

10. PROJECT DEVELOPMENT, LEADERSHIP, AND OVERSIGHT

10.1. INTRODUCTION

10.1.1. Chapter Introduction

This document summarizes the basis and rationale for the Regional Transitway Guidelines recommended for transitway project development, leadership, and oversight through conversations with the technical committees, Advisory Committee, and Metropolitan Council and Metro Transit senior staff. Following the introduction, the remainder of this document is organized into the following sections:

- Relevant background information including applicable laws, regional policies, and funding programs
- Existing project development, leadership and oversight and funding practices
- Existing transit operations
- Transit ridership forecasting
- Capital investment criteria
- Guidelines recommended through the technical development process

10.1.2. Committee Purpose

The organizational structure and the associated laws related to the delivery of public transit facilities and services in the Twin Cities region are complex and have evolved over several decades. There are multiple agencies involved in the funding, planning, design, construction, operation, and maintenance of transit facilities and services. As part of the Regional Transitway Guidelines, the objectives of the Project Development, Leadership and Oversight (PDLO) Guidelines are to support:

- Effective coordination among multiple agencies/entities involved in funding and implementation
- Simple, efficient and consistent organization for all steps in the project development process
- A clear decision-making process at both staff and policy levels
- A shared understanding of roles and responsibilities for each stakeholder
- Legal and funding requirements
- Effective stakeholder and public involvement
- The best use of available resources at all levels of government, including the interests, skills and resources of all partners
- Quality outcomes

Funding is a very important, if not the most important, component of transitway development. The availability and amount of funding will often determine the feasibility, timing, and degree to which a transitway project can be built. Transitway funding, however, is a difficult subject for which to develop guidelines, in that most transitway funding sources already come with specific rules and requirements guiding the use of the funding. In addition, to the degree that funding does not have specific

requirements, it does not appear to be in the region's best interest to impose additional rules that may inhibit the use of the funding and the development of transitways. The Funding Technical Committee discussed these issues in detail and determined that rather than developing "Funding Guidelines", it would be more appropriate and useful to:

- Document existing funding sources and programs;
- Build a shared understanding of existing funding rules, practices and assumptions; and
- Clarify roles and responsibilities related to transitway funding.

As a result, discussion and information relating to the issues above have been incorporated into this chapter, where overall project roles and responsibilities, including funding, are discussed in more detail.

10.1.3. Transitway Modes

There are five transitway modes included in the scope of the Regional Transitway Guidelines 2010 effort. The modes included in the PDLO and Funding technical committee discussions include Arterial Bus-Rapid Transit (BRT), Highway BRT station-to-station, Highway BRT express, Light-Rail Transit (LRT), and Commuter Rail. See Chapter 1 for a summary of the characteristics of the modes. These modes are intended to provide a level of service along transitways that is at least 20 percent faster than local bus service with a high level of reliability and a high quality of transit facilities.

10.2. BACKGROUND INFORMATION

This section of the report addresses existing transitway laws and regulations related to project development, leadership and oversight and project funding.

10.2.1. Existing Laws and Regulations

The following section summarizes the existing laws and requirements related to transitway implementation. This section does not cover all local, state, and federal laws or regulations that are relevant to transitways, but rather just those relevant to the issues addressed by the PDLO and Funding committees.

10.2.2. General

Transitway Modes - Minn. Stat. 473.399, subd.1 states that transitway modes may include BRT, LRT, Commuter Rail, or other available systems or technologies that improve transit service.

Integrated Transportation System - Minn. Stat. 473.399, subd.1a requires an integrated transportation system in the region, including transit.

10.2.3. Commuter Rail

Responsible Authority - Minn. Stat. 174.82 makes the commissioner of the Minnesota Department of Transportation (Mn/DOT) responsible for all aspects of planning, developing, constructing, operating, and maintaining Commuter Rail, but the commissioner can delegate the authority to a public or private entity, including a regional railroad authority, a joint powers board, and a railroad and to the Metropolitan Council per Minn. Stat. 473.4057.

Minn. Stat. 473.4057 requires the Metropolitan Council to operate and maintain commuter rail facilities located whole or in part in the metropolitan area.

Also under Minn. Stat. 473.4057, after commencement of revenue service, the Metropolitan Council is responsible for subsequent planning, development, acquisition, construction, and equipping of improvements in that corridor.

Commuter Rail Planning - Minn. Stat. 174.84, subd. 2 requires the state's Commuter Rail system plan be approved by metropolitan planning organizations in areas in which Commuter Rail will be located before the commissioner may begin final design of rail facilities.

Minn. Stat. 174.84, subd. 4 requires that Commuter Rail be planned, designed, and implemented in such a way as to move transit users to, from, and within the metropolitan area, and to provide a unified, integrated, and efficient multimodal transportation system.

Minn. Stat. 174.86 defines the Commuter Rail corridor plan review process including city, county, and town approval, and metropolitan planning organization plan consistency review.

Minn. Stat. 174.86, subd. 5 requires a corridor coordinating committee for planning, design, construction, and service of a Commuter Rail line and specifies the composition of the committee.

Funding Stipulations - Minn. Stat. 174.88, subd. 2 states, among other things, that the commissioner shall not spend state funds to study Commuter Rail unless the funds are appropriated in legislation that identifies the route, including origin and destination.

10.2.4. Light-Rail Transit

Responsible Authority - Minn. Stat. 473.3994, subd.1a requires the governor to designate either the Metropolitan Council or Mn/DOT as the responsible entity for LRT planning, design, right-of-way acquisition, construction, and equipment.

LRT Planning - Minn. Stat. 473.3994 defines the LRT corridor plan review process including city, county, and town approval, and metropolitan planning organization plan consistency review (when Mn/DOT is the responsible authority).

Minn. Stat. 473.3994, subd. 10 requires a corridor management committee for design and construction of LRT and specifies the composition of the committee.

10.2.5. Bus-Rapid Transit

Cedar Avenue Corridor - MN Session Laws 2005. 1st Special Session chapter 6. Section 90 allows the Dakota County Regional Railroad Authority (DCRRA) the authority to develop BRT in the Cedar Avenue transit corridor:

“Dakota County Regional Railroad Authority may exercise the powers conferred by Minnesota Statutes, section 398A.04, to plan, establish, acquire, develop, construct, purchase, enlarge, extend, improve, maintain, equip, operate, regulate, and protect a bus-rapid transit system located within the Cedar Avenue transit corridor within Dakota County.”

10.2.6. Transit Funding Sources and Programs

The following section highlights transit and transitway funding programs available under existing federal and state laws. Table 10-1 provides a summary of the information including a listing of the potential funding sources, approximate amount available annually, a summary of how the funds are made available, and requirements governing how the funds may be used.

10.2.6.1. 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 preliminary engineering phase of development. 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 policy has limited annual funding from the New Starts program to \$95 M.

Small Starts (5309) – Small Starts funding may be used on new or extended transit system projects that are fixed guideway for at least 50 percent or bus projects with ten/fifteen minute headways. A project is only eligible for Small Starts funding once it has entered the preliminary engineering phase of development. The funding may only be used on projects approved through the Small Starts application and approval process and requires. A minimum local match of 20 percent is required for all Small Starts funding.

Bus Capital Improvements (5309) – Bus Capital Improvements funding may be used for bus capital and preventative maintenance projects. Rail capital projects are not eligible for this funding. The funding is provided through congressional earmarks and varies in amount from year to year. The Metropolitan Council or Mn/DOT serves as the designated federal recipient for these funds and, if awarded to another regional entity, acts as the fiscal oversight agency. A minimum local match of 20 percent is required for all Bus Capital Improvements funding.

Urbanized Area Formula (5307 & 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 the Urban Area Formula 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 (CIP). The Twin Cities region typically receives an estimated \$50 million annually in Urbanized Area Formula funding (per 2010 data). A minimum local match of 20 percent is required for all Urban Area Formula funds.

Fixed Guideway Modernization (5309) – Fixed Guideway Modernization funding may be used for capital and preventative maintenance on fixed guideway projects, including BRT on exclusive or high-occupancy vehicle (HOV) lanes and bus-only shoulders. Non-fixed-guideway projects are not eligible for this funding. The Metropolitan Council is allocated the Fixed Guideway Modernization funds through a federal formula and allocates these funds to specific fixed-guideway projects through annual development of the six-year CIP. The Twin Cities region typically receives an estimated \$13.6 million annually in Fixed Guideway Modernization funding (per 2010 data). A minimum local match of 20 percent is required for all Fixed Guideway Modernization funding.

Alternative Analysis (AA) (5339) – Alternative analysis funding may be used on a transit project during the alternative analysis phase of development, until the selection of the locally preferred alternative (LPA). The spending of the AA funding must be completed by the project's entry into the preliminary engineering (PE) phase of development. Alternative analysis funding is provided through congressional earmarks and varies in amount from year-to-year. A minimum local match of 20 percent is required for all AA funding.

Congestion Mitigation and Air Quality (CMAQ) – 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 (TAB) and its Technical Advisory Committee (TAC). The

Twin Cities region typically receives an estimated \$25 million annually in CMAQ funding (per 2010 data). The regional solicitation process limits projects to a maximum of \$7.0 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 for all CMAQ funding.

Surface Transportation Urban Program (STP-U/STP-Urban) – Surface Transportation Urban Program funding is primarily used for road construction purposes, up to \$7 million per project. In order to be eligible for funding, a project must meet the solicitation category requirements. STP-Urban 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 \$43 million annually in STP-Urban funding (per 2010 data). A minimum local match of 20 percent is required for all STP-Urban funding. Currently, the 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 to the project ranking.

Transportation Enhancements – Transportation Enhancements funding is used primarily for bicycle, pedestrian, and trail projects. In order to be eligible for funding, a project must meet the solicitation category requirements. Transportation Enhancements funding is distributed in the region through a regional solicitation process led by the TAB its TAC. The Twin Cities region typically receives an estimated \$8 million annually in Transportation Enhancements funding (per 2010 data). A minimum local match of 20 percent is required for all Transportation Enhancements funding.

Federal Railroad Administration (FRA) – 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 (UPWP) (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 (MPO) UPWP funding is allocated to the Metropolitan Council Metropolitan Transportation Services (MTS). 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 (per 2010 data). A minimum local match of 20 percent is required for all UPWP funding.

Special Grant Programs – There are many special grant programs that may provide funding for transitway projects, past programs include the Urban Partnership Agreement (UPA), the American Recovery and Reinvestment Act (ARRA), Transportation Investment Generating Economic Recovery (TIGER), and [Transit Investments for Greenhouse Gas and Energy Reduction \(TIGGER\)](#). The specifics of funding from these competitive programs - eligible/ineligible uses, estimated annual amount, local match – vary by specific grant type. The funding is allocated through Federal grant processes both FTA and Federal Highway Administration (FHWA), with some grants requiring submittal through the Metropolitan Council or Mn/DOT.

10.2.6.2. 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 and currently Hiawatha LRT receives an annual general fund appropriation of \$5.2 million.

General Obligation (GO) Bonds – General obligation bonds can provide funding for transitway capital and are allocated through state legislative appropriations in varying amounts. Typically, the state has a large bonding bill in even numbered sessions and smaller or no bonding bill in the odd numbered sessions. 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 (MMB) 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.

