# Introduction

The Federal Transit Administration (FTA; the lead federal agency) and the Metropolitan Council (Council; the project sponsor) prepared this Supplemental Final Environmental Impact Statement (EIS) and Draft Section 4(f) and 6(f) Evaluation that describes the benefits and impacts of the METRO Blue Line Light Rail Extension Project (Project) in Hennepin County, Minnesota.

The Project was evaluated in the Supplemental Draft EIS made available to stakeholders, agencies, and the public for review and comment during a 45-day public comment period between June 21 and August 6, 2024. The Supplemental Draft EIS evaluated the preliminary impacts from the modified alignment (referred to in the Supplemental Draft EIS and this Supplemental Final EIS as the "Project Alignment") in contrast to the 2016 Alignment and identified impacts that were not analyzed in the 2016 Final EIS/Section 4(f) Evaluation and Record of Decision (ROD).

# This Supplemental Final EIS:

- 1. Summarizes and evaluates the changes to the Project since the 2024 publication of the Supplemental Draft
- 2. Responds to substantive comments received on the Supplemental Draft EIS and updates sections of the Supplemental Draft EIS in response to comments;
- 3. Updates supporting information including ridership projections, traffic analysis, and noise and vibration impact assessments; and
- 4. Identifies the mitigation measures and commitments that the Council is making as part of the Project to address Project impacts.

Key changes to the Project's design that are addressed in this Supplemental Final EIS compared to the Build Alternative and the Project Alignment evaluated in the Supplemental Draft EIS are listed below and presented in Table I-1:

- New light rail transit (LRT) station at Washington Ave and W Broadway Ave added in response to City of Minneapolis and stakeholder community input. This LRT station would further integrate the communities to the east and west of Interstate 94 (I-94) and provide development opportunities in an underdeveloped industrial area.
- Downtown Robbinsdale Station location is finalized north of 40th Ave after Municipal Consent. This station was evaluated to be located either south or north of 40th Ave in the Supplemental Draft EIS.
- Advancement of the design to reduce property acquisition requirements, improve property access, and incorporate safety elements and other mitigation measures requested by the Cities of Brooklyn Park, Crystal, Robbinsdale, and Minneapolis.
- Additional design details based on the advancement from 15 percent design.
- Design changes based on city input contained in Municipal Consent Resolutions (Actions taken by the Cities of Brooklyn Park, Crystal, Robbinsdale, and Minneapolis approving the Project Design in September and October 2024).

FTA and the Council received over 1,000 comments on the Supplemental Draft EIS. These included more than 250 individual comment letters, emails, voicemails, submissions via an electronic comment form, and submissions via oral testimony at public hearings, many of which contain several topics. The comments received and the Council's responses to those comments are presented in Appendix CR in this Supplemental Final EIS. Relevant updates have been incorporated into this Supplemental Final EIS in response to the public comments and to reflect the current engineering design, updated information, and mitigation commitments. These updates are incorporated in sections that maintain the same numbering and headings as the Supplemental Draft EIS to the extent possible. Appendices to the Supplemental Draft EIS that presented analysis for alternatives and design options not carried

forward in the Build Alternative are incorporated by reference in this Supplemental Final EIS. The Supplemental Draft EIS is available online at <a href="https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-">https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-</a> <u>Line-Extension/Environmental/Supplemental-Draft-EIS.aspx.</u>

Table I-1 Summary of Revisions from the Supplemental Draft EIS

EIS Section	Title	Primary Revisions			
Chapter 1	Purpose and Need	Updates based on comments submitted on the Supplemental Draft EIS, more current data since fall 2023, and inclusion of a new LRT station in the City of Minneapolis.			
Chapter 2	Alternatives	Updates based on comments submitted on the Supplementa Draft EIS, inclusion of a new LRT station in the City of Minneapolis, additional design details from the advancement from 15 percent design.			
Chapter 3	Transportation	Traffic Analysis updates to reflect design changes, to address Federal Highway Administration (FHWA) Interstate Access Modification Request (IAMR) requirements, and to address changes to the horizon year from 2040 to 2050. Additional design details based on the advancement from 15 percent design and design changes based on city input contained in Municipal Consent Resolutions.			
Chapter 4	Community and Social Analysis	Updates based on comments submitted on the Supplemental Draft EIS, inclusion of a new LRT station in the City of Minneapolis, additional design details from the advancement from 15 percent design and design changes resulting from Municipal Consent Resolutions.			
Chapter 5	Physical and Environmental Analysis	Updates based on comments submitted on the Supplemental Draft EIS, inclusion of a new LRT station in the City of Minneapolis, additional design details from the advancement from 15 percent design and design changes resulting from Municipal Consent Resolutions.			
Chapter 6	Cumulative Potential Effects (per Minnesota Administrative Rules [MN Rules] §4410) Reasonably Foreseeable Trends and Future Plans	Indirect and Cumulative Impacts of updated chapters and the inclusion of a new LRT station in the City of Minneapolis.			
Chapter 7	Environmental Justice analysis has been removed	Executive Orders 12898 and 14096 have been rescinded since the publication of the Supplementary Draft EIS and as such, consideration of subject matter mandated by these rescinded Executive Orders is no longer required.			
Chapter 8	Summary of Supplemental Draft Section 4(f) and 6(f)	Updates based on comments submitted on the Supplemental Draft EIS and Section 4(f) and 6(f) comment period.			
Chapter 9	Consultation and Coordination	Updates based on comments submitted on the Supplemental Draft EIS and more current data since fall 2023.			

EIS Section	Title	Primary Revisions
Chapter 10	Financial Analysis	Updates based on comments submitted on the Supplemental Draft EIS, more current data since fall 2023, and design changes being incorporated based on the input received during the Municipal Consent Process including addition of W Broadway Station in the City of Minneapolis.
Appendix A-E	Evaluation of Alternatives	Updates based on comments submitted on the Supplemental Draft EIS, inclusion of a new LRT station in the City of Minneapolis, additional design details from the advancement from 15 percent design and design changes resulting from Municipal Consent Resolutions.

# **Purpose and Need**

This chapter describes the purpose of and the need for the Project. It also provides an overview of the Project, including its location and setting within the local communities and the region, and the context of previous planning studies.

### 1.1 **Project Purpose and Need**

In 2016, FTA published a Final EIS and ROD for the Project based on the preferred Project alignment at that time. The 2016 preferred Project alignment (2016 Alignment) extended approximately 13.4 miles from Downtown Minneapolis generally west along Trunk Highway (TH) 55 and then northwest near Theodore Wirth Regional Park, serving North Minneapolis and the Cities of Golden Valley, Robbinsdale, Crystal, and Brooklyn Park. That alignment included 11 new light rail stations, approximately 1,670 park-and-ride spaces (565 are existing), accommodations for drop-off and bicycle and pedestrian access, one operations and maintenance facility (OMF), and associated LRT equipment. Eight miles of the 2016 Alignment were located in a freight rail carrier right-of-way from TH 55 in the City of Minneapolis (portions of which are referred to as Olson Memorial Highway in the Cities of Minneapolis and Golden Valley) and 73rd Ave N in the City of Brooklyn Park. As discussed in the sections below, it became necessary to identify an alternative alignment that provides transit service to the Cities of Brooklyn Park, Crystal, Robbinsdale, and Minneapolis while still providing the opportunity to meet the Project purpose and need, as documented in the 2016 Final EIS. The alignment modification was necessary for only the freight rail section of the Project; therefore, the Project termini did not change. The Project Alignment was developed specifically to be consistent with the original Project purpose and need. Therefore, the purpose and need in this Supplemental Final EIS remains consistent with the purpose and need identified in the Final EIS published for the 2016 Alignment, with key updates as discussed below.

The following purpose statement defines the fundamental reasons why the Project is being proposed:

The purpose of the Project is to provide transit service which will satisfy the long-term regional mobility and accessibility needs for businesses and the traveling public.

In 2016, the Project intended to address the underlying causes of the defined "needs" as stated below:

The Project is needed to effectively address long-term regional transit mobility and local accessibility needs while providing efficient, travel-time-competitive transit service that supports economic development goals and objectives of local, regional, and statewide plans.

The Project need has been updated based on new sociodemographic data and engagement with the communities, and in response to the communities' interests.

