9	15.6	16.2
CTIB	11.7	11.5	12.2	13.3	13.9	13.8	14.4	15.0	14.9	15.6	16.2
Other	3.1	2.7	1.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	35.3	36.5	37.9	39.1	40.3	41.6	42.9	44.2	45.6	47.1	48.5

Green Line Extension	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox						8.2	12.4	12.6	12.7	14.1	14.2
State						6.0	7.9	8.3	8.7	8.4	8.9
CTIB						6.0	7.9	8.3	8.7	8.4	8.9
Other						0.5	0.5	0.5	0.5	0.5	0.5
Total						20.7	28.6	29.5	30.4	31.4	32.4

Orange Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox						2.6	2.7	2.8	2.9	3.0	3.1
CTIB						2.8	2.9	3.0	3.1	3.2	3.3
State						2.8	2.9	3.0	3.1	3.2	3.3
Total						8.2	8.5	8.8	9.1	9.4	9.7

Table 2: Estimated Guideway Operating Expenditures ($ millions)

Blue Line Extension	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox							5.7	11.4	11.5	12.7	12.9
State							4.8	9.6	10.0	9.9	10.3
CTIB							4.8	9.6	10.0	9.9	10.3
Other							0.2	0.5	0.5	0.5	0.5
Total							15.5	30.9	31.9	32.9	34.0

Gold Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Metropolitan Council (MVST)									5.8	5.8	5.8
CTIB									5.8	5.8	5.8
Total									11.5	11.5	11.5

Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Farebox	20.9	23.5	26.3	26.5	26.7	40.5	50.9	57.0	60.7	63.9	64.6
Federal Funds (Other)		0.5									
Metropolitan Council (MVST)	6.3	7.7	9.4	9.6	9.9	10.0	10.3	10.6	16.5	16.8	17.1
State	22.5	23.1	23.5	25.1	26.2	34.9	42.8	49.2	50.0	50.9	53.2
CTIB	28.8	31.3	32.9	34.7	36.1	44.9	53.1	59.8	66.5	67.7	70.3
Greater MN MnDOT	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Local (Sherburne County)	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Other	4.0	3.8	3.1	1.9	2.0	2.4	2.7	2.9	2.9	3.0	3.0
Total	85.0	92.4	97.8	100.7	103.6	135.5	162.7	182.6	199.8	205.5	211.5

Table 3: Estimated Guideway Capital Maintenance Expenditures ($ millions)

Blue Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)	5.6	8.8	7.8	7.4	5.4	4.0	3.2	3.2	7.3	15.4	12.1
Metropolitan Council (RTC)	1.4	2.2	1.9	1.9	1.3	1.0	0.8	0.8	1.8	3.8	3.0
Total	7.0	11.0	9.7	9.3	6.7	5.0	4.0	4.0	9.1	19.2	15.2

Northstar	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)	0.7	0.8	0.8	0.8	2.2	0.9	0.9	0.9	0.9	7.8	1.0
Metropolitan Council (RTC)	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2	1.9	0.2
Total	0.9	1.0	1.0	1.0	2.7	1.1	1.1	1.1	1.2	9.7	1.2

NOTE: Years 2019 and 2024 include Northstar Vehicle Overhaul Programs

Green Line	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)	1.4	1.7	1.5	1.9	1.7	6.3	4.6	3.8	3.6	4.6	2.4
Metropolitan Council (RTC)	0.3	0.4	0.4	0.5	0.4	1.6	1.2	0.9	0.9	1.1	0.6
Total	1.7	2.1	1.8	2.3	2.1	7.8	5.8	4.7	4.5	5.7	3.0

Green Line Extension	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)											
Metropolitan Council (RTC)											
Total											

Blue Line Extension	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)	5.6	8.8	7.8	7.4	5.4	4.0	3.2	3.2	7.3	15.4	12.1
Metropolitan Council (RTC)	1.4	2.2	1.9	1.9	1.3	1.0	0.8	0.8	1.8	3.8	3.0
Total	7.0	11.0	9.7	9.3	6.7	5.0	4.0	4.0	9.1	19.2	15.2