Mn/DOT Trunk Highway Funds and Bonds – Mn/DOT 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 Mn/DOT and are considered part of the trunk highway system. Trunk highway funding and bonds are allocated through the state legislative process or a Mn/DOT grant program in varying amounts.

State Transit Funding Related Laws – 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”.

10.2.6.3. Metropolitan Council Funding

Motor Vehicle Sales Tax (MVST) – Minn. Stat. 297B.09 allocated 36 percent of the state Motor Vehicle Sales Tax funding to the metropolitan area transit fund to be used for transit assistance in the metropolitan area. The Metropolitan Council is responsible for allocating the MVST funds to various transit purposes. The funds 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 (adopted in September 2010).

Regional Transit Capital (RTC) 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 \$35 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.

10.2.6.4. Counties Transit Improvement Board (CTIB) 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 (CTIB) and implemented a quarter-cent sales tax and \$20 a motor vehicle sales tax to fund transitway projects within these counties. The sales tax currently raises approximately \$88 million annually and under the legislation, may be used for transitway capital and operating costs. CTIB has adopted a Transitway Investment Framework, which establishes principles and rules regarding how the CTIB will invest in transitway development. 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. Currently, the Metro Counties Sales Tax raises an estimated \$88 million annually and the funding is allocated through the CTIB grant application process. A minimum of a ten percent local (non-state) match is required for all CTIB funding.

10.2.6.5. Local

Regional Railroad Authority (RRA) – Minn. Stat. 398A.04 provides RRAs with the power to impose a property tax levy not to exceed 0.04835 percent of 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.

Regional Railroad Authority funds may be available for transitway projects. Typically RRA funds are used for the AA 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 costs 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.

Table 10-1 – Summary of Potential Transitway Funding Sources

Name (by source)	Estimated Annual Amount for Region	Min. Match	Eligible Uses	Ineligible Uses	Policy/Process for Allocating Funds
Federal					
New Starts (5309)	\$ 95,000,000	20%	Approved new or extended fixed-guideway systems	Funding begins in PE, available only for approved projects	New Starts application/approval process
Small Starts (5309)	TBD	20%	New or extended systems that are fixed-guideway or bus corridor projects with specific components	Funding begins in PE, available only for approved projects	Small Starts application process
Bus Capital Improvements (5309)	Earmarks	20%	Bus capital and preventative maintenance	Rail capital	Annual Congressional requests/appropriations
Urbanized Area Formula (5307 & 5340)	\$ 50,000,000	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
Fixed Guideway Modernization (5309)	\$ 13,600,000	20%	Fixed-guideway projects (including BRT on exclusive or HOV lanes) capital and preventative maintenance	Non-fixed guideway projects	Federal formula allocation to Council, allocated through Council CIP development
Alternatives Analysis (AA) Funding (5339)	Earmarks	20%	AA activities (pre-LPA)	Spending complete by entry into PE	Annual Congressional requests/appropriations
Unified Planning Work Program (5303)	\$ 1,300,000	20%	Planning activities	Construction/capital purposes	MTS annual work program planning
CMAQ	\$ 25,000,000	20%	Transit capital and operating expansion (up to \$7 million per project)	Existing transit operations/capital	TAC/TAB Regional Solicitation Process
STP (Urban Guarantee)	\$ 43,000,000	20%	Primarily road construction purposes (up to \$7 million per project)	Must meet solicitation category requirements	TAC/TAC Regional Solicitation Process

Name (by source)	Estimated Annual Amount for Region	Min. Match	Eligible Uses	Ineligible Uses	Policy/Process for Allocating Funds
Transportation Enhancements	\$ 8,000,000	20%	Primarily bicycle, pedestrian, and trail projects	Must meet solicitation category requirements	TAC/TAC Regional Solicitation Process
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 Mn/DOT
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
Mn/DOT Trunk Highway Funds or Bonds	Varies	N/A	Must have a trunk highway purpose	Transit operations	State legislative process or Mn/DOT grant program
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)	\$ 35,000,000	N/A	Transit capital including vehicles	Transit operations	Council CIP development

Name (by source)	Estimated Annual Amount for Region	Min. Match	Eligible Uses	Ineligible Uses	Policy/Process for Allocating Funds
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 \$88 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

10.3.EXISTING PRACTICE

This section of the technical memorandum presents information about the agencies that are currently involved in the planning, design, construction, and operation of transitways in the Twin Cities region, existing processes for project development, existing coordination activities, and existing transit operations.

10.3.1. Public Agencies Involved in Transitways

The provision of public transit in the Twin Cities region is complicated. Multiple modes are used to provide a variety of transit services by several public agencies and public and/or private transit operators. Multiple agencies are involved in the planning, design and construction of these facilities. As documented in section 10.2 above, there are many different statutes governing the provision of transit facilities and services in the region.

10.3.1.1. Federal Agencies

Several federal agencies may be involved in the funding of transitway development. The FTA is involved in the review and oversight of any projects that seek federal transit funding. This will likely include all light rail and commuter rail projects and may also include BRT projects. The FHWA may be involved in any project that includes highway improvements eligible for federal funding. This is most likely to occur with BRT projects but may also occur with other transit projects. The FRA is involved in the review of commuter rail projects. The lead agency is responsible for meeting all federal requirements when federal funding is used for a project. Metropolitan Council, acting as the MPO, provides project oversight on behalf of the FTA.

The recipient of federal funds, either Mn/DOT or the Metropolitan Council, is responsible for ensuring federal compliance. While a subrecipient is required to comply with all federal regulations, the recipient remains the entity responsible to the federal agency.

10.3.1.2. Minnesota Department of Transportation (Mn/DOT)

Mn/DOT is designated by state law as the lead agency for all aspects of planning, designing, constructing, operating, and maintaining Commuter Rail. In the case of Northstar Commuter Rail, Mn/DOT worked jointly with the Northstar Corridor Development Authority and Metropolitan Council to plan, design, and construct the line. Northstar service is operated by Metro Transit through an operating contract with BNSF Railway, which owns the underlying railroad. The vehicles and stations are owned and maintained by Metro Transit, which was selected through a competitive bidding process.

10.3.1.3. Metropolitan Council

The Metropolitan Council is the designated MPO for the Twin Cities metropolitan region. Federal law and regulation require that every metropolitan area over 50,000 in population have an MPO and a continuing, coordinated, and comprehensive transportation planning process in order to receive any federal transportation funds. Federal regulations require the participation of local elected officials in the planning process and this function is fulfilled by the TAB together with the Metropolitan Council. The Metropolitan Council must prepare a long-range transportation plan every four years, and performs long-range transit planning activities for the region.

The Metropolitan Council and TAB are responsible for the selection of projects for federal funding and the preparation of a four-year transportation improvement program (TIP), which is completed through the TAB. All federal funds used on a transitway project must be programmed in the TIP.

The Metropolitan Council, as the major regional transit operator, is the designated recipient of federal funds for transit projects (other agencies/entities may be subrecipients) and provides an oversight function when federal funds are used for a transitway project. The Metropolitan Council coordinates the operation of all public transit services in the region. The Council, through Metro Transit, a division of Metropolitan Council, operates Commuter Rail, LRT, and the largest bus system in the region. The Council also provides for some regular route and dial-a-ride transit services through competitive bidding processes.

10.3.1.4. Counties Transit Improvement Board (CTIB)

The Counties Transit Improvement Board (CTIB) is a joint powers board established in 2008 to grant funds to major transit infrastructure projects from proceeds of a one-quarter cent county sales tax levied within the seven-county metropolitan region (Minn. Stat. 297A.922 Subd. 4). Five counties (Anoka, Dakota, Hennepin, Ramsey, and Washington) currently levy the tax and are members of CTIB. CTIB has independent bonding authority, secured by future revenues of the transit tax. Funded projects must be consistent with the Transportation Policy Plan (TPP). CTIB's Transit Investment Framework provides policy guidance. CTIB prepares an Annual Financial Review and Capacity Estimate each year, which informs its annual grants process.

10.3.1.5. Regional Railroad Authorities (RRAs)

Minn. Stat. 398A.02 states the purpose of the Regional Railroad Authorities Act is to provide a means for one or more municipalities (including cities, counties, and towns) to provide for the preservation and improvement of local rail service and for the preservation of abandoned rail right-of-way for future transportation uses. The statute (Minn. Stat. 398A.04, subd. 2.) also states that regional railroad authorities may plan, establish, acquire, develop, construct, purchase, enlarge, extend, improve, maintain, equip, operate, regulate, and protect railroads and railroad facilities, including but not limited to terminal buildings, roadways, crossings, bridges, causeways, tunnels, equipment, and rolling stock.

An RRA may be organized by resolution or joint resolution by the governing body of one or more counties, or if the county chooses not to organize, by one or more municipalities, as a local governmental unit and a political subdivision of the state. Each of the seven counties in the metropolitan region has organized an RRA. RRAs play a significant role in the planning, design and implementation of LRT, Commuter Rail, and BRT in the region and have traditionally been the lead agency in planning activities during the alternatives analysis (AA), conceptual engineering, and initial National Environmental Protection Act (NEPA) processes.

Minn. Stat. 398A.04, subd. 2 states that RRAs may not expend state or federal funds to engage in planning for or development of Light-Rail Transit or Commuter Rail, unless this activity is consistent with a plan adopted by the Mn/DOT under Minn. Stat. 174.84 and a plan adopted by the Metropolitan Council under Minn. Stat. 473.399, and is carried out pursuant to a memorandum of understanding executed by the authority and the commissioner after appropriate consultation with the Metropolitan Council.

Minn. Stat. 398A.10 states that an RRA that has imposed the metropolitan transportation sales and use tax may not, by the end of a project, contribute more than ten percent of the capital costs of a LRT or Commuter Rail project. It also states that a regional railroad authority may not contribute any funds to pay operating and maintenance costs for LRT or Commuter Rail.

10.3.1.6. Metro Transit

Metro Transit, a division of the Metropolitan Council, is the largest transit operator in the region. Metro Transit operates all LRT and provides about 95 percent of bus rides in the region. Metro Transit also operates Commuter Rail through an operating contract with BNSF for the Northstar Line.

Metro Transit is also directly involved in planning and implementing transitway projects. Metro Transit has led LRT projects through the preliminary engineering (PE), final design, construction, and implementation phases, was the lead on operations planning elements for the Northstar Line, and is also the lead for the I-35W South BRT planning, construction, and implementation.