The five factors informing the Project need are listed below and described in more detail in Chapter 1, Section 1.4:

- Factor 1: Growing Travel Demand
- Factor 2: Reducing Local Pollution with a Balanced Transportation Network
- Factor 3: Increased Reliance on Transit
- Factor 4: Changing Travel Patterns from the COVID-19 Pandemic
- Factor 5: Regional Objectives for Growth

In this document, the purpose and need statement is confirmed based on input and to ensure that the need is articulated in a way that reflects the current understanding of the communities in the Project area. Building on this enhanced understanding, the Project would invest in an area that has experienced a history of disinvestment, provide improved connectivity and access for communities in the Project area, and advance local and regional goals.

### 1.2 **Project Description**

The Project is proposed to run 13.4 miles generally northwest from Downtown Minneapolis, connecting North Minneapolis, the City of Robbinsdale, the City of Crystal, the City of Brooklyn Park, and surrounding communities to new opportunities and destinations. This critical piece of the transit system would greatly improve mobility and access in the highly traveled northwest area of the Twin Cities metropolitan area, including communities with high numbers of households who rely on transit to get where they need to go every day.

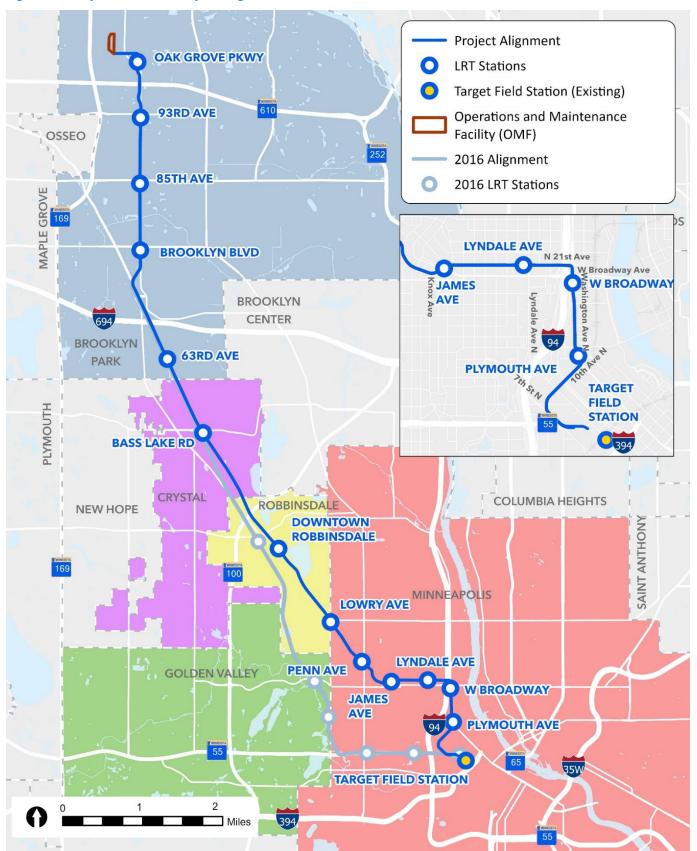
METRO Blue Line LRT currently terminates in Downtown Minneapolis, and the Project would extend LRT to terminate in the City of Brooklyn Park. The Project would provide a one-seat ride to Minneapolis-St. Paul International Airport, the Mall of America, and many other key destinations and connections along the way. While integrating with other existing and planned transitways, the Project and its 13 LRT stations would connect people to jobs, education, healthcare, culture, and recreation. By coordinating this generational transit investment with strong strategies to build community prosperity and minimize displacement, the Project would help reduce regional disparities and bring transformative benefits to current Project area residents and future generations. The Project components would include LRT tracks, LRT stations, bridges, a relocated transit center, pedestrian bridges, bike facilities, and park-and-ride facilities.

#### 1.2.1 **Project Location**

The Project would be located in Hennepin County and is an extension of the existing METRO Blue Line LRT that would serve a broader area, including the communities of Golden Valley, New Hope, Brooklyn Center, Maple Grove, Osseo, Champlin, and Dayton while passing through and directly serving the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. Figure 1-1 shows the Project area. Key transportation facilities within the Project area include the highways shown as well as W Broadway Ave in the City of Brooklyn Park (County State Aid Highway [CSAH] 103), Starlite Transit Center, Crystal Airport, County Road (CR) 81, Robbinsdale Transit Center, W Broadway Ave in the City of Minneapolis, N 21st Ave, METRO C Line, Lyndale Ave N, Washington Ave N, and Target Field Station.

The Project Alignment is also depicted in Figure 1-1 and is defined as the Project in its linear configuration, including the LRT stations, the guideway (LRT tracks and catenary system), and all other components necessary to provide for a fully functional LRT project (see the summary list of Project components in Chapter 1, Section 1.2 and a complete description in greater detail in Chapter 2).

**Figure 1-1 Project Area and Project Alignment** 



### 1.2.2 **Project Setting**

The character of the Project area transitions from the dense urban grid in Downtown Minneapolis to a moderatelydense urban setting in North Minneapolis divided by I-94, to a less dense suburban setting starting in the City of Robbinsdale and extending through the City of Brooklyn Park at the north end of the Project Alignment. The Project area includes a variety of land use patterns that have been influenced by the transportation-oriented history of the Project area. Low-density, auto-oriented land uses have heavily influenced existing development patterns in the Project area, which primarily reflect highway-oriented and traditional suburban development forms.

Development in North Minneapolis and the City of Robbinsdale reflects the history of W Broadway Ave as a commercial streetcar corridor, with portions of auto-oriented commercial activity developed more recently. Residential neighborhoods are also located along the Project Alignment in the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. In the City of Brooklyn Park, south of 73rd Ave N, and in Northern Crystal, development adjacent to the Project includes highway-oriented commercial activity and the Crystal Airport. In the City of Brooklyn Park, north of 73rd Ave N, development adjacent to W Broadway Ave includes mixed commercial and retail, commercial office/corporate campus (Target North Campus), residential, and institutional use (North Hennepin Community College and Hennepin County Library).

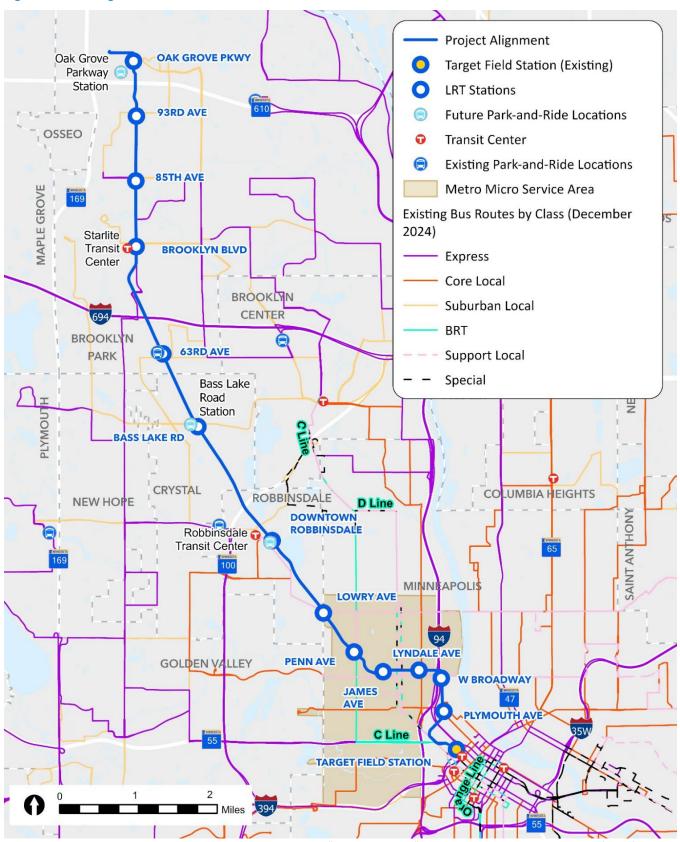
Several activity centers and community-identified important places are adjacent to the Project Alignment, including Downtown Minneapolis, the W Broadway Ave business district in North Minneapolis, Wirth/Victory Memorial Pkwy Regional Trail, the Grand Rounds, Downtown Robbinsdale, the Crystal Shopping Center, the City of Brooklyn Park commercial strip, and North Hennepin Community College. In addition, large business-park and mixed-use development areas with potential for substantial employment concentrations are anticipated by 2040 in the City of Brooklyn Park (surrounding the Target North Campus and along United States Highway 169 [US 169] north of TH 610 and Downtown Robbinsdale along W Broadway Ave near 42nd Ave N). The City of Minneapolis has identified potential opportunities for development and redevelopment near Washington Ave and W Broadway Ave.