Total Capital Maintenance	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (Other)	13.2	19.9	17.8	17.5	14.6	15.1	11.9	11.1	19.2	43.1	27.7
Metropolitan Council (RTC)	3.3	5.0	4.4	4.4	3.6	3.8	3.0	2.8	4.8	10.8	6.9
Total	16.5	24.9	22.2	21.9	18.2	18.9	14.9	13.9	24.0	53.9	34.6

Table 4: Overall Totals

	Pre-2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal (5309 New Starts)	573.8	478.4	150.0	233.3	233.3	200.0	245.0	258.6	217.5	125.5	
Federal (Other)	103.6	27.4	25.5	23.6	16.3	15.1	11.9	11.1	19.2	43.1	27.7
State	28.2	33.0	34.3	33.8	31.9	38.9	52.8	64.2	60.5	50.9	53.2
State (General Fund Appropriation)	0.5	0.5									
State (T.H. Bonds or G.O. Bonds)	239.8	124.1	82.1	66.0	60.9	10.0					
Metropolitan Airport	87.0										
Hennepin County	120.3	73.6	80.2	58.0	35.8	10.0					
Mall of America (in-kind)	9.9	66.4									
Metropolitan Council (RTC)	47.4	9.2	4.4	4.4	3.6	3.8	3.0	2.8	4.8	10.8	6.9
Metropolitan Council (MVST)	6.3	7.7	9.4	9.6	9.9	10.0	10.3	10.6	16.5	16.8	17.1
Northstar Corridor Development Authority	50.2										
CTIB	146.7	455.7	308.5	271.7	160.4	75.9	88.1	112.3	109.7	67.7	70.3
Farebox	20.9	23.5	26.3	26.5	26.7	40.5	50.9	57.0	60.7	63.9	64.6
Greater MN MnDOT	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Local	14.3	16.4	45.1	11.0	13.5	13.4	11.5	16.5	12.1	1.6	1.7
Other	7.0	4.3	92.6	214.4	142.0	-2.4	-97.3	-97.1	-147.1	-84.2	3.0
Total	1457.2	1321.4	859.7	953.6	735.7	416.6	377.6	437.6	355.5	297.6	246.1

Appendix A: Transit Funding Sources and Programs

The following is an excerpt from the Regional Transitway Guidelines Technical Report.

Transit Funding Sources and Programs

The following section highlights transit and transitway funding programs available under existing federal and state laws. The table at the end of this section provides a summary of the information, including a listing of the potential funding sources, the approximate amounts available annually, a summary of how the funds are made available and requirements governing how funds may be used.

Federal Transit Funding

NEW STARTS (5309) – New Starts funding may be used for new or extended fixed-guideway transit system projects. A project is only eligible for New Starts funding once it has entered the project development phase. The funding may only be used on projects approved through the New Starts application and approval process. A minimum local match of 20 percent is required for all New Starts funding. Current federal practice typically limits annual project funding from the New Starts program to about $100 million.

SMALL STARTS (5309) – Small Starts funding may be used on new or extended transit system projects where the total project cost is $250 million or less. Eligible transit system projects include those with fixed guideway for at least 50 percent or bus projects with frequencies ranging between ten and fifteen minute intervals between vehicles. A project is only eligible for Small Starts funding once it has entered the engineering phase of development. The funding may only be used on projects approved through the Small Starts application and approval process. A minimum local match of 20 percent is required and the maximum federal grant award for Small Starts is currently $75 million.

URBANIZED AREA FORMULA (5307 AND 5340) – Urban Area Formula funding may be used for transit system replacement and expansion, capital purposes, preventative maintenance, and the capital costs of contracting. Non-transit capital projects are not eligible for this funding. The Metropolitan Council is allocated 5307 funds through a federal formula and allocates funds to specific projects in the region through the annual development of the Council's six-year Capital Improvement Plan. The Twin Cities region typically receives an estimated $60 million annually in 5307 funding (2014 data). A minimum local match of 20 percent is required.