10.3.1.7. Suburban Transit Providers

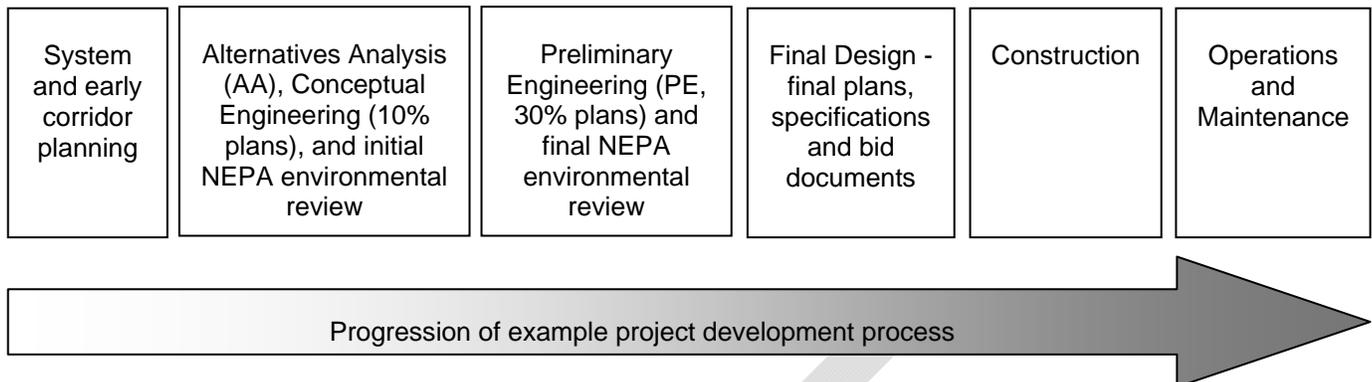
There are six suburban transit providers in the region. These providers are local agencies that “opted out” of the regional transit taxing district in the 1980s and retained transit taxing revenues to provide their own transit services. The majority of services provided by these agencies are express bus services. Operation is typically contracted out to a private operator through a competitive bidding process with one suburban provider contracting its express service with Metro Transit. The suburban transit providers are:

- Minnesota Valley Transit Authority (MVTA) serving the cities of Apple Valley, Burnsville, Eagan, Rosemount, and Savage
- SouthWest Transit (SWT) serving the cities of Chanhassen, Chaska, and Eden Prairie
- Maple Grove Transit (MGT) serving the city of Maple Grove
- Plymouth Metrolink serving the city of Plymouth
- Shakopee Transit serving the city of Shakopee
- Prior Lake Transit serving the city of Prior Lake

The City of Minnetonka also elected to opt out in 2002 but entered into an agreement with the Metropolitan Council for the Council and Metro Transit to continue to provide service for the city. Section 10.5 provides additional information on existing transit operations in the region.

10.3.2. Project Development Process

An example of a typical project development process is shown in Figure 10-1. However, every corridor is different, has a different mix of agency partners and stakeholders, and different funding sources have different project development process requirements. There are several variations on the project development process as a result. PE and final design may be combined into one design phase for Small Starts, Very Small Starts and non-New Starts projects. Some projects may be done with a simpler environmental review process than others and this might be done in the AA phase rather than the PE phase. Other project delivery methods, such as design-build, may have a somewhat different project development process. Ultimately, all projects have to address all of these steps in some manner.

Figure 10-1 – Example of Project Development Process

10.3.2.1. Federal New Starts Program

The Federal Transit Administration's (FTA) discretionary New Starts program is the federal government's primary financial resource for supporting major transitway investment projects. This program funds new, and extensions to existing, fixed-guideway transit projects including Commuter Rail, LRT, heavy rail, BRT, streetcars, and ferries.

New Starts projects must emerge from a regional, multi-modal transportation planning process and be documented in the region's Transportation Policy Plan (TPP). The New Starts program requires that a transitway project be completed in four major steps, each requiring FTA review and approval prior to receiving federal funding for the subsequent step. These four major project phases are:

Phase I – Alternatives Analysis (AA)

During the alternatives analysis (AA) phase, both mode and alignment options are evaluated for a particular corridor and compared on the basis of benefits, costs and impacts. This phase results in the selection of a locally preferred alternative (LPA), which is adopted by the MPO into the region's long-range transportation plan. In the Twin Cities, this phase is typically led by a RRA but could be led by Mn/DOT, the Metropolitan Council, a joint powers board, a county, or a city. This phase also typically involves up to ten percent conceptual engineering and initial activities for the environmental review process.

Phase II – Preliminary Engineering (PE)

During PE, design options are considered to refine the locally preferred alternative and complete the NEPA and Minnesota Environmental Policy Act (MEPA) process. A more detailed assessment of project costs, benefits and impacts of the LPA is performed based on 30 percent engineering. During this phase, local sponsors must also finalize management plans, demonstrate their technical capabilities to develop the project, and commit local funding sources. In the Twin Cities, this phase is legislatively required to be led by Mn/DOT or its designee for Commuter Rail projects, Mn/DOT or the Metropolitan Council for LRT projects, and by Mn/DOT, Metropolitan Council, a joint powers board, a county, or a city for BRT.

Phase III – Final Design

This phase includes the preparation of final construction plans, detailed specifications and bid documents. This phase culminates in the FTA's full funding grant agreement (FFGA) for construction of the project. In the Twin Cities, this phase is led by Mn/DOT or its designee for Commuter Rail; by

Mn/DOT or the Metropolitan Council for LRT; and by Mn/DOT, Metropolitan Council, a joint powers board, a county, or a city for BRT.

Phase IV – Construction

Bids are let and the project is constructed in this phase. In the Twin Cities, this phase is led by Mn/DOT or its designee for Commuter Rail; by Mn/DOT or the Metropolitan Council for LRT; and by Mn/DOT, Metropolitan Council, a joint powers board, a county, or a city for BRT.

10.3.2.2. Federal Small Starts Program

The FTA administers a project category called Small Starts, under the Section 5309 Capital Investment Grant program. These projects must have a total project cost of less than \$250 million with a grant request of no more than \$75 million. These projects must either be a fixed guideway for at least 50 percent of the project length in the peak period or must be a corridor-based bus project with substantial transit stations, signal priority, low floor/level boarding vehicles, special branding, frequent service (ten-minute peak/15-minute off-peak), and service at least 14 hours per day. FTA requires three phases for a Small Starts project:

Phase I – Alternatives Analysis (AA)

This can be a simpler process than that required for a New Starts project, but must still consider mode and alignment options in the corridor being studied. This phase results in an LPA. This phase also includes the required NEPA/MEPA process (may be a simpler process than an Environmental Impact Statement depending on the project). It would also typically include up to ten percent engineering for the LPA. In the Twin Cities, this phase would typically be led by an RRA or local unit of government, but could be led by Mn/DOT or Metropolitan Council.

Phase II – Project Development

This phase includes both preliminary and final engineering work. During this phase, the project sponsor must also develop a project management plan including a budget and schedule for implementation. This phase results in a Project Construction Grant Agreement (PCGA) with FTA. In the Twin Cities, this phase would be led by Mn/DOT or its designee for Commuter Rail, Mn/DOT or the Metropolitan Council for LRT, and by Mn/DOT, Metropolitan Council, a joint powers board, a county, or a city for BRT.

Phase III – Construction

Bids are let and the project is constructed in this phase. In the Twin Cities, this phase is led by Mn/DOT or its designee for Commuter Rail; by Mn/DOT or the Metropolitan Council for LRT; and by Mn/DOT, Metropolitan Council, a joint powers board, a county or a city for BRT.

10.3.2.3. Federal Very Small Starts Program

The FTA also administers a project category called Very Small Starts. These projects are simple, low-risk projects that qualify for a highly simplified project evaluation and rating process by FTA. The project must have a total project cost of less than \$50 million and must have a capital cost of less than \$3 million per mile (excluding vehicles). FTA requires a planning process for Very Small Starts projects that is similar to the Small Starts process described above. However, a Very Small Starts project may utilize a very simple AA process.

10.3.2.4. Non- New Starts/Small Starts/Very Small Starts Projects

There is no existing required process for non-New Starts projects. However, these projects (depending on their size and complexity) still need to go through some level of planning, design and construction process. It is typical for transitway projects to use a process similar to the New Starts or Small Starts/Very Small Starts process so that they can be eligible for federal funding at later stages in the project development process, if desired. These projects must also be consistent with the region's Transportation Policy Plan to use federal discretionary funds.

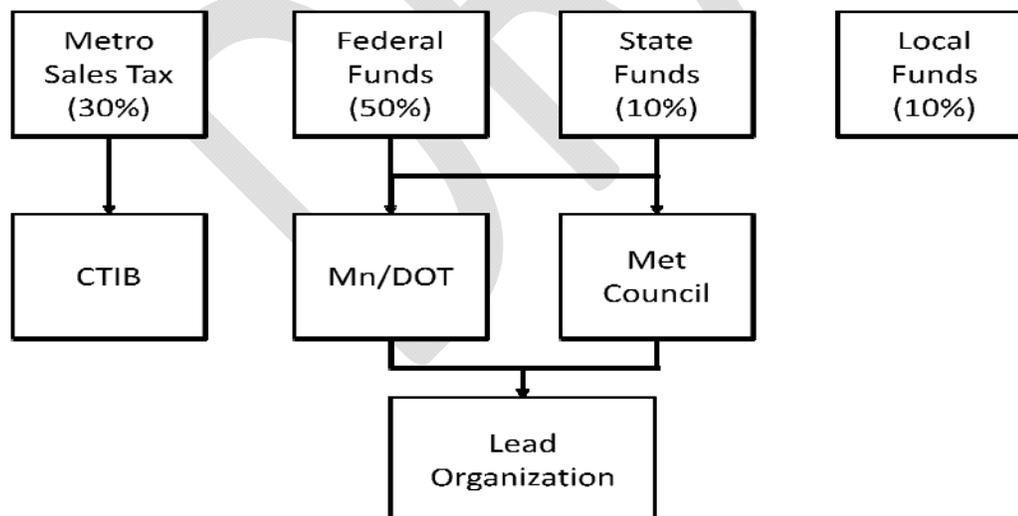
10.3.3. Funding Practices & Assumptions

10.3.3.1. Capital

Rail projects are assumed to be funded through the federal New Starts program. Eligible costs include preliminary engineering, final design, construction, rolling stock and project financing costs. Though these costs are eligible for federal participation, federal funding may not be received until a full funding grant agreement (FFGA) has been signed. Prior to the FFGA, federal funds may be received through specific congressional appropriations, which may or may not be in proportion to the expected 50 percent federal share. Therefore, the funding shares shown below are assumed to be reached at project completion, differing shares may occur throughout the various project stages. The final funding formula is:

- 50% federal
- 30% Counties Transit Improvement Board (CTIB)
- 10% State
- 10% County RRAs (distributed among the counties where the transitway is geographically located based upon percent of mileage within the county)

Figure 10-2 – Typical Flow of Transitway Funds



If a highway or arterial BRT were to receive New Starts funding, the assumed funding formula would be similar to that of rail transitways. Small Starts funding allows projects that have a capital cost of less than \$250 M to receive up to \$75 M in federal funding or 80 percent of the project costs, whichever is less. Highway and arterial BRT projects that are not New Starts or Small Starts do not have an

“accepted” formula for the capital costs. There are a number of potential issues that arise related to the capital funding for BRT projects:

- Level of federal funding for the overall project is often unknown and maybe received from a number of different federal funding programs
- The project may be constructed incrementally over a period of many years and it becomes difficult to track and monitor the entire project costs and funding shares over long periods of time
- Oversight of the number of funding sources and eligibility of funding for individual project components can become very complicated.

10.3.3.2. Operating

The assumed funding formula for rail transitway operating costs is as follows:

- Calculate the net operating cost by subtracting fare revenue, advertising revenue, any allocated federal funding and any other revenue attributable to the rail facility from the total operating costs (total operating costs include Council allocations).
- For rail facilities completely within the metropolitan area, the net operating cost of the rail facility is to be paid:
 - 50% by CTIB using sales tax revenues, and
 - 50% by the state.
- For rail facilities that are partially within the metro area and partially outside the metro area, the net operating costs are to be paid:
 - 50% by CTIB and the other counties in which the transitway is geographically located based upon the percentage of transitway mileage within the CTIB or county boundary, and
 - 50% by the state.