# 1.2.3 Regional Transit System

The Project area is presently served by local and limited express bus service provided by Metro Transit, the region's largest transit provider. Key existing transit facilities within the Project area, shown in Figure 1-2, include the Starlite Transit Center on Brooklyn Blvd and the 63rd Ave N park-and-ride in the City of Brooklyn Park, and the Robbinsdale Transit Center at Hubbard Marketplace in the City of Robbinsdale. Additional transportation infrastructure in the Project area includes bus-only shoulders on most of I-94 in both directions between the City of Minneapolis and Northern Maple Grove.

Metro Transit service in the Project area consists of urban and suburban local routes, METRO C Line, METRO D Line and microtransit serving North Minneapolis and the Cities of Robbinsdale, Crystal, and Brooklyn Park. Suburban local routes serve communities to the north and west. Metro micro is a shared ride service provided by Metro Transit which operates 5:30 a.m. to 10:30 p.m. on weekdays and 7 a.m. to 10:30 p.m. on weekends within a boundary shown in Figure 1-2. The Council's 2020 update to the 2040 Transportation Policy Plan<sup>1</sup> (2040 TPP) envisions further development of the regional transit system, with opportunities for the expansion and improvement of bus service and transit facilities.<sup>2</sup> In addition, the 2020 update to the 2040 TPP shows the Twin Cities metropolitan area moving toward a regional multimodal system, including transitways, to improve service in high-demand corridors, improve the availability and quality of travel options to meet mobility needs, and increase transit system ridership. A transitway is a combination of infrastructure and transit service improvements that allows transit customers to avoid congestion on roadways and connect to regional activity centers and that boosts the potential for transitoriented development (TOD).

Figure 1-2 Existing Area Bus Transit and Metro Micro-Services and Facilities



Source: Metropolitan Council and NCompass Technologies, "Transit Routes," Minnesota Geospatial Commons (2024), https://gisdata.mn.gov/dataset/us-mn-state-metc-trans-transit-routes.

The Project would connect North Minneapolis and the region's northwest suburbs with the region's system of transitways that consist of existing LRT on the METRO Blue Line and METRO Green Line, as well as METRO Green Line Extension (under construction); bus rapid transit (BRT) on the METRO Red Line, METRO Orange Line, METRO A, B, and D Lines; the Northstar Commuter Rail; express bus routes, as well as planned BRT transitways (METRO Gold (under construction) and METRO Purple Line (in route modification process)) and planned arterial BRT transitways (B (under construction), E (under construction), F, G, and H Lines), as shown in Figure 1-3. Development of the Project would include bus service restructuring focused on maintaining and enhancing overall transit service in the Project area and reflect Metro Transit's Network Now service planning outcomes. Network Now is a vision for transit service that best meets the needs of the region through 2027 to expand service, improve coverage and mobility by expanding bus routes and Metro micro service and redesign express and commuter services to meet travel needs.

### 1.3 **Project Background**

This section describes the background of the Project, including early planning efforts, alignment modification evaluation, and the environmental review process.

#### 1.3.1 Overview

An Alternatives Analysis (AA), Bottineau Transitway Alternatives Analysis Study Final Report, was completed in 2010, and the Draft EIS was completed in 2014.<sup>3,4</sup> Following publication of the Draft EIS, the Project was renamed "BLRT Extension" to signify that it is an extension of the existing Blue Line light rail. FTA and the Council completed a Final EIS and ROD in 2016.<sup>5,6</sup> The Council issued a Determination of Adequacy pursuant to the Minnesota Environmental Policy Act (MEPA) the same year. Approximately 8 miles of the 2016 Alignment were proposed to operate in BNSF Railway (BNSF; formerly known as Burlington Northern Santa Fe Railway) freight rail carrier right-of-way. Negotiations to secure needed right-of-way and other commitments to allow construction of the Project in freight rail carrier right-of-way were unsuccessful. Local Project sponsors—the Council and Hennepin County—worked with Project stakeholders (including Project city partners and organizations), advisory committee members (Technical Project Advisory Committee [TPAC], Business Advisory Committee [BAC], Community Advisory Committee [CAC], and Corridor Management Committee [CMC]), and leadership from Project partners including the Council, Hennepin County, and FTA to identify an alignment that would avoid use of the freight rail carrier rights-of-way.

#### 1.3.2 **Early Planning Efforts**

Transportation and land use studies in the Project area date back to the mid-1980s. Previous studies included regional system studies, area studies, and site-specific studies. The Project (previously identified as the Bottineau Transitway and before that, as the Northwest Transitway) has consistently been included in local and regional transportation system plans. Many alignments and modes, including BRT, LRT, and commuter rail, have been considered and evaluated in area-specific plans and studies. Previous studies provide a valuable base of information for the Project EIS process. Chapter 1 of the 2016 Final EIS summarized the studies conducted in the CR 81/Northwest Project area prior to the Final EIS. Figure 1-4 summarizes the studies and engagement completed since publication of the Final EIS in 2016.

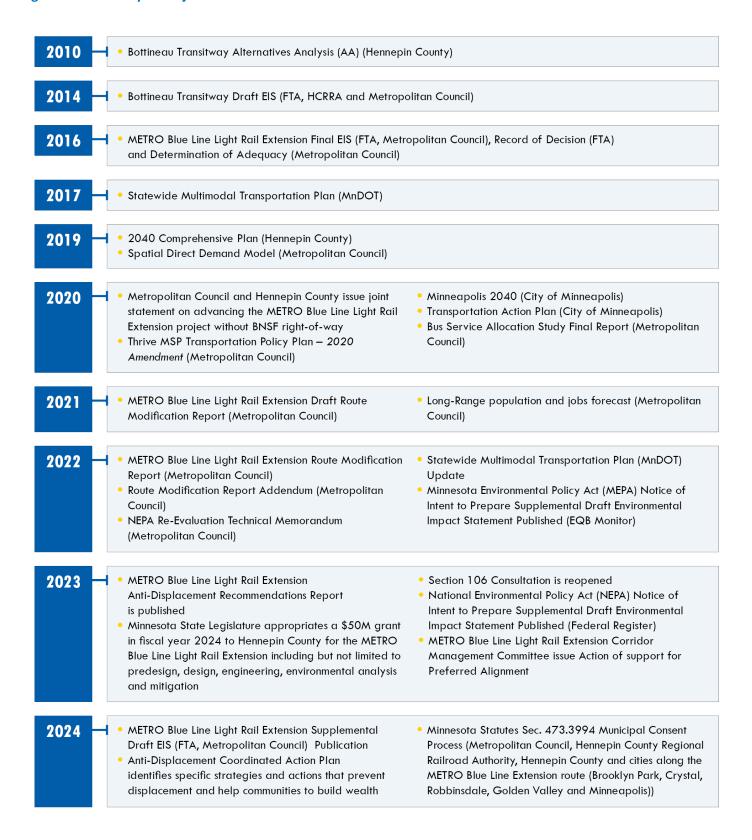
The region's current long-range transportation plan, the 2040 TPP, targets the completion of the Project and initiation of operations prior to 2030. The recommendation for the Project is based on findings from the Council's 2030 Transit Master Study<sup>78</sup> to address and accommodate the transit travel demand in the Bottineau (Northwest) Transitway. These findings are consistent with previous regional transportation system plans including the Regional Transit Board LRT Plan, Transit 2020 Master Plan, 2025 Transportation Policy Plan (amended 2002), 2030 Transportation Policy Plan, and 2040 TPP (updated 2020). 9,10,11,12,13

D Line Minneapolis C Line H Line 394 Green Line LRT \*B Line \*Gold Line BRT Orange Line BRT 494 Dashed Lines = Proposed Solid Lines = Existing Lettered Lines = Arterial BRT \* = Under Construction Red Line BRT 2 5 ☐ Miles

Figure 1-3 METRO Regional Transitway System and Planned METRO System (2030)

Source: Metropolitan Council, "Transitways Generalized (Alignments and Stations)," Minnesota Geospatial Commons (2024), https://gisdata.mn.gov/dataset/us-mn-state-metc-trans-transitways-generalized.