STATE OF GOOD REPAIR FORMULA (5337) – State of Good Repair funding is a new program under federal transportation law MAP-21 that is dedicated to repairing and upgrading rail transit systems along with high-intensity bus systems that use high-occupancy vehicle lanes, including bus rapid transit (BRT). These funds may be used to maintain a state of good repair on fixed guideway and high-intensity bus projects, including activities that replace or rehabilitate: rolling stock; track; line equipment and structures; signals and communications; power equipment and substations; passenger stations and terminals; security equipment and systems; maintenance facilities and equipment; and operational support equipment, including computer hardware and software. BRT on exclusive or high-occupancy vehicle lanes and bus-only shoulders replacement and rehabilitation are also included in this definition. The Metropolitan Council is allocated 5337 funds through a federal formula and allocates these funds to specific fixed-guideway and high-intensity bus facilities through annual development of the six-year CIP. The Twin Cities region typically receives an estimated $12 million annually in State of Good Repair funding (2014 data). A minimum local match of 20 percent is required.

BUS AND BUS FACILITIES FORMULA (5339) – The Bus and Bus Facilities funding is a new formula program under federal transportation law MAP-21 that allocates funding based on the size of the motor bus system. This program is very similar to Urbanized Area Formula (5307 and 5340) but is limited to capital investments and limited to bus fleets and facilities. The Twin Cities region typically receives an estimated $5 million annually in Bus and Bus Facilities formula funding (2014 data). A minimum local match of 20 percent is required.

CONGESTION MITIGATION AND AIR QUALITY – Congestion Mitigation and Air Quality funding may be used on transit capital and operating expansion. Existing transit operations and capital are not eligible for CMAQ funding. CMAQ funding is distributed in the region through a regional solicitation process led by the Transportation Advisory Board and its Technical Advisory Committee. The Twin Cities region typically receives an estimated $27 million annually in CMAQ funding (2013 data). The regional solicitation process limits projects to a maximum of $7 million and allocates these funds four years in advance of expected expenditure (i.e., 2011 solicitation is for funds in 2015 and 2016), though recipients can choose to advance construct projects and be reimbursed in the award year. A minimum local match of 20 percent is required.

SURFACE TRANSPORTATION URBAN PROGRAM – Surface Transportation Urban Program funding is primarily used for road construction purposes in the Twin Cities region, up to $7 million per project, although most transportation-related activities in urban areas are eligible under federal law. STP-Urban funding is distributed in the region through a regional solicitation process led by the Transportation Advisory Board and its Technical Advisory Committee. In order to be eligible for funding, a project must meet the regional solicitation category requirements, which were recently revisited for the 2015 regional solicitation. The Twin Cities region typically receives an estimated $40 million annually in STP-Urban funding (per 2013 data). A minimum local match of 20 percent is required. Currently, solicitation categories do not include a category specifically for transit projects, but elements of a road project that benefit transit are eligible and typically given extra points on the project ranking.

TRANSPORTATION ALTERNATIVE PROGRAM – Transportation Alternative Program (formerly known as Transportation Enhancements) funding is used primarily for bicycle, pedestrian and trail projects. In order to be eligible for funding, a project must meet the regional solicitation category requirements. TAP funding is distributed in the region through a regional solicitation process led by the TAB and its TAC. The Twin Cities region typically receives an estimated $7 million annually in TAP funding (2013 data). A minimum local match of 20 percent is required.

FEDERAL RAILROAD ADMINISTRATION – Federal Railroad Administration funding may be used on intercity passenger rail facilities. FRA funding is provided through congressional appropriations and varies in amount from year to year.

UNIFIED PLANNING WORK PROGRAM (5303) – Unified Planning Work Program funding may be used for transportation planning activities, but may not be used on design, engineering, construction or capital related expenditures. As the regional Metropolitan Planning Organization UPWP funding is allocated to the Metropolitan Council Metropolitan Transportation Services. MTS produces an annual work program specifying how the planning funds will be used, with the majority of the funding used to support MTS planning staff work. The Twin Cities region typically receives an estimated $3.5 million annually in UPWP funding (2013 data). A minimum local match of 20 percent is required.