In addition, current law, 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”. However, “state” rail operating revenues have not been defined in law. To date, the state has not supplied 50 percent of the net operating costs for Hiawatha LRT or for Northstar Rail through general fund appropriations. The Council has used transit funds, primarily MVST, to provide the 50 percent state share. In addition, Mn/DOT using Greater Minnesota Transit funds pays 50 percent of the net operating costs for the state share of Northstar Rail that is outside of the 7-county area. Sherburne County pays the 50 percent local share of the operating costs for the portion of Northstar Rail that lies outside of the metropolitan area. It is assumed that in future budget years, the Council and Mn/DOT will continue to request the 50 percent state share of rail operating costs.

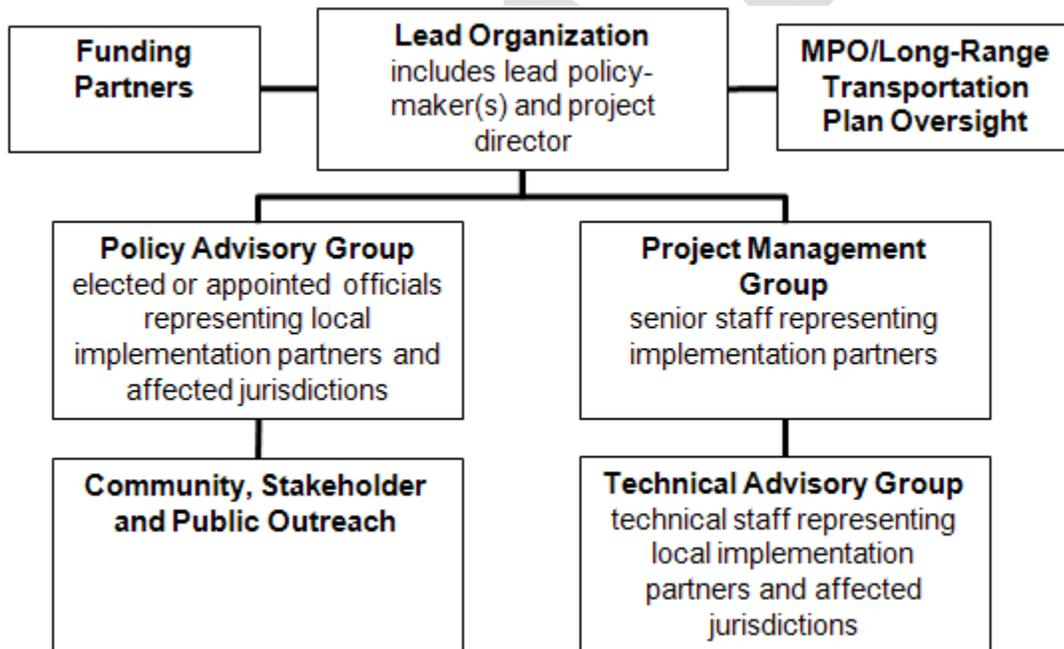
Highway and Arterial BRT do not have an agreed upon funding formula for the operating costs. To date, CTIB has agreed to fund 50 percent of the incremental operating costs for new service being implemented on both Cedar Ave BRT and I-35W South BRT. The remaining 50 percent has been paid by the Council using Regionally Allocated MVST funds. It is unclear whether this formula will be followed for all future service additions on BRT transitways.

10.4. EXISTING PROJECT LEADERSHIP AND OVERSIGHT ROLES AND RESPONSIBILITIES

The organizational structures used for several local projects during different phases of project development (Central LRT, Northstar Commuter Rail, Southwest LRT, and Cedar Avenue BRT) were reviewed to identify common functions, roles, and responsibilities along with strengths and weaknesses. Organizational charts for these projects are provided as Appendix E to this report. Based on a review of these projects, the following were identified as common functions that are required and/or beneficial for all projects. Projects in planning phases (e.g. alternatives analysis) will likely be more complex from a political perspective and may require much broader outreach to external partners and the general public, as well as a more collaborative decision-making process. Projects during construction will likely be more complex from a technical implementation and scheduling perspective and may require a more complex and expansive internal organizational structure. While the specific organizational structure may change with the phase of project development, the basic *functions* illustrated in Figure 10-3 are typically required for all projects. The *structure* for how these functions are carried out may vary depending on the phase of project development and the complexity of the project.

The leadership and oversight bodies identified in Figure 10-3 each play a role in fulfilling these responsibilities, as described in the following paragraphs.

Figure 10-3 – Typical Project Leadership and Oversight Functions



10.4.1. Funding Partners

The funding partners provide funding to plan, design, construct, operate, maintain, and expand the transitway project. Funding partners may change when a project moves from one phase of project development to another. The funding partners advise the lead agency on project decisions with substantial or potentially controversial financial implications. The funding partners have decision-making authority related to the use of funds they contribute to the project and provide advice to the lead agency on policy issues. Coordination with funding partners may be accomplished through a formal committee (e.g. a financial advisory committee), through interagency agreements, or through other agreed-upon informal or formal processes.

10.4.2. Metropolitan Planning Organization (MPO)

The MPO is a federally required organization that is responsible for working with its local partners to develop and maintain transportation plans for the metropolitan area, including a long range transportation plan. The MPO in the Twin Cities region is the Metropolitan Council and its TAB, and the long range transportation plan is the TPP. Any transitway project that receives federal, state, or CTIB funding must be consistent with the region's Transportation Policy Plan.

10.4.3. Lead Agency

Once a project has entered preliminary engineering, the lead agency may be referred to as the project sponsor, consistent with FTA terminology. The lead agency for a Commuter Rail project is the Commissioner of Transportation (Mn/DOT) per MN Statue 174.82, but the statue allows the Commissioner to delegate the authority to a public or private entity including a regional railroad authority, a joint powers board, a railroad or the Metropolitan Council per MN statue 473.4057; this leadership designation is assumed to apply after a locally preferred alternative has been selected for a corridor and adopted into the region's long-range transportation plan. For LRT, pursuant to Minn. Stat. 473.3994, subd. 1a, the Governor designates either Metropolitan Council or Mn/DOT as the responsible entity; this leadership designation is assumed to apply after a locally preferred alternative has been selected for a corridor and adopted into the TPP. Through the selection of a locally preferred alternative (LPA), the lead agency may be an RRA (if rail is still an alternative being considered), county board, joint powers board (including transit providers), city, Mn/DOT, or the Metropolitan Council. However, specific legislation does not exist for lead agency candidates prior to the selection of an LPA and the lead agency may change when a project moves from one phase of project development to another.

Primary responsibilities of the lead agency include providing overall project leadership by identifying and managing project funding, schedule, the delivery of all project tasks, and the delivery of all project leadership, oversight, coordination, and outreach. The lead agency includes one or more lead policy-maker(s) and identifies a project director who is responsible for project management, including coordination (with Mn/DOT and/or Metropolitan Council involvement) with the FTA, as well as the FRA and FHWA, if required.

The lead agency may establish interagency agreements to allow for the execution of project tasks by other project partners including, but not limited to, the provision of funding, corridor planning, design, construction, right-of-way acquisition, and utility relocation. The lead agency may establish a project office and assemble additional staff (including staff from various implementation agencies) dedicated to the project. The lead agency may also establish advisory committees (including the legislatively required corridor coordinating committee for Commuter Rail and corridor management committee for LRT) depending on the phase of development, geographic size, and complexity of a project. Examples of advisory committees include financial, community, business, land use, communications, risk management, and advocacy.

The lead agency is responsible for ensuring that ALL tasks are accomplished that are needed to implement the project and achieve full funding and all necessary project approvals. The specific responsibilities of the lead agency will vary depending on the phase of project development and the complexity of the project. The lead agency may choose to ask an implementing partner to execute some of the activities, but such relationships should be reflected in an appropriate interagency agreement (also cooperative and funding agreements, if needed). Typical responsibilities of the lead agency will include:

- Intergovernmental and public relations, including policy-making, land use coordination/transit oriented development, public information, community outreach, and interagency coordination and agreements.
- Administration and project controls, including information resources, document management, schedule management, project/change control, reporting requirements, financial oversight, grant requirements, contract administration, procurement agreements, interagency agreements, legal requirements, and risk management.
- Securing funding for each phase of project development, including grant applications, grant management, financial oversight, and reporting requirements.
- Environmental requirements, including NEPA process, environmental permits and approvals, Phase I and II (contaminated sites) investigations, Section 106 (historic/cultural resources)/State Historic Preservation Office (SHPO) requirements and agreements, and environmental mitigation and monitoring during and after construction.
- Right-of-way activities, including acquisition, easements, appraisals, agreements, property management, and mapping.
- Design and engineering activities, including civil, transit (runningway), systems, traffic, bridge, station design, vehicle maintenance facilities, streetscape design, and design coordination with other jurisdictions.
- Construction, including civil, bridge, transit (runningway), systems, streetscape, maintenance of traffic, utility relocations, stations, vehicle maintenance facilities, inspections, work zone safety, emergency response, and coordination with other jurisdictions.
- Procurement, including vehicles, fare collection systems, and other necessary materials and equipment. In the case of LRT and Commuter Rail, these responsibilities also include start-up planning and testing.
- Lead agency responsibilities do *not* include transit operations unless the lead agency is the Metropolitan Council or the designated transit operator as designated by legislation.
- While the lead agency is not directly responsible for service planning, the lead agency should coordinate with Metropolitan Council and affected suburban transit providers to ensure that the necessary transit service planning is completed. As a principal funder of transitway operations, the Metropolitan Council/Metro Transit is responsible for service planning on transitways. The Council may delegate this responsibility to a local transit provider but must approve the service plan. Transit service planning must be done in cooperation with the local transit provider(s) when the transitway impacts a suburban transit provider's jurisdiction.
- Assembly of project funding is the responsibility of the lead agency working in partnership with the other funding partners and stakeholders.

10.4.4. Policy Advisory Group/Corridor Coordinating Committee/Corridor Management Committee

The policy advisory group (which may take the form of a policy advisory committee in the AA/concept design and initial NEPA phases; the corridor coordinating committee for Commuter Rail projects in subsequent phases per Minn. Stat. 174.86, subd.5; or the corridor management committee for LRT projects in subsequent phases per Minn. Stat. 473.3994, subd.10) includes elected or appointed officials

representing each city and county through which the corridor passes, local funding and implementation partners, and others consistent with the direction set in the statutes. The policy advisory group advises the lead agency on issues with substantial or potentially controversial policy or financial implications, and provides a liaison with the elected/appointed bodies of the member organizations. The policy advisory group should operate separately from any advocacy committee or organization. Typically, the chair of the policy advisory group is the lead policy maker from the lead organization.

10.4.5. Project Management Group

The project management group consists of the project director and corresponding director-level staff having technical backgrounds from local implementation partners, or their designees. The project management group advises the project director and lead agency on issues with substantial or controversial technical, policy, or financial implications. During some phases of project development or on less controversial projects, the functions of the project management group and the technical advisory group may be combined.