Figure 1-4 Summary of Project Environmental Review and Related Studies



### **Route Modification Evaluation 2021–2022**

FTA and the Council published a Final EIS for the Project on July 15, 2016, and FTA issued a ROD September 19, 2016. As defined at the time of publication of the Final EIS and issuance of the ROD, the Project consisted of approximately 13.4 miles of new LRT guideway from Downtown Minneapolis to the northwest, serving North Minneapolis and the Cities of Golden Valley, Robbinsdale, Crystal, and Brooklyn Park (see Figure 1-1). Approximately 8 miles of the 2016 Alignment would operate in freight rail carrier right-of-way within the Monticello subdivision located between Olson Memorial Highway (TH 55) in the City of Minneapolis and 73rd Ave N in the City of Brooklyn Park. Negotiations to secure needed right-of-way and other commitments to allow construction of the Project in the freight rail carrier right-of-way were unsuccessful, and in 2020 local Project sponsors determined that it was necessary to advance the Project, identifying an alignment that would avoid any use of the freight rail carrier rights-of-way.

The route modification process began in 2020 with local Project sponsors partnering with Project stakeholders and jurisdictions to identify and evaluate alignments that would avoid use of the freight rail carrier rights-of-way. This process was documented in the following series of reports:

- Initial Route Evaluation Report (March 2021)<sup>14</sup>
- Draft Route Modification Report (December 13, 2021)<sup>15</sup>
- Final Route Modification Report (April 18, 2022)<sup>16</sup>
- Route Modification Report Addendum (June 2, 2022)<sup>17</sup>

Additional information about the route modification process and the identification of the scope of this Supplemental Final EIS is provided in Chapter 2 of this Supplemental Final EIS.

#### **Route Modification Report Project Goals** 1.3.3.1

The following Project goals, identified in the Final Route Modification Report, 18 were used as metrics with which to identify recommendations to move forward into the environmental review phase of the Project. These goals, developed earlier in Project planning, support the environmental review in this Supplemental Final EIS and will be incorporated where possible into the environmental review:

- Improve transit access and connections to jobs and regional destinations
- Improve frequency and reliability of transit service to communities in the Project area
- Provide transit improvements that maximize transit benefits while being cost-competitive and economically viable
- Support communities' development goals
- Promote healthy communities and sound environmental practices
- Advance local and regional goals

### 1.3.4 **Route Modification Evaluation 2022–2023**

After publication on the Council's website<sup>19</sup> of the Final Route Modification Report in spring 2022, community and stakeholder feedback continued to inform alignment options and the advisory committee decision-making process. This Supplemental Final EIS assesses the anticipated impacts from the alignments considered on either side of I-94 based on the study published in the June 2022 Route Modification Report Addendum. The criteria used in the analysis of alternatives are based on Project Principles, which are available on the Council's website. 20 Additional information about the route modification alternatives and the scope of this Supplemental Final EIS is provided in Chapter 2.

### 1.3.5 Environmental Review Process

The Council is pursuing federal funding from FTA through the Capital Investment Grants (CIG) program for the Project, and as a result, FTA is required to undertake environmental review in compliance with the National Environmental Policy Act (NEPA). The Council is the local public agency and is required to comply with the requirements of MEPA (Minnesota Statute [Minn. Stat.] §§ 116D.04 and 116D.045). In coordination with local Project partner, Hennepin County, the Council is the Project sponsor and federal grantee, and is leading the process for preliminary engineering, final design, and construction. FTA, as the federal lead agency, and the Council have prepared this Supplemental Final EIS to satisfy the requirements of NEPA. The Council has prepared this Supplemental Final EIS also in compliance with the requirements of MEPA. See Chapter 9 for more information about cooperating and participating agencies and ongoing coordination.

The intent of the NEPA and MEPA processes is to ensure that potential social, economic, and environmental impacts are identified and considered in the decision-making process. A Draft EIS was completed in 2014 and a Final EIS was completed in 2016 for the 2016 Alignment. After the Council and Hennepin County completed the route modification recommendation in 2022, FTA determined that a Supplemental Draft EIS was the appropriate NEPA class of action for assessing the impacts of the Project Alignment. Subsequently, the Council published a Supplemental Draft EIS preparation notice in the Minnesota Environmental Quality Board (EQB) publication, *EQB Monitor*, on October 18, 2022. FTA published a Notice of Intent to Prepare a Supplemental EIS in the Federal Register on August 18, 2023.

This Supplemental Final EIS documents the purpose and need for the Project; presents a discussion of the alternative alignments considered; identifies potential social, economic, and environmental impacts; and proposes potential mitigation measures. The primary purpose of this Supplemental Final EIS is to communicate the preliminary impacts and benefits associated with the Project.

NEPA also requires engaging the public in the environmental review process. In addition, federal law requires the development of a coordination plan to outline how the environmental process for the Project would engage the public; tribal governments; and local, State of Minnesota (State), and federal agencies with an interest in the Project. The Supplemental Draft EIS was published for review by interested parties, including individuals, community groups, the business community, elected officials, and public agencies in accordance with federal and State requirements.

Feedback on the Supplemental Draft EIS was collected during a public comment period from June 21, 2024, to August 6, 2024. Two public hearings were held to provide a forum for agency and public participation and comment. Comments with responses are presented in Appendix CR in this Supplemental Final EIS.

## 1.3.5.1 Cooperating and Participating Agencies

Certain federal, State, local, and tribal agencies were also invited to have a more formal role in the environmental review process as Cooperating and/or Participating Agencies. A complete discussion of the public and agency engagement process, including the identification of Cooperating and Participating Agencies for the Project, is provided in Chapter 9.

### 1.4 Project Need Factors

This section presents detailed descriptions of the five factors informing Project need.

## 1.4.1 Factor 1: Growing Travel Demand

Between 2020 and 2040, the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park (the cities that the Project directly serves, which are referred to herein as "Project cities") are forecasted to collectively grow by an estimated 66,000 people and 37,000 jobs (see Table 1-1, Figure 1-5, and Figure 1-6). The areas within one-half mile of the Project Alignment are projected to attract a greater share of the growth within the Project cities, resulting in more than 20,000 new people. The Cities of New Hope, Brooklyn Center, Golden Valley, Maple Grove, Osseo,

Champlin, and Dayton (herein referred to as "contributing cities") are not directly served by the Project but are expected to contribute to ridership connected by local bus or paratransit, park-and-ride facilities, and bicycle trips. Most of the contributing cities are projected to experience population growth at about the same rate as the Twin Cities metropolitan area. Notably, the Cities of Maple Grove and Dayton are expected to far surpass the average growth rate of the metropolitan area, growing by 48 percent and 182 percent, respectively.

Employment growth, especially within one-half mile of the Project Alignment, is forecast to exceed the average Twin Cities metropolitan area employment growth rate. Concentrated areas along the Project Alignment in Downtown Minneapolis, Downtown Robbinsdale, the City of Brooklyn Center, and the City of Brooklyn Park are forecast to experience more than a 25 percent increase in employment by 2040, adding 22,000 new jobs, as shown in Figure 1-6. The Project is poised to connect those employment centers to each other and to the potential employees in areas that are projected to experience large population growth.

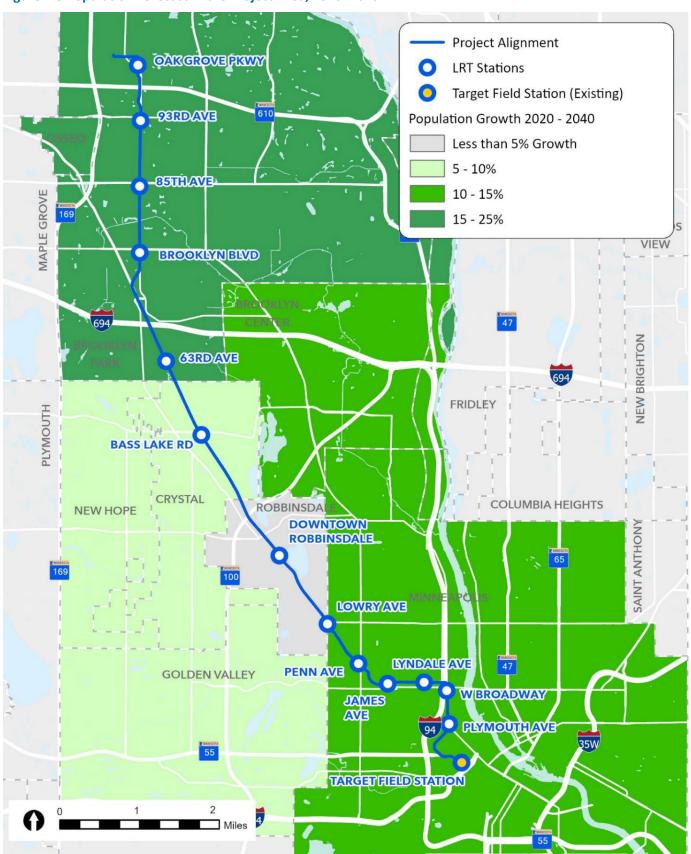
**Table 1-1 Population and Employment Forecasts** 