SPECIAL GRANT PROGRAMS – There are many special grant programs that may provide funding for transitway projects, past programs include the Urban Partnership Agreement, the American Recovery and Reinvestment Act, Transportation Investment Generating Economic Recovery and Transit Investments for Greenhouse Gas and Energy Reduction. The specifics for these competitive programs - eligible/ineligible uses, estimated annual amount, and local match – vary by grant type. Funding is allocated through FTA and FHWA grant processes, with some grants requiring submittal through the Metropolitan Council or MnDOT.

State Transit Funding

STATE GENERAL FUND – Funding from the state general fund is made available for transitway projects through appropriations by the state legislature and varies in amount from year to year. General funds are rarely used for capital investments and may include additional restrictions as specified in the appropriation language. General funds may be used for transitway operations. Currently the Blue Line and Green Line receive an annual general fund appropriation to cover 50 percent of the net cost of operations.

GENERAL OBLIGATION BONDS – General obligation (GO) bonds can provide funding for transitway capital and are allocated through state legislative appropriations in varying amounts. The specific use of the funds is dictated by the appropriation language. Any capital expenditure funded by GO bonds must be for a specific capital project that will have a 20-year life and the asset must be owned by the public entity specified in the appropriation. GO bonds may not be used for planning studies, alternatives analysis, technology, vehicles or operations expenditures. Minnesota Management and Budget has directed that state GO bonds appropriated to the Council are not to be passed through to sub-recipients unless the bond appropriation language permits a pass-through.

MNDOT TRUNK HIGHWAY FUNDS AND BONDS – MnDOT trunk highway funds and bonds may be used on transitway projects that further a trunk highway purpose. Trunk highway funding can only be used for trunk highway purposes and cannot be used for transit operations. Capital assets that utilize trunk highway bonds must have a 20-year life, be owned by MnDOT and are considered part of the trunk highway system. Trunk highway funding and bonds are allocated through the state legislative process or a MnDOT grant program in varying amounts.

STATE LAWS RELATED TO TRANSIT FUNDING – Minn. Stat. 473.4051 subd. 3, prohibits state money from being used to pay more than 10 percent of the total capital cost of an LRT project. In addition, Minn. Stat. 473.4051, subd. 2, states that "after operating and federal money have been used to pay for light rail transit operations, 50 percent of the remaining costs must be paid by the state."

Metropolitan Council Funding

MOTOR VEHICLE SALES TAX – Minn. Stat. 297B.09 allocates 36 percent of state MVST funding to the metropolitan area transit fund for transit assistance in the metropolitan area. The Metropolitan Council is responsible for allocating the funds, which are primarily used to pay for existing transit operations, both rail and bus. The funds may be used on transitway projects for existing operations or capital and operating expansion.

MVST funding is allocated annually by the Council through the adopted Regional Transit Operating Revenue Allocation Procedure and Regional Transit Capital Revenue Allocation Procedure.

REGIONAL TRANSIT CAPITAL BONDS – Regional transit capital funds are bond funds where the debt service is paid using the Council's transit capital levy. The legislature is responsible for authorizing the amount of RTC bonds that may be sold and the Council is responsible for setting the annual levy to pay the debt. RTC funds are used for transit capital expenditures including assets with shorter than a 20-year life, including transit vehicles and technology. RTC funds may not be used for transit operations or planning activities. RTC funds are allocated by the Council through annual development of the six- year CIP. There is typically $40 million in RTC funding available annually in the Twin Cities region.

FARES AND OTHER SELF-GENERATED FUNDS – Fares and other self-generated funds are typically used for transit operations. Fares from a transitway project are allocated specifically to the operations of that transitway. This allows for calculation of a net subsidy which represents the public cost after accounting for the fare revenue. The transit operator is responsible for allocating fare revenues through the budgeting process. Other self-generated revenue may include advertising revenue or interest income. These revenues are typically used for operating purposes but could be allocated to a capital expenditure.