10.4.6. Technical Advisory Group

The technical advisory group is made up of technical staff representing each city and county through which the corridor passes, local implementation partners, and others as appropriate to the specific transitway project. The technical advisory group advises the policy advisory group, the project management group and the lead agency on technical issues and elevates issues with policy or financial implications. Coordination with the technical advisory group may be done through a formal committee (for example, a technical advisory committee), or through other agreed-upon informal or formal processes. Typically, the chair of a technical advisory group is from the lead organization. During some phases of project development or less controversial projects, the functions of the project management group and the technical advisory group may be combined.

10.4.7. Affected Communities, Stakeholders and General Public

Coordination and consultation with the affected communities, stakeholders, and the general public may or may not be done via formal committee(s), but outreach to affected communities, key stakeholders, and the general public is always needed. Affected communities, stakeholders, and the general public advise the lead agency, policy advisory group, project management group, and technical advisory group on issues of concern, including issues with technical, policy, or financial implications. Key stakeholders include natural resource and permitting agencies, the Metropolitan Council's Transportation Accessibility Advisory Committee (TAAC) and other advisory groups, local communities, advocacy groups, neighborhood and business associations, and many others.

10.5. EXISTING TRANSIT OPERATIONS

10.5.1. Commuter Rail

BNSF is the contracted operator for the Northstar Commuter Rail. When the right to operate on the BNSF mainline was purchased, BNSF required that they be the operator for the first ten years. Due to the specifics of federal law regarding railroading, most Commuter Rail properties contract out the operations of service, either to the railroad, a private contractor or Amtrak. Metro Transit is responsible for operations, including service planning, and was selected to maintain the Commuter Rail vehicles and facilities using a competitive bidding procurement process.

10.5.2. Light-Rail Transit

LRT in the Twin Cities is managed, operated, and maintained by Metro Transit. The operation for the existing Hiawatha LRT was originally bid competitively. Legislation (Minn. Stat. Section 473.4051) now requires that all LRT in the seven-county metropolitan area be operated by Metropolitan Council/Metro Transit.

10.5.3. Bus Service

Bus service in the Twin Cities metropolitan region is provided by several entities including Metro Transit, several suburban transit providers, and a number of private contractors under contract with the Metropolitan Council and others (e.g. City of Ramsey, University of Minnesota).

10.5.3.1. Metro Transit

The Metro Transit division of Metropolitan Council operates the largest public transit system in the state, having provided about 78 million bus and rail rides in 2010. Metropolitan Council is the regional transit service provider except in those communities that have chosen to “opt-out” of the regional system (see Suburban Transit Providers section below).

10.5.3.2. Metropolitan Transportation Services

The Metropolitan Transportation Services (MTS) division of Metropolitan Council provides some transit service under contract mostly through competitive procurements. Contracted regular-route services consist primarily of commuter routes from suburbs into the central cities and suburban local routes. These services are provided by private companies under contract with the Council. In 2009, these routes carried 2.4 million passengers. MTS also provides supplemental transit service for the entire seven-county metro area, mostly through competitive contracts. These services are Metro Mobility, the Americans with Disabilities Act (ADA) service provided when/where all-day regular route transit service is offered, and Transit Link, the dial-a-ride service provided throughout the metro area where regular route transit service is not offered. MTS also contracts for subsidized commuter vanpool services.

10.5.3.3. Suburban Transit Providers

In 1981, the Legislature authorized a Metropolitan Transit Demonstration Program (Minn. Stat. 174.265) that allowed any city or town or group of cities and/or towns to test providing public transit service for communities that were not adequately served by the regional transit service existing at that time. The Legislature subsequently statutorily authorized a permanent Replacement Service Program (Minn. Stat. 473.388) continuing the demonstration program. Cities had to exercise their option to “opt-out” by the sunset date of July 1989. Twelve cities “opted out” of the regional system. These communities were allowed to retain up to 90 percent of the transit property tax levied in their communities to provide transit services themselves. Some formed joint powers agreements. There are currently six Suburban Transit Providers, which carried nearly 4.8 million riders in 2009, including:

- Minnesota Valley Transit Authority (MVTA) serving the cities of Apple Valley, Burnsville, Eagan, Rosemount, and Savage
- South West Transit (SWT) serving the cities of Chanhassen, Chaska, and Eden Prairie
- Maple Grove Transit (MGT) serving the city of Maple Grove
- Plymouth Metrolink serving the city of Plymouth

- Shakopee Transit serving the city of Shakopee
- Prior Lake Transit serving the city of Prior Lake

In 2002, as a result of a short-term opportunity provided to the cities of Minnetonka and Shorewood by the 2000 Legislature, the City of Minnetonka elected to opt-out. The city entered into an agreement with the Metropolitan Council to continue to provide service for the city because the city determined that was a more economically advantageous approach than providing the service itself. The city evaluates transit services annually.

Today, the suburban transit providers provide primarily commuter express service to downtown Minneapolis, downtown St. Paul and the University of Minnesota. All use private contractors (selected through a competitive procurement process) with the exception of Maple Grove, which contracts its express service with Metro Transit. Southwest Transit performs some aspects of the service directly (e.g., maintenance). In 2008, the suburban transit providers (excluding Minnetonka) provided 5.8 percent of the region's *total* rides but delivered 33.5 percent of the region's *express* rides.

10.5.4. Existing Metropolitan Council Contracting Process

The Metropolitan Council both directly operates transit service through Metro Transit and contracts for service. The Metropolitan Council makes the determination of whether to competitively bid services based on the amount of service to be procured, and the anticipated benefits and costs of a competitive procurement. When the Metropolitan Council determines that it is appropriate to bid out a route(s), a competitive bidding process is used to select the service operator. The suburban transit providers (within their respective jurisdictions) and/or private operators may compete for these services. In some cases, Metro Transit will also provide a cost proposal to be used to determine whether the service should be directly operated.

The following process is a typical process used for this competitive bidding process:

- A written request for proposal (RFP) is issued that documents all proposal/bid requirements including details of the services to be provided and the regional performance standards that must be met while providing the services. Council-owned buses are usually provided for the service.
- A pre-proposal conference is held and written responses to written questions are provided to the proposers.
- Written proposals and bids are submitted by the proposers.
- Proposals are reviewed by an evaluation panel composed of people who are not employed by any of the proposers. Proposals are reviewed based on evaluation criteria published in the RFP.
- Interviews may be conducted.
- If negotiations are required, they are conducted by a negotiation team that is separate from the evaluation panel.
- The recommendations of the evaluation panel are reviewed by the Council Transportation Committee.
- The Metropolitan Council makes the final selection based on recommendations of the evaluation panel and findings, conclusions and comments of the Transportation Committee.
- A contract is negotiated with the selected operator.

The RFP includes a definition of organizational conflicts and the process to be used for protests. In those cases where Metro Transit has also provided a cost proposal for the services to be provided, “walls” are established to avoid any organizational conflict of interest. The Metro Transit cost proposal is reviewed against those submitted by other providers to determine whether there is a cost advantage in directly operating the service.

Typically, the evaluation criteria will include past experience and size of services provided in relation to the services required in the RFP: driver training and selection program, management, administration, financial and technical capabilities, vehicle maintenance practices, reporting capabilities, compliance with the RFP, and cost. Cost is approximately equal in importance to the combination of the other evaluation criteria.

10.6. TRANSIT TRAVEL DEMAND FORECASTING¹

Travel demand modeling is an essential part of transportation planning for transitway investments. It allows project planners to identify and analyze travel demand markets and produces ridership estimates. Estimates of ridership are important throughout the transitway development process for project justification; in early planning stages for alternative analysis and selection; and in later planning stages for service planning, facility needs assessment, and future revenue projections. Realistic and defensible travel demand forecasts are needed at every stage of transitway planning and project development.

10.6.1. Lead Agencies and Responsibilities

The Metropolitan Council, acting in its role as the federally recognized MPO, is responsible for ensuring high quality, consistent and defensible travel demand forecasting is completed for all transportation projects in the Twin Cities region, including transitway projects. However, the Metropolitan Council itself does not typically perform the travel demand forecasting work, and it may or may not be the organization leading the development effort for a particular transportation project (lead organization). For these reasons, local partner agencies and the consulting community also bear responsibility in developing the region’s travel demand forecasts.

For every project, the Metropolitan Council is responsible for maintenance and development of the Regional Travel Demand Forecast Model (Regional Model) and for the development of forecast socio-economic data. In cases where the Metropolitan Council is a project’s lead organization, it is also responsible for directing travel demand forecasting and other work being performed by one or more consulting firms.

In cases where a local partner is the lead organization, the local partner is responsible for directing work being performed by one or more consulting firms and also for involving Metropolitan Council forecasting staff in a cooperative review during all phases of travel demand forecasting. At a minimum, this cooperative review should take place during the following phases of a study:

- Development of a proposed scope of work
- Review of proposed travel demand forecasting methodology prior to beginning any modeling work
- Review of model validation prior to proceeding with forecasts

¹ The travel forecasting section was prepared by Metropolitan Council forecasting staff Mark Filipi and Jonathan Ehrlich with assistance from Steve Wilson, SRF Consulting Group, Inc., and Steve Ruegg, Parsons Brinckerhoff.

- Review of no-build or baseline input assumptions
- Review of draft forecasts prior to their presentation to project stakeholders, including policy makers and the general public.

10.6.2. Forecasting Goals and Allocation of Effort

Travel demand forecasting should be used judiciously and may serve different purposes throughout the project development process. The goal of travel demand forecasting is to develop results that are logical, sensible, and reflective of key differences between alternatives; a perfect number will not be produced by travel demand forecasting. The development of these kinds of high quality, defensible forecasts takes time and effort.

Independent of the phase of project development, national and local experience suggests that a third to half of an overall forecasting effort is typically devoted to building and validating the base model before running or analyzing any alternatives. Furthermore, these experiences suggest that travel demand forecasting makes up a quarter to half of a particular study's overall effort. This will vary depending on the length of the corridor and the overall complexity of the project. Lead organizations and consultants should be mindful of these guidelines when scoping forecasting tasks for a study.

During feasibility studies and early phases of alternatives analyses, travel demand forecasting should be used to identify and describe the travel markets present in a potential transitway corridor and to produce high-level transit ridership demand data for proposed alternatives. A screening evaluation should be performed based on factors other than travel demand to limit the number of alternatives requiring travel demand forecast modeling. In addition, similar alternatives should be grouped to minimized potential distractions caused by operational variations that are not yet significant during this phase of project development. These approaches will allow the forecasting team to keep the development of a solid base model and identification of travel demand markets as top priorities.

In later stages of project development, the purpose of travel demand forecasting is to produce results that are unbiased across the alternatives under consideration. At this point in the process, all of the ridership markets on each alternative under consideration should be understood and correctly modeled. Modeling process and coding should be consistent across alternatives.

10.6.3. Travel Demand Forecasting Model Options

Several potential travel demand forecasting approaches might apply to transit projects in the Twin Cities, depending on a project's stage of development or scale. In general, these approaches fall into two categories: the Regional Model or rule-based market analysis tools.