Area	2020	2040	Percentage	2020	2040	Percentage
	Population	Population	Change	Employment	Employment	Change
Project cities	554,410	623,100	12%	334,096	412,500	24%
Minneapolis	429,956	485,000	13%	294,467	360,000	22%
Robbinsdale	14,646	16,400	12%	6,402	7,400	16%
Crystal	23,330	23,800	2%	3,466	4,900	41%
Brooklyn Park	86,478	97,900	13%	29,761	40,200	35%
Contributing cities	182,392	213,870	17%	90,287	121,300	34%
New Hope	21,986	23,100	5%	10,460	12,600	21%
Brooklyn Center	33,782	35,400	5%	12,585	14,600	16%
Golden Valley	22,552	26,700	18%	28,845	37,000	28%
Maple Grove	70,253	89,700	28%	31,786	47,000	48%
Osseo	2,688	3,170	18%	1,694	2,300	36%
Champlin	23,919	25,400	6%	3,854	4,800	25%
Dayton	7,212	10,400	44%	1,063	3,000	182%
Project area <sup>a</sup>	121,197	141,514	17%	148,574	171,280	15%
Hennepin County	1,281,565	1,463,410	14%	811,001	1,060,660	31%
Twin Cities	3,163,104	3,653,000	16%	1,543,594	2,016,000	31%
metropolitan area						

Source: Metropolitan Council Annual Population Estimates as of January 1, 2023.

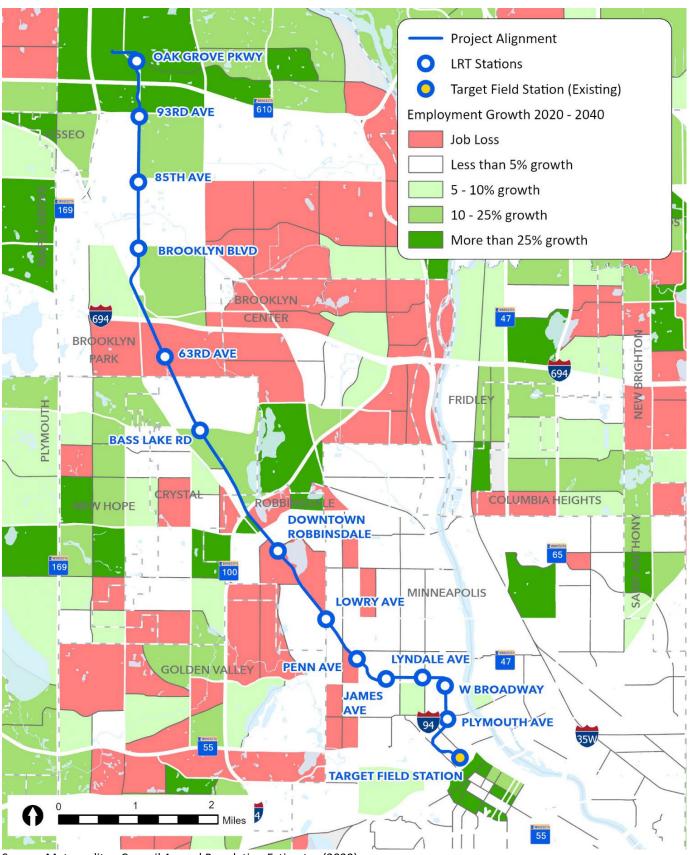
<sup>&</sup>lt;sup>a</sup> For resident population and demographics information, "Project area" is defined as the Transportation Analysis Zones within one-half mile of the rail alignment.

Figure 1-5 Population Forecast in the Project Area, 2020–2040



Source: Metropolitan Council Annual Population Estimates (2020).

Figure 1-6 Employment Forecast in the Project Area, 2020–2040



Source: Metropolitan Council Annual Population Estimates (2020).

# 1.4.2 Factor 2: Reducing Local Pollution with a Balanced Transportation Network

Statewide, regional, and local transportation planning has undergone a paradigm shift in recent years to focus on a balance between modes that meet transportation needs through a range of transportation options rather than through prioritization of single-occupancy vehicle (SOV) trips. These multimodal goals strive to provide access to jobs and destinations, reliable and efficient movement of goods and people, and access to opportunity. In concert with this focus on modal shift, the State and local governments in the Project area have adopted goals related to expanding transportation options.

State policy, outlined in the Minnesota Department of Transportation's (MnDOT) *Statewide Multimodal Transportation Plan* (SMTP) <sup>22</sup> and different modal investment plans under the Minnesota GO vision, <sup>23</sup> and regional policy outlined in the Council's *2040 TPP*, recognize the importance of a balanced approach to addressing travel demand that includes maintaining the existing transportation system and public transportation improvements.

Specifically, the SMTP, most recently updated in 2022, includes the overarching key objective of "Critical Connections," which highlights the importance of a multimodal system essential for Minnesotans' prosperity and quality of life. Key strategies in support of this objective include working with other regional and local agencies to:

- Provide access to destinations and services
- Ensure efficient, affordable, reliable, and safe movement of goods to support a vibrant and growing economy
- Provide transportation options to connect people to services, employment, neighborhoods, and other destinations
- Support economic vitality through transportation investment
- Follow a tiered, phased approach to addressing mobility and safety
- Encourage expanding of modal options through infrastructure improvements, education, programs, and services

The need to optimize mobility through multimodal strategies is relevant to the Project. The Project would provide an alternative to the SOV travel option to areas of the Twin Cities Metropolitan Area currently underserved by transit.

At the regional level, the Council addresses a modal shift in transportation in its 2040 TPP.<sup>24</sup> To achieve its goal of "supporting the prosperity of people and businesses in the region by connecting them to destinations throughout the region and beyond," the 2040 TPP identifies the following objectives related to multimodal transportation and increasing the share of trips in non-SOVs:

- Increase the availability of multimodal travel options, especially in congested highway corridors
- Increase the number and share of trips taken using carpools, transit, bicycling, and walking
- Improve the availability and quality of multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities

Additionally, the 2040 TPP identifies increasing the availability and attractiveness of multimodal transportation options, including transit, as an important step in advancing livability while protecting the natural, cultural, and developed environments.

A modal shift in transportation is also identified at the local level. The City of Minneapolis comprehensive plan, *Minneapolis 2040*, identifies Goal 9: Complete Neighborhoods, which states that "[i]n 2040, all Minneapolis residents will have access to employment, retail services, healthy food, parks, and other daily needs via walking, biking, and public transit." In addition to building new parks and encouraging commercial and housing development close to transit, the city will work with Metro Transit to "increase the frequency, speed and reliability of the public transit system" to achieve Goal 9.<sup>25</sup>

Plans put in place by Hennepin County also contribute to balancing modal needs at the local level. Hennepin County identifies the challenge of accommodating projected population growth, the pressure this will place on existing transportation systems, and the need to provide access to alternative modes in its *2040 Comprehensive Plan*. <sup>26</sup> The County also notes that transportation preferences are shifting, and county residents expect "new and diverse mobility options that are affordable and available throughout the county."

The Project plays a critical role in supporting stated goals identified at the local, regional, and State levels to balance transportation modes. The quality, high-frequency transit service the Project would provide has the potential to convert SOV trips to transit trips in an area of the Twin Cities Metropolitan Area that is not currently served by similar transit service.

### 1.4.3 Factor 3: Increased Reliance on Transit

The Project would serve and connect communities in the Twin Cities metropolitan area that are likely to use or rely on public transit to meet their transportation needs. According to U.S. Census estimates, <sup>27</sup> more than 500,000 people live in the municipalities that the Project would directly serve, and an additional 177,000 people live in adjacent municipalities served by local transit connections and park-and-ride locations (see Table 1-1). Several sociodemographic indicators help inform where people are most likely to use or rely on transit. Table 1-2 shows how the following indicators are correlated with transit propensity: age, disability, zero-car households, poverty, renter status, and housing cost-burdening (spending more than 30 percent of household income on housing costs. <sup>28</sup> For the populations in the Project area, these variables indicate more transit usage when compared to the Twin Cities metropolitan area. A total of 29 percent of households in the Project area do not have access to a private vehicle, compared to only 21 percent of households in the metropolitan area. Large concentrations of these zero-car households exist near station areas in North Minneapolis and Downtown Robbinsdale, as shown in Figure 1-7, areas that would be directly served by LRT stations.