Counties Transit Improvement Board Funding

METRO COUNTIES SALES TAX – In April 2008, under authorizing legislation contained in Minn. Stat. 297A.99, five counties – Anoka, Dakota, Hennepin, Ramsey and Washington – formed a joint powers board known as the Counties Transit Improvement Board and implemented a quarter-cent sales tax and a $20 motor vehicle sales tax to fund transitway projects within these counties. The sales tax currently raises approximately $110 million annually (CY 2012) and may be used for transitway capital and operating costs.

CTIB has adopted a Transitway Investment Framework, which establishes principles and rules for how the CTIB will invest in transitway development. CTIB also recently (2014) adopted a Program of Project Investment Strategy that is updated annually and establishes the Board's priorities for upcoming grant requests. The Investment Strategy serves as the Board's 5-year financial plan and

tracks the long-term funding potential of the sales tax against projects expected to request funding for the next 30 years or so.

Additionally, metro counties sales tax revenues cannot be used to fund more than 30 percent of the total transitway costs, though an individual component of the overall project may receive more than 30 percent if approved by CTIB. The funding is allocated through the CTIB grant application process. A minimum ten percent local (non-state) match is required for CTIB funding.

Local Funding

REGIONAL RAILROAD AUTHORITY – Minn. Stat. 398A.04 provides RRAs with the power to impose a property tax levy not to exceed 0.04835 percent of the market value of all taxable property within the RRA boundary. Minn. Stat. 398A.07 states that a regional railroad authority may issue bonds as necessary to fulfill its purpose and to exercise any of its powers to provide funds for operating expenses in anticipation of revenues or for capital expenditures in anticipation of other funds.

RRA funds may be available for transitway projects. Typically these funds are used for the alternative analysis phase of development, environmental processes, right of way acquisition, or for the local match in rail projects, with the exception of the Cedar Avenue BRT project in Dakota County.

RRA funds must be no more than ten percent of the total capital project cost and cannot be used for rail operations in the counties that have enacted the metro counties sales tax (see Minn. Stat. 398A.10). The amount of funding available is tied to the levy limit and is allocated through the RRA budgeting process.

COUNTY GENERAL FUND – County general funds may be used on transitway projects as allocated. General funds are allocated through the county budget process and vary in amount from year to year.

COUNTY HIGHWAY FUNDS –County highway funds may be used for highway-related transit improvements, but may not be used for non-highway transitway purposes. Highway funds are allocated through the county budget process and vary from year to year.

CITY GENERAL FUND – City general funds may be used on transitway projects as allocated. General funds are allocated through the city budget process and vary in amount from year to year.

MUNICIPAL HIGHWAY FUNDS – Municipal highway funds may be used for highway related transit improvements, but may not be used for non-highway transitway purposes. Highway funds are allocated through the city budget process and vary in amount from year to year.

Summary: Transit Funding Sources and Programs

Name (by Source)	Estimated Annual Amount for Region ($M)	Minimum Match (%)	Eligible Uses	Ineligible Uses	Policy/Process for Allocating Funds
Federal					
New Starts (5309)	100.0M	20	Approved new or extended fixed-guideway systems	Funding begins in Engineering, available only for approved projects	New Starts application / approval process
Small Starts (5309)	TBD	20	New of extended systems that are fixed-guideway or bus corridor projects with specific components	Funding begins in Construction, available only for approved projects	Small Starts application process
Urbanized Area Formula (5307 and 5340)	60.0 M	20	Transit system replacement and expansion capital purposes, preventative maintenance, capital cost of contracting	Non-transit capital	Federal formula allocation to Council, allocated through Council CIP development
State of Good Repair Formula (5337)	12.0 M	20	Rail and high-intensity bus systems in order to maintain a state of good repair for all associated assets	Capital not associated with rail or high-intensity bus systems	Federal formula allocation to Council, allocated through Council CIP development
Bus and Bus Facilities Formula (5339)	5.0 M	20	Capital investments for bus fleets and facilities.	Rail, operating, or non-transit capital	Federal formula allocation to Council, allocated through Council CIP development
Unified Planning Work Program (5303)	3.5 M	20	Planning activities	Construction / capital purposes	MTS annual work program planning
CMAQ	27.0 M	20	Transit capital and operating expansion (up to $7 M per project)	Existing transit operations / capital	TAC/TAB Regional Solicitation Process
STP (Urban Guarantee)	40.0 M	20	Primarily road construction purposes (up to $7M per project)	Must meet solicitation category requirements	TAC/TAB Regional Solicitation Process
Transportation Alternatives Program	7.0 M	20	Primarily bicycle, pedestrian, and trail projects	Must meet solicitation category requirements	TAC/TAB Regional Solicitation Process