The Regional Model is a multi-modal transportation forecasting model maintained in the Twin Cities region by the Metropolitan Council. Its results are based on use of socio-economic data allocated throughout the region to traffic analysis zones (TAZs) and a classic, four-step travel demand modeling process. The modeling process generates trips for each TAZ based on forecasted demographic and economic variables. The modes of travel available in the zone, also called generalized accessibility, are used to calculate trip destination by purpose. Generalized cost (including travel time) is used to calculate the mode of each trip. Transit trips are then assigned on the regional network. The Regional Model is a series of sub-models, which reflects complex interactions between travel time, accessibility, and cost across different trip purposes and market segmentations (e.g. income, auto ownership).

Rule-based market analysis tools are based on allocation of portions of existing markets based on base market data (e.g. Census Transportation Planning Package (CTTP) or Longitudinal Employer-

Household Dynamics (LEHD) data for the work market) and selected characteristics of the transit system. Several examples of rule-based market analysis tools in use today are include:

- **Aggregate Rail Ridership Forecasting (ARRF) II Model:** A rule-based model which applies a series of expected rail shares and adjustments for service characteristics to 2000 CTTTP Data. It was developed by FTA to estimate rail ridership for cities without existing rail systems, and is used as a secondary check for New Starts forecasts.
- **Metropolitan Council Park-and-Ride Demand Model:** The Metropolitan Council currently uses a rule-based model for forecasting park-and-ride demand. A series of factors (downtown workers, mode splits, etc.) developed from LEHD and surveyed parking origin data are applied to forecast population to develop future demand.
- **Transit Boardings Estimation and Simulation (TBEST) Tool:** The state of Florida has developed a comprehensive transit analysis and ridership forecasting model that is capable of simulating travel demand at the individual stop level while accounting for network connectivity, spatial and temporal accessibility, time-of-day variations, and route/stop competition and complementary effects.

Model selection is discussed in the next section. Selection of any given model approach should be made with an awareness of its strengths and limitations, as well as an understanding of the inherent uncertainty involved with any modeling effort.

10.6.4. Forecasting Process

This section of the document focuses on several key elements of the forecasting process; the goal of each forecast refinement, the selection of a model and refinement of methodology, validation of the base model, and documentation of base and future year results. This discussion is not intended to be a technical manual of forecasting practice, but to summarize key issues underlying the needed scope and complexity of the forecasting process.

10.6.4.1. Iterative Nature

Forecasts evolve over time, along with the rest of the project during the development process, as new data becomes available. Model inputs to be refined at each step include both networks and zonal data (though the socio-economic data used for forecasts needs to be the approved Metropolitan Council TAZ data for base forecasts). However, each step should use the same model (overall process, set of programs, linkage to survey data, etc.). At each refinement, ridership forecast numbers may increase or decrease. The goal of each refinement is to produce the highest quality forecasts based on known alignment data and the latest planning assumptions. It should not be to match or exceed the result of previous forecasting effort.

10.6.4.2. Model Selection

A primary consideration in selecting the travel demand forecasting approach is the type of funding for which the lead organization wants the project to be eligible. The largest sources of federal funding for transit capital projects are the New Starts, Small Starts, and Very Small Starts programs. Forecasting for projects that may become New Starts projects should use the Regional Model and be done in cooperation with Metropolitan Council forecasting staff as noted above.

While other and simpler methods of forecasting ridership exist for Small Starts, Very Small Starts, and non-New Starts projects, use of the Regional Model is recommended as a starting point for all projects. The Regional Model is the only forecasting methodology available with:

- The ability to reflect all geographic markets, including non-work markets, for a corridor
- Sensitivity to various scenarios of future development
- Sensitivity to routing, access, and operating characteristics of the transit and other transportation systems
- The ability to extend analysis beyond basic total ridership, including analyzing ridership by station/stop and to follow a trip from origin to destination, and the ability to measure trip-based user benefits.

Another benefit resulting from use of the Regional Model on all transit projects is its consistent use creates opportunity for comparison of travel demand results among different corridors in the region.

Use of the Regional Model for Small Starts, Very Small Starts, and non-New Starts projects may be more flexible in methodology than its use for New Starts projects. In particular, New Starts forecasting conditions required to ensure national comparability – such development of a baseline alternative and the requirement for a constant trip table – are not required for projects being developed and delivered outside the New Starts/Small Starts process. However, a lead organization should be aware of and acknowledge the financial and political risks created using these approaches should the project evolve into a New Starts project. Another opportunity for these kinds of projects is that when only near-term forecasts are required, it may be acceptable to use trip tables derived from transit surveys rather than the full modeling process.

There are cases where the Regional Model may not be the best analysis tool and rule-based market analyses should be performed and documented. But when using rule-based models, it should be recognized that few are accepted by FTA for use in New or Small Starts projects, and those that are tend to be as data-intensive and complex as four-step and activity-based regional forecast models. Examples of projects where a rule-based market analysis may be appropriate are:

- Park-and-ride facility planning - the Council's Park and Ride Demand Model may be a more appropriate tool
- Local route planning applications where stop spacing is smaller than the TAZ size in the Regional Model
- Projects where service changes are not anticipated to generate new ridership and benefits are intended to be estimated for existing users only

10.6.4.3. Development of Model Assumptions and Modifications

Input data used for forecasting should be based on latest planning assumptions. Land use and socio-economic forecasts for the horizon year should be based on approved Metropolitan Council municipal totals and consistent with local comprehensive plans. Highway and transit networks should be consistent with the adopted TPP. Potential changes in approved socio-economic data or TPP amendments should be discussed with Metropolitan Council staff. Service planning assumptions should be reviewed by appropriate transit agencies and Metropolitan Council staff.

It is often worthwhile, especially when there is significant uncertainty in long-range socio-economic forecasts or local transportation improvements, to perform sensitivity analysis on key inputs. This increases the number of model runs required, but can provide insights to the reasons for resulting ridership forecasts and their reasonableness.

For corridor-level analysis, expansion of the model zone system and/or sub-area zone splits are often warranted. Application of these and other modifications to the Regional Model structure or parameters should be done with care and with consultation with Council staff.

10.6.4.4. Model Validation

Forecasting results produced using the Regional Model and rule-based market analyses both require validation against observed data as model results are only meaningful in the context of observed data. The Regional Model is calibrated and validated at a regional system level. Before it can be used to produce valid and credible corridor transit forecasts, the model's reasonableness in the base year needs to be reviewed and documented in the corridor study area. This is to check for problems with the model itself, which would not be visible on a regional scale, and to check for coding errors in input files. The agency and the person or firm performing the validation should review and analyze data and results prior to submitting them to the Metropolitan Council for review. Specifically, counter-intuitive results should be explained in writing. This analysis should be documented and submitted along with the data and results.

Validation should include, but is not limited to, comparison of the modeled and observed:

- Highway and transit travel times and speeds
- Productions and attractions, and person trip tables by district and by trip purpose
- Assignment of transit trip tables from survey data compared to observed boarding data
- Base year transit assignment results by:
 - Time of day
 - Line for routes within the corridor
 - Mode of access by route and/or station
 - Type of service (express, local, LRT, BRT, etc.)

Content of validation for non-Regional Model methods may differ from that described above, although a linkage to observed data remains critical. Validation should be performed in consultation with Metropolitan Council forecasting staff.

10.6.4.5. Forecast Development

While validation of the model in the base year is a necessary step toward ensuring that the model is reasonably reflecting future conditions, it is not a guarantee. The complexity of the modeling process (and, indeed, the future itself) can make the determination of forecast reasonableness and the cause of any errors difficult. A systematic approach to developing the base future year (no build or baseline) and alternative model runs is recommended.

Differences between forecasts from one step in the process and the next, or between build alternatives, should be traceable to changes in input assumptions and be sensible. A stepped series of forecasts building up from the base year to the full future forecast is a systematic approach that is often useful to understand the dynamics of the input assumptions and their impact on the final forecast. The steps in a stepped approach could be as illustrated in Figure 10-4:

Figure 10-4 – Build-up Forecast

	Step 1- (Validation Run)	Step 2	Step 3	Step 4	Step 5 (No- Build)	Step 6 (New Starts Baseline)	Step 7 (Build)
Base Year Forecast							
Future Year Development							
Future Year Parking Costs							
Future Year Highway Congestion							
Future Year Transit System (no transitway improvement)							
Other Corridor Improvements							
Transitway Improvement							

While this approach moderately increases the number of forecast model runs required, it is a worthwhile investment of time and resources that will ensure all transitway projects in the Twin Cities are developed based on credible and defensible travel demand forecasts. The first forecast and the last three forecasts are typically produced in any normal study process.

10.6.4.6. Forecast Documentation

Forecast methodology (including zonal data changes and transitway operating parameters), validation and results should be fully documented. Draft documentation of methodology and validation should be submitted to Metropolitan Council forecasting staff before any official model runs are performed. This submittal should include electronic copies of the transit networks (validated base and build networks).

During transit forecast development, the following should be analyzed, documented in writing, and provided to Metropolitan Council forecasting staff:

- Changes to base zonal data or networks (both highway and transit)
- Specified vs. calculated headways and travel times
- Modeled person trips by purpose, by district, by time of day, and by mode
- Modeled district-to-district transit trips
- Modeled boardings in the corridor by mode, by time of day, by route or group of routes
- Modeled transfers
- Modeled screen-line volumes

- Modeled passenger loads by route, mode, and time-of-day and peak loads
- Forecast ridership by access and egress modes by route and by station
- Passenger and vehicle hours/miles of service

The agency and the person or firm producing the forecasts should review and analyze data and results prior to submitting them to the Metropolitan Council for review. Specifically, counter-intuitive results should be explained in writing. This analysis should be documented and submitted along with the data and results. When forecasting is complete, electronic copies of the model developed and all data should be sent to the Metropolitan Council for preservation.

10.6.5. Presentation of Results

All travel demand forecasts are derived from models of future conditions based on uncertain assumptions and limited base data. All forecasts contain risk and uncertainty. It is often appropriate to clearly communicate this uncertainty when presenting results. If the forecast involves multiple alternatives, communication of uncertainty may help in evaluating the significance of differences in results between alternatives.

No performance measure, including ridership, can be fully evaluated without the presence of a no-build alternative for comparison. The no-build alternative should be forecasted using the same validated model or alternate methodology as the comparison alternative (for FTA New Starts projects, comparison to the New Starts Baseline is also required).

10.6.5.1. Transitway Ridership Definition

It is useful when comparing different potential transitways in the region to have a set of metrics with consistent definitions. In particular, *ridership* can be a difficult metric to apply in different settings, given the potential complexity of connecting, parallel, and feeder service and the differing route structures of LRT, Commuter Rail, and BRT service.

For the purposes of regional comparison, ridership should be defined as:

LRT: Rides taken using the LRT service

Commuter Rail: Rides taken using the Commuter Rail service

BRT: Rides taken using the BRT station-to-station services

Rides taken on local or express services that utilize a defined transitway runningway for at least 50 percent of the route and use at least one non-downtown transitway station

Care should be taken to count (one-way) rides, to avoid double-counting transfers, and to exclude any rides provided on transitway feeder services that do not travel on the transitway from the transitway ridership total. Express bus ridership that does not primarily travel on the transitway runningway or does not serve at least one non-downtown station on the transitway should not be counted. Ridership on bus routes that are primarily feeder service or on parallel routes that do not use the transitway runningway should not be counted. Rides on local service using an Arterial BRT runningway should be counted.