The Cities of Robbinsdale, Osseo, and New Hope house a considerably higher percentage of people who are disabled than the region at large. The Cities of Robbinsdale, New Hope, Osseo, and Golden Valley house a considerably higher percentage of people more than 65 years old than the metropolitan area at large, as shown in Table 1-2. Seniors and transit customers with disabilities are aided by Metropolitan Transportation Service's paratransit, dial-a-ride, and vanpool services, and similar services administered by Maple Grove Transit and Plymouth Metrolink, but it is important that regularly scheduled transit be accessible for all customers.

The City of Minneapolis has a greater proportion of renting residents than Hennepin County or the entire Twin Cities metropolitan area. <sup>29</sup> Generally, renters are more likely to be housing cost-burdened than are residents who own their homes. This pattern holds true throughout the Project area and the Twin Cities metropolitan area, and rates of rent-burdening and overall housing cost-burdening are higher in the Project area than the metropolitan area at large. Approximately half of the renting households in the Project area are housing cost-burdened (see Table 1-2). As shown in Figure 1-8, North Minneapolis households specifically—both renting and owning—are cost-burdened at a much higher rate than the metropolitan area.

In the metropolitan area, 18% of all households meet the U.S. Census definition of poverty, compared to 28 percent in the Project cities. <sup>30</sup> To adapt national poverty thresholds to reflect local living costs, "low-income" for this study is defined as the percentage of population in households where the household income is less than or equal to 1.85 times the federal poverty level, or 185 percent. <sup>31</sup>

The ability to navigate an area on foot, often called walkability, is another strong predictor of transit ridership. It is important that LRT stations provide walkable access to a large service area. Figure 1-9 shows the areas that can be accessed from each proposed LRT station in a 5-, 10-, and 15-minute walking trip. These LRT stations are within a 15-minute walk of several major commercial and office districts, regional parks, and the North Memorial Medical Center. Pedestrian analysis is detailed in Chapter 3, Section 3.2 of this Supplemental Final EIS.



Sociodemographic indicators for populations of disabled people more than 65 years old, and housing cost-burdened residents present in the Project area represent populations who may rely on transit for mobility and may benefit from improved transit service.

**Table 1-2 Factors Influencing Public Transit Use** 

Area	Percentage of Renting Households	Percentage of Zero-Vehicle Households <sup>a</sup>	Percentage of People over 65 <sup>b</sup>	Percentage of People with Any Disability	Percentage under 185% Federal Poverty Threshold <sup>c</sup>	Percentage of Renting Households That Are Rent-Burdened	Percentage of All Households That Are Cost-Burdened <sup>e</sup>
Project cities	47%	14%	11%	10%	28%	46%	35%
Minneapolis	52%	15%	11%	10%	30%	45%	37%
Robbinsdale	29%	13%	18%	15%	24%	58%	28%
Crystal	25%	5%	14%	10%	15%	54%	24%
Brooklyn Park	31%	8%	12%	9%	23%	55%	29%
Contributing cities	25%	5%	15%	9%	14%	47%	23%
New Hope	47%	8%	18%	15%	24%	57%	39%
Brooklyn Center	39%	7%	12%	11%	32%	45%	32%
Golden Valley	29%	2%	22%	11%	13%	47%	24%
Maple Grove	16%	8	14%	7%	9%	38%	16%
Osseo	52%	11%	25%	15%	12%	48%	39%
Champlin	10%	2%	13%	7%	12%	50%	18%
Dayton	5%	2%	13%	9%	12%	18%	10%
Project area	47%	14%	12%	12%	31%	49%	36%
Hennepin County	37%	9%	15%	10%	20%	44%	28%
Twin Cities metropolitan area	31%	7%	15%	10%	18%	46%	25%

Source: U.S. Census American Community Survey 2018–2022.

Note: Results presented in Table 1-2 are updated from the Supplemental Draft EIS with newer U.S. Census American Community Survey data. The methodology used to calculate these metrics is articulated below:

<sup>&</sup>lt;sup>a</sup> Percentage of zero-vehicle households is the sum of percent renter households with no vehicles plus the percent owner households with no vehicles.

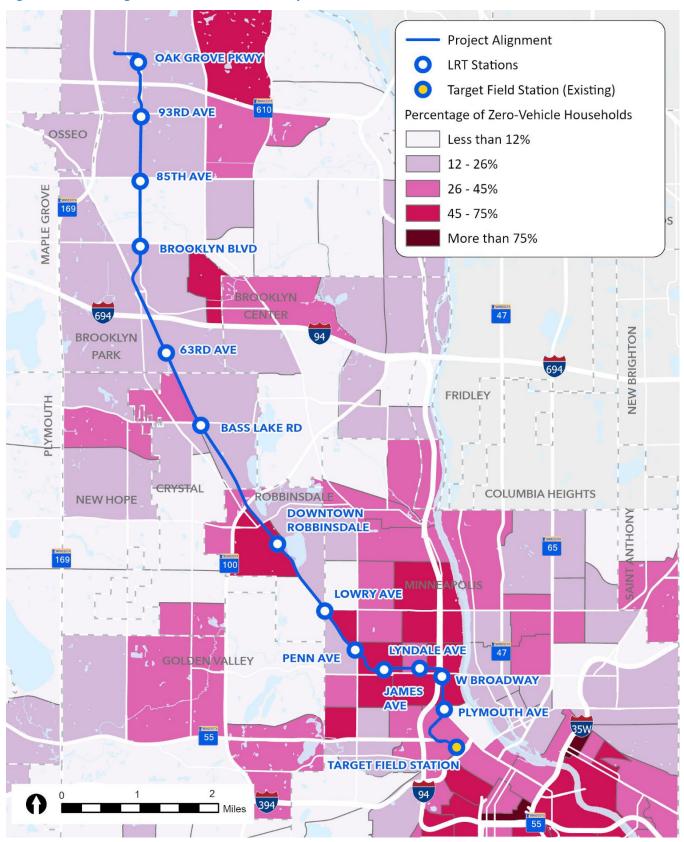
<sup>&</sup>lt;sup>b</sup> Population age 65 or older divided by total population.

<sup>&</sup>lt;sup>c</sup> The definition of low-income is the percentage of population under 185% meeting the Federal Poverty Threshold, or the sum of population by ratio of income to poverty: < 0.5 to <1.84. Source: Table C17002 Ratio of Income to Federal Poverty Level, U.S. Census American Community Survey 2018–2022 5-year estimate.

d "Rent-burdened" means that a household spends more than 30 percent of its income on rent. Calculated sum of households with gross rent greater than 30% to more than 50% of income.

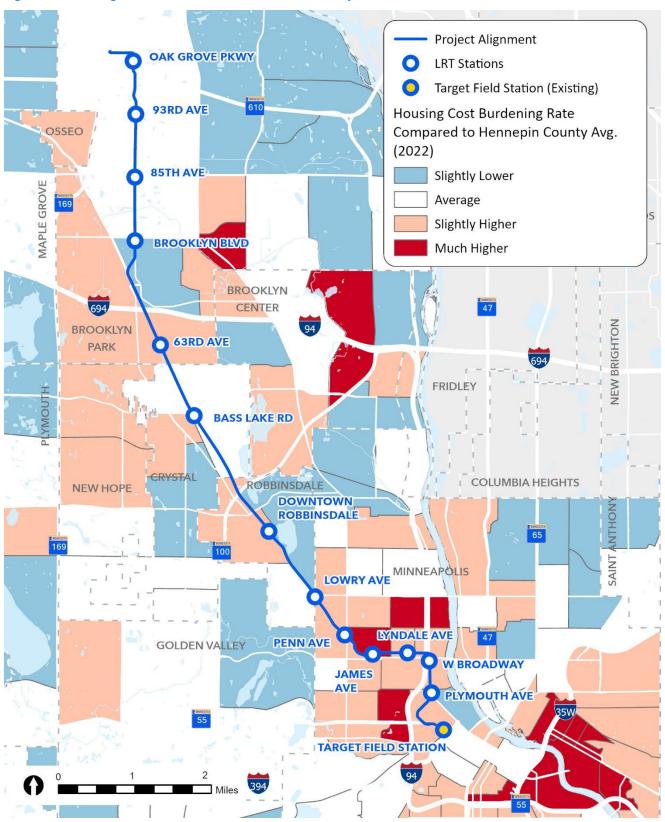
e "Cost-burdened" in this context means that a household spends more than 30 percent of its income on housing costs, including mortgage, property tax, home repairs, and rent. Calculated sum of renting households that are cost burdened plus households with mortgages that are cost burdened plus households without mortgages that are cost burdened.