Name (by Source)	Estimated Annual Amount for Region ($M)	Minimum Match (%)	Eligible Uses	Ineligible Uses	Policy/Process for Allocating Funds
Federal Railroad Administration	Varies		Intercity passenger rail facilities		Congressional appropriations, special grant programs
Special grant programs (e.g., UPA, ARRA, TIGER, TIGGER)	Varies	Varies	Varies	Varies	Federal grant application process, some grant programs require submittal through Council or MnDOT
State					
General Funds	Varies	N/A	Specified in appropriation language	Rarely used for capital	State legislative process
General Obligation Bonds	Varies	N/A	Must meet public purpose requirement, use as specified in appropriation language. Capital must have a 20-year life, asset owned by organization specified in appropriation	Planning studies, AA, technology, vehicles, non-capital uses	State legislative process
MnDOT Trunk Highway Funds or Bonds	Varies	N/A	Must have a trunk highway purpose	Transit operations	State legislative process or MnDOT grant program

Name (by Source)	Estimated Annual Amount for Region ($M)	Minimum Match (%)	Eligible Uses	Ineligible Uses	Policy/Process for Allocating Funds
Metropolitan Council					
MVST (Regionally Allocated MVST)	Varies	N/A	Existing transit operations and expansion, capital is allowed	Non-transit purposes	Regional Revenue Allocation Policy / Procedures
Regional Transit Capital (RTC)	40.0 M	N/A	Transit capital including vehicles	Transit operations	Council CIP development
Fares / other self-generated	Varies	N/A	Primarily service operations		Transit operator budget process
Counties Transit Improvement Board (CTIB)					
Metro counties sales tax	Raises about 110.0 M per year	10 non-state	Transitways capital and operating	General transit operations, arterial BRT	CTIB grant application process
Local					
Regional Railroad Authority (RRA)	Levy limit	N/A	Typically used for planning, AA, environmental, ROW, local match for rail projects with exception of Dakota County	Not more than 10% of capital costs. For metro counties with CTIB sales tax, cannot be used for rail operations	RRA budget process
County general fund	Varies	N/A			County budget process
County highway funds	Varies	N/A	Highway-related transit improvements	Non-highway purpose	County budget process
City general fund	Varies	N/A			City budget process
Municipal highway funds	Varies	N/A	Highway-related transit improvements	Non-highway purpose	City budget process

Appendix B: Acronyms used in Report

Acronym	Meaning
AA	Alternatives analysis
AAU	Alternatives analysis update
BNSF	Burlington Northern Santa Fe Railroad Company
BRT	Bus rapid transit
CMAQ	Congestion Mitigation Air Quality
CTIB	Counties Transit Improvement Board
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HOT	High occupancy toll
HOV	High occupancy vehicle
LOS	Level of service
LPA	Locally Preferred Alternative
LRT	Light-rail transit
MIS	Major Investment Study
MnDOT	Minnesota Department of Transportation
MVST	Motor vehicle sales tax
MWRRI	Midwest Regional Rail Initiative
NCDA	Northstar Corridor Development Authority
PD	Project Development
PE	Preliminary Engineering
ROW	Right of way
RRA	Regional railroad authority
RTC	Regional transit capital
RTC	Rail Traffic Controller
SDP	Service Development Plan
TFAC	Transportation Finance Advisory Committee
TH	Trunk Highway
TIGER	Transportation Investment Generating Economic
TPP	Transportation Policy Plan
UPA	Urban Partnership Agreement