10.6.5.2. Other Performance Measures

No single performance measure can fully represent the benefits of transitway service or serve as a basis for comparison between corridors or alternatives in all cases. Differing performance measures may be

warranted for different types of projects (a new transitway vs. a new station). Other potential measures that should be evaluated are new transit riders, existing riders that benefit from a transitway, total corridor riders, passenger miles per mile, total linked and unlinked trips, transit travel time saved and total user benefits.

10.7. CAPITAL INVESTMENT CRITERIA

The FTA has implemented a rigorous evaluation process for major transit investment projects that are federally funded through the New Starts or Small Starts programs. Previously planned Commuter Rail and LRT projects in this region have followed these processes. However, current BRT projects have not utilized New Starts/Small Starts funding and, thus, have not been required to follow the federal guidelines. There are no current regional guidelines establishing capital investment criteria for projects which are non-New Starts funded projects. CTIB has adopted a Transit Investment Framework which includes criteria that guide its investment priorities and decisions.

10.7.1. New Starts Evaluation Criteria

New Starts projects must undergo evaluation by the FTA throughout the entire project development process. Based on these evaluations, the FTA decides, with Congressional review, whether a project should move forward to the next phase of project development. The criteria used for evaluating New Starts projects (see Figure 10-5) include the following project justification criteria²:

- Mobility improvements – measured by the number of transit trips using the project, their travel-time benefits per project passenger mile, number of trips made by transit dependent riders using the project and their user benefits per project passenger mile, and the share of user benefits received by transit dependent riders compared to the share of transit dependents in the region
- Environmental benefits – measured by Environmental Protection Agency (EPA) air quality designation
- Cost-effectiveness – measured as the cost per hour of travel time saved (often referred to as the cost-effectiveness index)
- Operating efficiencies – measured by system operating cost per passenger mile
- Transit supportive land use – measured by existing population and employment within ½ mile of station areas
- Economic development effects – measured by transit-supportive plans and policies in place and the performance and impact of those policies
- Other – a number of optional factors, including environmental justice considerations and equity issues, opportunities for increased access to employment for low-income persons, and others

The FTA also takes into consideration the local funding commitment. Based on a combination of the project justification and local funding commitment scores, FTA then rates projects as high, medium-high, medium, medium-low or low.

² Subject to change. Source: Reporting Instructions for the Section 5309 New Starts Criteria, US DOT FTA, July 2010.

10.7.2. Small Starts Evaluation Criteria

The FTA evaluates Small Starts project using the following criteria³:

- Cost-effectiveness – measured as incremental cost per hour of transportation system user benefits as compared to the baseline alternative (using opening year forecast)
- Transit supportive land use – measured by existing population and employment within ½ mile of station areas
- Economic development effects – measured by transit-supportive plans and policies in place and the performance and impact of those policies
- Other factors – measured by economic development benefits and use of congestion pricing

The FTA also takes into consideration the local funding commitment. The project will receive a medium rating if the project sponsor can demonstrate a reasonable plan to secure the local funding share, the agency is in reasonably good financial condition, and the additional operating and maintenance costs of the project are less than five percent of the agency's operating budget.

Figure 10-5 – Federal Project Justification Criteria for Transitway Projects

Evaluation Criteria	Measures	New Starts	Small Starts	Very Small Starts
Mobility Improvements	<ul style="list-style-type: none"> • Number of Transit Trips • User benefits per project passenger mile • Number of transit dependents using the project • Transit dependent user benefits per passenger mile • Share of transit dependent riders compared to share of transit dependent riders in the region 	Yes	Yes	3,000/day existing riders
Environmental Benefits	<ul style="list-style-type: none"> • EPA air quality designation 	Yes	No	No
Cost-Effectiveness	<ul style="list-style-type: none"> • Incremental cost per hour of transportation system user benefit between the baseline and build alternatives 	Yes (2030)	Yes (Opening Year)	Automatic medium rating
Operating Efficiencies	<ul style="list-style-type: none"> • Incremental difference in system-wide operating cost per passenger mile 	Yes	<5% of total operating	<5% of total operating costs

³ Subject to change. Source: Reporting Instructions for the Section 5309 Small Starts Criteria, US DOT FTA, July 2010.

	between the build and baseline alternatives		cost	
Transit Supportive Land Use	<ul style="list-style-type: none"> Existing population and employment within ½ mile of station areas 	Yes	Yes	Automatic medium rating
Economic Development Effects	<ul style="list-style-type: none"> Transit supportive plans and policies Performance & impacts of policies 	Yes	Yes	Automatic medium rating
Other	<ul style="list-style-type: none"> Environmental justice considerations and equity issues Opportunities for increased access to employment for low-income persons 	Yes	Yes	Yes

10.7.3. Very Small Starts Evaluation Criteria

The FTA uses a very simplified evaluation process for Very Small Starts projects. A Very Small Starts project must be a bus, rail or ferry project, and it must contain the following features: transit stations, signal priority, low floor/level boarding vehicles, special branding, frequencies of at least 10 min peak/15 min off peak, service at least 14 hours per day, and an existing ridership of at least 3,000 per day. The total project cost must be less than \$50 million and must cost less than \$3 million per mile (excluding vehicles). If it meets these conditions, the project is given an automatic medium rating for cost-effectiveness and land use/economic development. The project will receive a medium rating for local financial commitment if the project sponsor can demonstrate that funds are available for the local share, the agency is in reasonably good financial condition, and the additional operating and maintenance cost of the project will be less than 5 percent of the agency's operating budget.

10.7.4. Non- New/Small Starts Projects

There are no existing criteria for the evaluation of non-New/Small/Very Small Starts projects in the Twin Cities. To date, most such projects have used measures similar to the above described federal evaluation criteria to compare alternatives and make investment decisions. In many cases, the federal process is used to ensure that the project meets federal funding requirements in the event that federal funding is sought at a future stage in the project development process.

As a result, all regional transitway projects should consider both qualitative and quantitative factors for both opening year and the planning horizon year. These factors are presented in the Regional Transitway Guidelines.

10.8. PROJECT DEVELOPMENT, LEADERSHIP, AND OVERSIGHT GUIDELINES

After reviewing relevant background information and existing conditions and gathering input from the technical committees, the Transitway Guidelines Advisory Committee, and Metropolitan Council and Metro Transit senior staff the following Project Development, Leadership and Oversight (PDLO) Guidelines are recommended for adoption. It is important to note that the committee worked to ensure these guidelines are not overly prescriptive, but rather provide a consistent basis for planning, designing, constructing, and operating Commuter Rail, LRT, and BRT services in the metropolitan area. The guidelines should be considered collectively when making project development, leadership, and oversight decisions for transitways. The guidelines are summarized and discussed below.

10.8.1. Project Development Process

State and federal funds may only be used for transitway development if the transitway is part of the regional Transportation Policy Plan (TPP) adopted by the Metropolitan Council.

A project development process similar to the federally required processes for New Starts or Small Starts/Very Small Starts should be used for all major transitway capital investment projects to ensure that the project will be eligible for federal funding should federal funding be needed or become available later in the project development process.

The locally preferred alternative (LPA) is reviewed and approved by the Metropolitan Council and amended into the TPP.

All transitway projects need to be developed using a planning and design process that carefully evaluates alternatives and weighs costs, benefits, and impacts. Many agencies and stakeholders will need to be coordinated throughout the project development process. The complexity of the process and level of National Environmental Protection Act (NEPA)/Minnesota Environmental Policy Act (MEPA) review should be reflective of the size, complexity, and any potential controversy of the project. While similar evaluation criteria and a similar project development process may be used, FTA review and involvement is only required when federal funding is being used for the project.

The roles and responsibilities can change throughout a transitway project development process, but it is important to ensure that the process that is followed is consistent with any existing or future funding source requirements. For example, although local municipalities (e.g. regional railroad authority, city) often initiate projects in the early phases, such as scoping or alternative analysis, and often do so with local funds, a consistent project development process must be used to qualify a project for New Starts or Small Starts/Very Small Starts funding.

10.8.2. Coordination of Agencies and Stakeholders

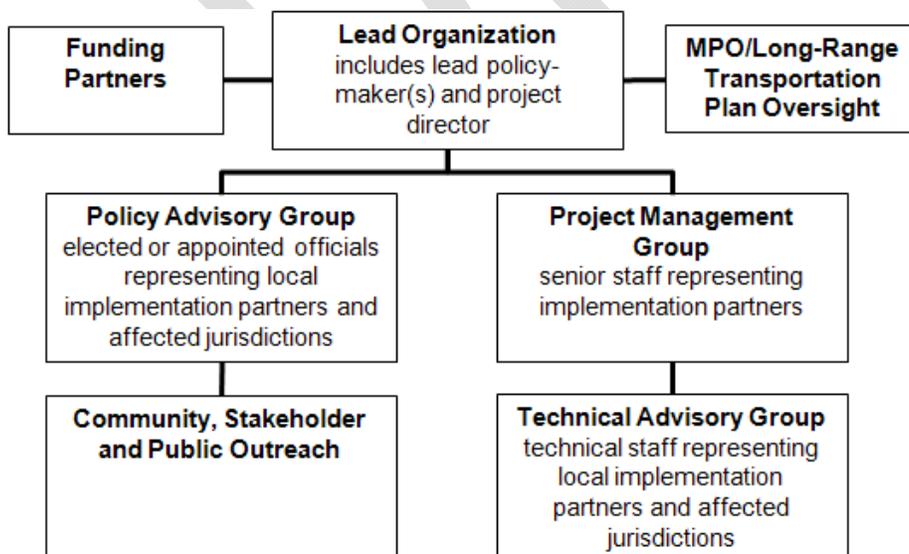
All major transitway capital investment projects should have a coordination structure that reflects the following functions:

- *Coordination with, and reporting to, the funding partners*
- *Coordination with the Metropolitan Council and Mn/DOT*
- *A clearly identified lead agency determined by Metropolitan Council with input from funding partners and the Commissioner of Transportation*
- *Coordination with the elected/appointed officials of the implementation partners (policy advisory group) (for design and construction of LRT projects, Minn. Stat. 473.3994 Subd. 10 requires a corridor management committee)*
- *Coordination with the management and technical staff of the implementation partners (technical advisory group and/or project management group)*
- *Effective outreach to, and involvement of, external stakeholders and the general public*

When both a county that is a member of the Counties Transit Improvement Board (CTIB) and CTIB are represented on the policy advisory group, the lead agency should request that CTIB appoint a member to the policy advisory group who represents an area outside the geographic boundaries of the transitway project.

All transitway projects will likely have multiple agencies and stakeholders involved in planning, design, and construction. Therefore, a clearly defined means of interagency coordination, stakeholder outreach, and decision-making will be needed. Figure 10-6 illustrates typical project leadership and oversight roles and relationships in a transitway development process. Each project and each stage in the project development process may have different needs for coordination and interagency involvement. For example, it is useful to have an interagency marketing/communications team that supports start-up and ongoing operations. It is also often useful to have an interagency team that coordinates land development and land use planning activities.