Figure 1-7 Percentage of Zero-Car Households by Census Tract



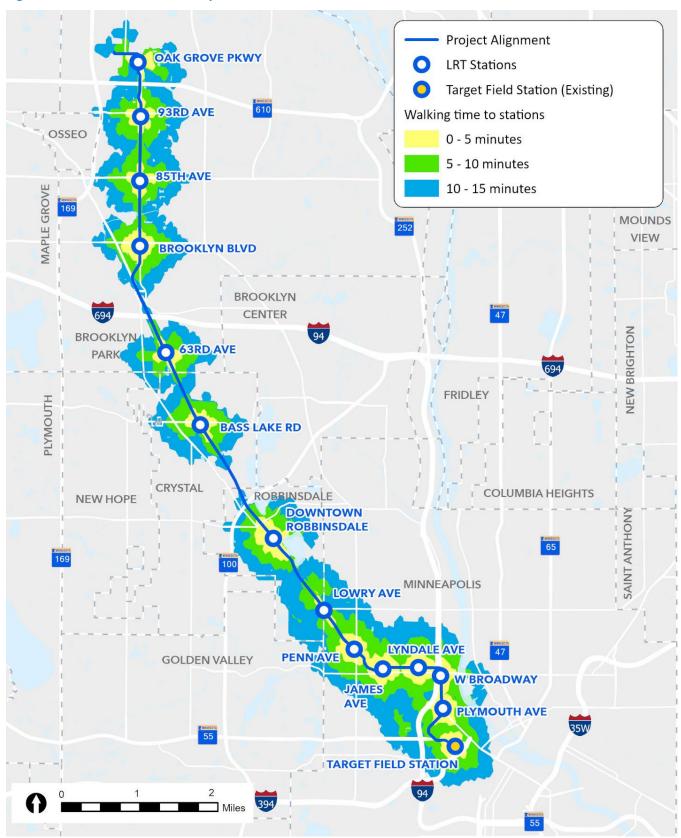
Sources: U.S. Census American Community Survey 2018–2022; Metropolitan Council.

Figure 1-8 Housing Cost-Burdened Households in the Project Area



Sources: U.S. Census American Community Survey 2018–2022; Metropolitan Council. White tracts are within 0.5 standard deviation of mean Hennepin County cost-burdening rate (28 percent). Light red/blue tracts are within 2 standard deviations of the mean. Dark red tracts are more than 2 standard deviations greater than the mean.

**Figure 1-9 Walksheds Around Proposed LRT Stations** 



# **Factor 4: Changing Travel Patterns from the COVID-19 Pandemic**

The COVID-19 pandemic drastically changed the way people travel, the types of trips they take, and the types of modes they use in the Twin Cities metropolitan area. Transit ridership includes fewer morning and afternoon peaks of commuter travel to and from work, and instead there is steadier demand throughout the day and for local trips within corridors. LRT is a transit mode that can reliably meet the need for an "all-day, all-purpose" type of trip, such as performing daily errands, transporting children to or from activities, commuting to second- or third-shift jobs, or generally traveling during off-peak hours. LRT also provides the added benefit of being the highest capacity and highest priority transit mode within the current metropolitan area transit system. LRT can quickly and efficiently move people to and from activity centers while connecting to or leading to the development of additional transit, transit improvements, and TOD to a greater extent than other modes. Stay-at-home orders issued in 2020 in response to the COVID-19 pandemic immediately affected how many people were traveling, which was reflected in a decrease in transit ridership across all Metro Transit service types. LRT is experiencing a recovery with an upward trend in ridership for all services, as shown in Figure 1-10. Transit ridership increased by approximately 37 percent between 2021 and 2023, and by 9 percent in the first 10 months of 2024. The demand for all-day, all-purpose trips is expected to continue to increase.

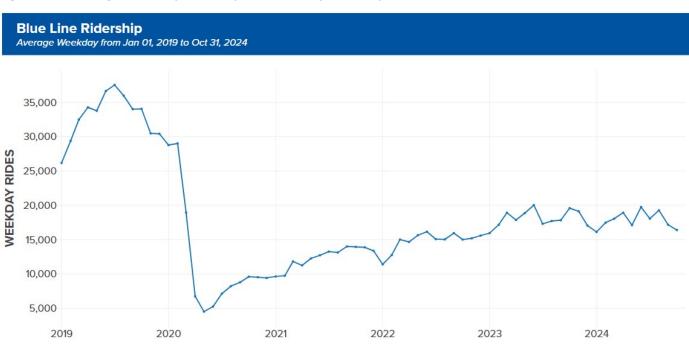


Figure 1-10 Average Weekday Ridership from January 2019 to present (October 2024) on Blue Line

Source: Metro Transit, "Metro Transit Ridership," Performance (accessed July 2024), https://www.metrotransit.org/performance#blueline.

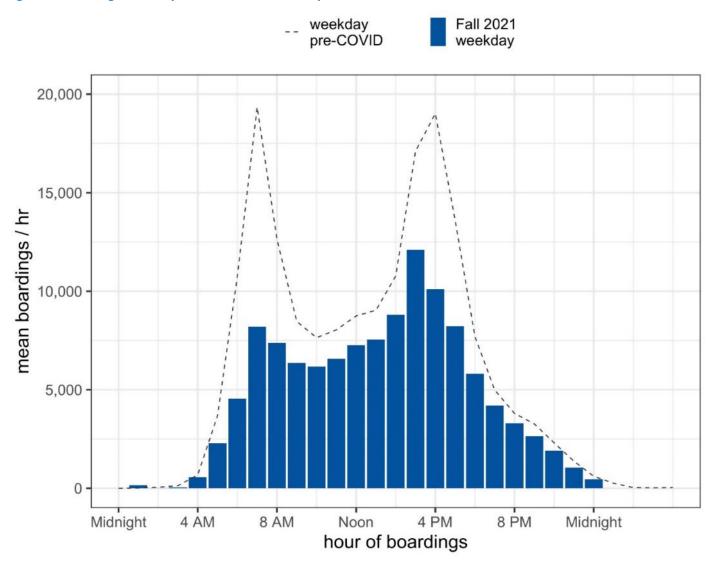
Daily transit demand has also changed because of the COVID-19 pandemic. Pre-pandemic transit demand peaked in the morning and evening around standard work and school commute times. Since the COVID-19 pandemic, transit demand has been more stable throughout the day and is no longer dominated by demand peaks in the morning and evening commute times, as shown in Figure 1-11. This change in transit demand is likely due to changes in workfrom-home policies, which enabled remote work options. Because express transit service is often developed to meet these morning and evening commute demand spikes, many of Metro Transit's express bus service routes are undergoing evaluation for changes or elimination, as outlined by the Network Now Concept Plan.<sup>32</sup> Steady transit demand throughout the day during the COVID-19 pandemic highlighted that all-purpose trip types and commutes

outside the standard morning and afternoon workday transit trips are happening and will continue to be made despite significant global events. While it remains to be seen how travel behavior, particularly transit demand, will moderate as the effects of the COVID-19 pandemic lessen, it is likely that a more stable demand for transit throughout the day will persist. Metro Transit's Network Now Concept Plan focuses on expanding service in the network by more than 35 percent from 2024 to 2027 to grow ridership, improving coverage and mobility by expanding bus routes and Metro Micro service and redesigning express and commuter services to meet the travel needs of the region.

The frequent, reliable, high-quality transit service that the Project would provide is well suited to meeting the demand of people running errands, transporting children, commuting to second- and third-shift jobs, or otherwise traveling during nonpeak hours. The resurgence in demand for Metro Transit's frequent, regular service modes such as BRT, local bus, and LRT in a post-COVID-19-pandemic recovery phase—as compared to commuter express bus routes and the Northstar Commuter Rail line—demonstrate the demand for all-day, all-purpose trips, as shown in Figure 1-11.

The COVID-19 pandemic revealed the transit requirements of those who are transit dependent as compared to those who have other travel options, such as a personal vehicle or telecommuting. Beyond the COVID-19 pandemic, these transit-dependent populations will still need to take all-day, all-purpose trips, and the Project can provide this type of transit service. Provision of all-day, all-purpose trips also helps to address Factor 2: Reducing Local Pollution with a Balanced Transportation Network and Factor 3: Increased Reliance on Transit, contributing to Project need.

Figure 1-11 Changes in Daily Metro Transit Ridership due to the COVID-19 Pandemic



Source: Metro Transit, "Transit and the Future of Remote Work" (Webinar, Center for Transportation Studies, June 29, 2021), https://www.cts.umn.edu/sites/cts.umn.edu/files/2021-06/Thompson.pdf.

### 1.4.5 **Factor 5: Regional Objectives for Growth**

The Council guides the orderly economic development of its seven-county area and the efficient use of four regional systems: transportation, aviation, water resources (including wastewater collection and treatment), and regional parks and open space. Thrive 2040 establishes a regional policy of desired outcomes that define the regional vision:

- Stewardship advances the Council's long-standing mission of orderly economic development by responsibly managing the region's natural and financial resources and making strategic investments in the region's future.
- **Prosperity** is fostered by investments in infrastructure and amenities that create regional economic competitiveness, thereby attracting and retaining successful businesses, a talented workforce, and, consequently, wealth.

- Livability focuses on the quality of our residents' lives and experiences in our region, and how places and infrastructure create and enhance the quality of life that makes our region a great place to live.
- Sustainability means protecting our regional vitality for generations to come by preserving our capacity to maintain and support our region's well-being and productivity over the long term.

The Project, as part of a regional transitway system, would be a step toward achieving these desired outcomes.

https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Environmental/DEIS.aspx.

<sup>&</sup>lt;sup>1</sup> Metropolitan Council, 2040 Transportation Policy Plan (Saint Paul: Metropolitan Council, 2020), https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan.aspx.

<sup>&</sup>lt;sup>2</sup> Metropolitan Council, 2040 Transportation Policy Plan (Saint Paul: Metropolitan Council, 2020), https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan.aspx.

<sup>&</sup>lt;sup>3</sup> Hennepin County Regional Railroad Authority, Bottineau Transitway Alternatives Analysis Study Final Report (Minneapolis: Hennepin County Regional Railroad Authority, 2010).

<sup>&</sup>lt;sup>4</sup> Federal Transit Administration, Hennepin County Regional Railroad Authority, Metropolitan Council, *Bottineau Transitway* Draft Environmental Impact Statement (Minneapolis: Federal Transit Administration, 2014),

<sup>&</sup>lt;sup>5</sup> Federal Transit Administration, Metropolitan Council, METRO Blue Line Light Rail Transit Extension Final Environmental Impact Statement (Chicago: Federal Transit Administration, 2016), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Environmental/Final-EIS.aspx.

<sup>&</sup>lt;sup>6</sup> Federal Transit Administration, Record of Decision METRO Blue Line Light Rail Transit Extension Project (Chicago: Federal Transit Administration, 2016), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Environmental/Final-EIS.aspx.

<sup>&</sup>lt;sup>7</sup> Metropolitan Council, 2030 Transit Master Study Twin Cities Metropolitan Area (Saint Paul: Metropolitan Council, 2008), https://metrocouncil.org/Transportation/Publications-And-Resources/Transit/SYSTEM/2030TransitMasterStudy-pdf.aspx.

<sup>8</sup> The 2030 Transit Master Study indicated that "[t]wo corridors had sufficiently high ridership, available right-of-way, and satisfactory costs that showed potential for transitway implementation. The Southwest and Bottineau [the BLRT Extension project] Transitways should continue advanced study towards implementation." Other corridors were also recommended for additional study.

<sup>&</sup>lt;sup>9</sup> Metropolitan Council, Regional Transit Board LRT Plan (Saint Paul: Metropolitan Council, 1990).

<sup>&</sup>lt;sup>10</sup> Metropolitan Council, *Transit 2020 Master Plan* (Saint Paul: Metropolitan Council, 2000).

<sup>&</sup>lt;sup>11</sup> Metropolitan Council, 2025 Transportation Policy Plan (Saint Paul: Metropolitan Council, 2001).

<sup>&</sup>lt;sup>12</sup> Metropolitan Council, 2030 Transportation Policy Plan (Saint Paul: Metropolitan Council, 2004).

<sup>&</sup>lt;sup>13</sup> Metropolitan Council, 2040 Transportation Policy Plan (Saint Paul: Metropolitan Council, 2020),

https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan.aspx.

<sup>&</sup>lt;sup>14</sup> Metropolitan Council, Metro Blue Line Extension Initial Route Evaluation Report (Minneapolis: Metropolitan Council, 2021), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Web-Docs/KH-Report-20210310.aspx.

<sup>&</sup>lt;sup>15</sup> Metropolitan Council, Metro Blue Line Extension Draft Route Modification Report (Minneapolis: Metropolitan Council, 2021), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Web-Docs/20211213 DaftReport.aspx.

<sup>&</sup>lt;sup>16</sup> Metropolitan Council, METRO Blue Line Extension Route Modification Report (Saint Paul: Metropolitan Council, 2022), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Route.aspx.

<sup>&</sup>lt;sup>17</sup> Metropolitan Council, Route Modification Report Addendum (Saint Paul: Metropolitan Council, 2022), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Route.aspx.

<sup>18</sup> https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Publications-And-Resources/Design/Route-Modification-Report-April-2022.aspx, page 46.

<sup>&</sup>lt;sup>19</sup> Metropolitan Council, Route Modification Reports (Saint Paul: Metropolitan Council, 2022), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Route.aspx.

- <sup>20</sup> Metropolitan Council, Route Modification Reports Executive Summary p. 3 (Saint Paul: Metropolitan Council, 2022), https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Publications-And-Resources/Design/Route-Modification-Report-Executive-Summary-April.aspx.
- <sup>21</sup> William Wheeler (FTA Region V), email to Kelcie Young (Metropolitan Council), July 14, 2022.
- <sup>22</sup> Minnesota Department of Transportation, Statewide Multimodal Transportation Plan December 2022 (Saint Paul: Minnesota Department of Transportation, 2022), https://minnesotago.org/final-plans/smtp-final-plan-2022.
- <sup>23</sup> Minnesota Department of Transportation, MINNESOTA GO Planning Minnesota's Transportation Future, (Saint Paul: Minnesota Department of Transportation, 2023), https://www.minnesotago.org/.
- <sup>24</sup> Metropolitan Council, 2040 Transportation Policy Plan (Saint Paul: Metropolitan Council, 2020), https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Transportation-Policy-Plan.aspx.
- <sup>25</sup> City of Minneapolis, Minneapolis 2040 (Minneapolis: City of Minneapolis, 2019), https://minneapolis2040.com/.
- <sup>26</sup> Hennepin County, Hennepin County 2040 Comprehensive Plan (Minneapolis: Hennepin County, 2019), https://www.hennepin.us/2040plan.
- <sup>27</sup> Metropolitan Council, US Census Data and Census 2020 (Saint Paul: Metropolitan Council, 2020), https://metrocouncil.org/Data-and-Maps/Research-and-Data/Census-Data.aspx.
- <sup>28</sup> Raven I McKnight and Eric M Lind, *Analyzing Bus Ridership with a Spatial Direct Demand Model* (Conference presentation, Transportation Research Board Annual Meeting, 2019), https://trid.trb.org/view/1759202.
- <sup>29</sup> Metropolitan Council, US Census Data and Census 2020 (Saint Paul: Metropolitan Council, 2020), https://metrocouncil.org/Data-and-Maps/Research-and-Data/Census-Data.aspx.
- <sup>30</sup> The U.S. Department of Health and Human Services (HHS), poverty guidelines, poverty threshold, https://www.census.gov/topics/income-poverty/poverty/about.html.
- <sup>31</sup> U.S. Census American Community Survey, *Table C17002 Ratio of Income to Federal Poverty Level*, 2018–2022 5-year estimate. https://data.census.gov/table/ACSDT5Y2022.C17002?q=C17002&g=050XX00US27053\$1400000.
- <sup>32</sup> Metro Transit, Network NOW, (Saint Paul: Metro Transit, 2024), https://www.metrotransit.org/network-now.