Figure 10-6 – Typical Project Leadership and Oversight Functions



10.8.3. Lead Agency Candidates and Responsibilities

The lead agency is an important component of project delivery and coordination in all phases of transitway implementation, even when not specified by legislation. The following guidelines relate to the lead agency candidates and responsibilities:

- *There must be a clearly identified lead agency for a major transitway capital investment project and this agency must accept all of the responsibilities for delivering the transitway project. The lead agency has the option of delegating responsibilities to other agencies/entities but is responsible for ensuring that all necessary tasks are accomplished. The lead agency may change as a project progresses from one phase to the next.*
- *When multiple agencies are involved in transitway development, interagency agreements (or other similar formal agreements) are strongly recommended to clearly identify roles, responsibilities, authorities, deadlines, budgets, and funding sources.*
- *Mn/DOT is the lead agency for implementing Commuter Rail following selection of the LPA (Mn/DOT may delegate this authority). (Minn. Stat. 174.82)*
- *Mn/DOT or the Metropolitan Council/Metro Transit, at the discretion of the governor, is the lead agency for implementing light rail following selection of the LPA. (Minn. Stat. 473.3994, subd. 1a)*
- *The Metropolitan Council/Metro Transit is the preferred lead agency for implementing BRT following selection of the LPA but, with Council agreement, the lead agency may be a joint powers board, a county, or a city. Mn/DOT may be the lead agency on BRT projects requiring construction in trunk highway right of way.*
- *Mn/DOT, regional railroad authorities, joint powers boards, counties, cities or the Metropolitan Council may be the lead agency for transitway capital projects prior to the selection of a LPA.*

There are no legal precedents governing lead agency candidates for certain aspects of transitway development, including planning and BRT implementation. This was identified as a project implementation gap that should be addressed by the Guidelines given the importance of the role of the lead agency in project delivery and coordination. The lead agencies for Commuter Rail and LRT following selection of the LPA are established by legislation. For BRT or for earlier stages in the project development process for LRT and/or Commuter Rail, the Metropolitan Council and Mn/DOT are responsible for determining the lead agency in consultation with funding partners. Metro Council has the statutory responsibility for Commuter Rail development in a corridor after commencement of revenue service, including planning, design, acquisition, construction, and equipping of any improvement of a line. The responsibilities associated with the role of lead agency are significant and the agency desiring to assume this role should understand the full range of these responsibilities and the cost and staffing requirements necessary to fulfill this role. Coordination with all affected agencies is required and many tasks may be accomplished by partner agencies through interagency agreements.

10.8.4. Financial Management Responsibilities

The lead agency is responsible for financial management of the transitway project including:

- *Securing funds*
- *Financial oversight and reporting*
- *Financial planning and budgeting*
- *Interagency coordination*
- *Accounting*
- *Cost estimating and cost control*
- *Any other aspects of financial management*

Financial management is extremely important to the success of any project and is often very complex on transitway projects due to exacting federal requirements and multiple funding sources and funding agencies. It is the responsibility of the lead agency to manage all financial aspects of the project or to enlist the assistance of partner agencies to provide these services through interagency agreements. Some examples of the most important elements of financial management include:

- Seeking funding for the project, including preparing and submitting grant applications
- Understanding and implementing all requirements of funding agencies including securing grant match funds, monitoring and oversight, providing required reporting, ensuring legal requirements are met, and any other expectations of the funding agencies
- Insuring that all legal requirements and funding agency requirements are met when procuring services, vehicles, materials, etc...
- Completing timely and accurate financial planning including the preparation of financial management plans that may be required by funding agencies
- Completing timely and accurate cost estimates for construction, procurement, and operations and maintenance
- Managing all accounting functions including budgeting and cash flow management
- Assessing financial risk and identifying strategies for addressing those risks
- Monitoring and managing costs to stay within budgets

10.8.5. Transit Operator Selection

The following Guidelines relate to the selection of the transit operator for a transitway:

- *The transit operator for Commuter Rail located in whole or in part in the metropolitan area will be Metro Transit. (Minn. Stat. 473.4057 subd. 1)*
- *Metro Transit will be the transit operator for all LRT in the metropolitan area. (Minn. Stat. 473.4051 subd. 1)*
- *Metro Transit and Suburban Transit Providers will continue to operate BRT express services within their respective jurisdictions.*
- *Metropolitan Council will determine the transit operator for highway BRT station-to-station services with input from funding partners. The Metropolitan Council will directly operate these routes through Metro Transit, bid them competitively or award a sole source contract in the case of a Congestion Mitigation and Air Quality (CMAQ) grant or other special circumstances.*
- *Metro Transit will operate Arterial BRT within their respective jurisdiction.*

According to the agreed-upon funding formula for new rail and Highway BRT service, Highway BRT station-to-station service in both the Cedar Avenue and the I-35W South corridors will be funded by CTIB (50 percent) and Metropolitan Council (50 percent). Because Highway BRT services are not wholly within a Suburban Transit Provider's jurisdiction; and they are funded with regional funds; the CTIB has deferred transit operations to the Metropolitan Council. Therefore, the responsibility for the selection of a transit operator rests with the Metropolitan Council. The Metropolitan Council makes the determination of whether to competitively bid services based on the amount of service to be procured, and the anticipated benefits and costs of a competitive procurement, or to award a sole source contract.

10.8.6. Transit Service Planning

Metropolitan Council/Metro Transit will lead or delegate transit service planning for transitway service in the region, including Commuter Rail, LRT, Highway BRT station-to station, and Arterial BRT services.

Metro Transit and Suburban Transit Providers will continue service planning for BRT express and local services within their respective jurisdictions.

Metropolitan Council/Metro Transit and the affected suburban transit provider(s) must coordinate closely when planning and operating services in BRT corridors to ensure that local, express and station-to-station services are well coordinated, not duplicative, transfers are timely, and stations are used efficiently.

Infrastructure corridor planning remains a local responsibility through selection of a LPA. After LPA selection, the lead agency is responsible for coordinating with the appropriate service providers for service planning to support facility planning. Close coordination between service and facility planning is critical for determining appropriate station locations and sizes and other facility needs within individual corridors.

10.8.7. Transitway Travel Demand Forecasting

The following Guidelines relate to Travel Demand Forecasting for transitway projects:

- *The Regional Transit Demand Forecast Model, maintained by the Metropolitan Council, is the preferred method for developing transitway travel demand forecasts. Exceptions should be justified and documented by the requesting agency and approved by Metropolitan Council forecasting staff.*
- *A project's lead organization is responsible for directing travel demand forecasting and other work being performed by one or more consulting firms and for involving Metropolitan Council forecasting staff. Metropolitan Council forecasting staff has oversight responsibility for ensuring quality and defensible ridership forecasting. Council staff should be consulted during all stages of forecast development for any phase of transitway development.*
- *The travel demand forecasting model should be validated, on a corridor level, against observed data before using it for forecasting. Forecasting input data for the base model should be based on the latest planning assumptions including:*
 - *The most recent adopted socio-economic data*
 - *Highway and transit networks in the adopted Transportation Policy Plan*
- *The presentation of ridership for transitway projects is an important aspect of overall project delivery, including presentation to decision-makers and the public. It is important that ridership results are presented in a manner that is clear and consistent, regardless of mode. At a minimum, the following ridership results should be separately presented for each mode:*
 - *LRT: Rides taken using the LRT service*
 - *Commuter Rail: Rides taken using the Commuter Rail service*
 - *BRT:*
 - *Rides taken using the BRT station-to-station services*
 - *Rides taken on local or express services that utilize a defined transitway runningway for at least 50 percent of the route and use at least one non-downtown transitway station*
 - *Local feeder service ridership should not be included in any transitway ridership figures.*

The Regional Transit Demand Forecast Model (Regional Model) is the preferred method for travel forecasting because the model:

- Reflects all geographic and trip markets
- Is sensitive to future development scenarios
- Can analyze trips by station/stop
- Can follow trips from origin to destination
- Can measure trip-based user benefits

There may be situations where a rule-based modeling tool is appropriate to use but the use of such models should be thought through carefully and the reasons for using a rule-based model should be justified and documented.

Consultation with Metropolitan Council staff should include, at a minimum, development of a proposed scope of work, review of methodology before any modeling work begins, review of no-build or baseline input assumptions, review of model validation prior to proceeding with forecasts, and review of draft forecasts prior to their presentation to project stakeholders, including policy makers and the general public. This consultation is meant to be part of a collaborative process. Staff will provide current guidance on the use and validation of the Regional Model. Metropolitan Council staff will have a Travel Demand Forecast User Guide available upon request, which can serve as a starting point for the forecasting process and consultation. When forecasting is complete, electronic copies of the developed model and all data should be sent to the Metropolitan Council for preservation.

Land use and socio-economic forecasts for the horizon year should be based on approved Metropolitan Council municipal totals and should be consistent with the latest planning assumptions and local comprehensive plans, including comprehensive plan amendments. Highway and transit networks should be consistent with the adopted TPP. Sensitivity tests of input data are worthwhile but not required. Service planning assumptions should be reviewed by appropriate transit agencies and Metropolitan Council staff

The ridership definition is intended to ensure that transitway ridership is calculated consistently for all transitways in the region. This definition includes all riders that benefit significantly from the transitway investment while ensuring that riders are not double-counted between feeder service and transitway service and that riders that do not benefit significantly from the transitway investment are excluded. The FTA does not have a formal definition of ridership, since their measures primarily look at system-wide impact and user benefit calculations. However, the definition of utilizing the transitway runningway for at least 50 percent of the route is structured after FTA's definition of a fixed-guideway for major capital investment funding eligibility.

10.8.8. Capital Investment Criteria

Any major transitway investment project that will seek federal funding through the federal New Starts, Small Starts, or Very Small Starts programs must use the federal process for the evaluation of capital investment.

Evaluation of all major transitway investment projects, whether funded with federal, state or regional funds, should consider at least the following quantitative factors for both opening year and the planning horizon year:

- *Ridership including total riders, new transit riders, and number of transit dependent riders*
- *Land use as measured by population, employment, and affordable housing units within ½ mile of stations*
- *Cost-effectiveness including annualized capital and operating cost/ride, passengers/service mile, passenger miles/service mile*
- *Transit travel-time savings over existing local bus service*
- *Congestion as measured by congested roadway miles in corridor*

Evaluation of all transitway projects should consider at least the following qualitative factors for both opening year and the planning horizon year:

- *Environmental benefits and impacts, including environmental justice considerations*
- *Economic development impacts*
- *Land use benefits and impacts*
- *Livability*
- *Sustainability*
- *Equity*
- *Local support*

10.8.9. Deviations from Transitway Guidelines

Deviations from the Regional Transitway Guidelines that have significant cost and/or operational implications should trigger discussion with funding partners (Metropolitan Council, Mn/DOT, CTIB, and Regional Railroad Authorities).

In general, the Regional Transitway Guidelines are intended to establish a baseline for transitway facilities and services while providing flexibility to lead agencies in managing the broad array of issues that must be balanced during the planning and design process. The Guidelines provide parameters for decisions that have considerable flexibility for planning, designing, building and operating regional transitways. Some of the guidance sets clear thresholds for certain decisions, and there may be times when greater flexibility is needed than is found in the guidance. Issues that arise which have significant cost and/or operation implications should trigger discussion and negotiation between the funding partners, including Metropolitan Council, CTIB and others as appropriate and the proposing entity or lead agency. The lead organization, in consultation with technical and policy advisory groups, is

responsible for initiating discussions and negotiations with the funding partners as to the need for a deviation and whether a deviation is warranted.

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