Appendix A-4: Appendix Chapter 4: Community and Social Analysis

Appendix A-4: Appendix Chapter 4: Community and Social Analysis is a companion document to the Supplemental Final Environmental Impact Statement containing Chapter 4 (Community and Social Analysis). Metropolitan Council and the United States Department of Transportation - Federal Transit Administration are committed to ensuring that information is available in appropriate alternative formats to meet the requirements of persons who have a disability. If you require an alternative version of this file, please contact FTAWebAccessibility@dot.gov.

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A-4. Appendix Chapter 4: Community and Social Analysis

Appendix A-4 supplements Chapter 4 and presents results from the analysis of impacts on the social characteristics and conditions within the study area. Results for the No-Build Alternative are presented for the purpose of establishing a basis to compare with the Project Alignment. Topics covered include land use, communities, property, cultural resources, visual quality, economics, and safety and security. Potential operating-phase (long-term) and construction-phase (short-term) impacts are also evaluated, and potential avoidance, minimization, and mitigation measures are presented. The Build Alternative carried forward for the Project is presented in Chapter 2 of this Supplemental Final EIS.

Community engagement and feedback received during the formal public comment period (as described in Chapter 9) for this Supplemental Final EIS has been used to inform and refine recommended avoidance, minimization, and mitigation measures for the Project.

This Supplemental Final EIS evaluates social characteristics and conditions for impacts: land use plan compatibility, community facilities and community character and cohesion, displacement of residents and businesses, cultural resources, visual and aesthetics, economic effects, and safety and security. Specifically, this appendix includes the following sections:

- ***Section 4.1*** reviews current comprehensive plans for the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park and Hennepin County for land use and plan compatibility with the Project.
- ***Section 4.2*** describes the communities along the Project Alignment (the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park). The analysis is based on the following three criteria: changes to community facilities access, changes to community character, and changes to community cohesion.
- ***Section 4.3*** describes the partial and full property acquisitions and relocations associated with the Project.
- ***Section 4.4*** describes cultural resources and discusses impacts that could result from implementation of the Project. This section also describes the process of consultation pursuant to 54 USC § 306108 of the NHPA (hereafter referred to as Section 106) and the development of an amendment to the Section 106 MOA.
- ***Section 4.5*** assesses the existing visual and aesthetic conditions along the Project Alignment and identifies potential impacts on the visual character of areas adjacent to the Project.
- ***Section 4.6*** summarizes an approach to capture potential economic effects associated with the Project.
- ***Section 4.7*** assesses potential safety and security impacts associated with the Project. This section also summarizes recent safety and security policies and recommendations for mitigation measures.

The study area represents a geographic area used to identify resources, and it varies based on the resource being evaluated. The basis for each study area begins with the LOD, which is defined as the study area for direct physical impacts from the Project. In some cases, the study area extends beyond the LOD to assess the potential extent of impacts on adjacent resources. The study area considered for each area of analysis in this appendix is summarized in Chapter 4, Table 4-2. Greater detail is provided in each section of this appendix.

4.1 Land Use Plan Compatibility

The Council reviewed land use planning information for the communities impacted by the Project. Because of Council requirements, each community has updated its comprehensive plan since the 2016 Final EIS was completed. Therefore, the information included in this section is focused primarily on changes made to existing and future land use plans made after the 2016 Final EIS was completed.

Various impacts such as noise, community cohesion, economic development, and visual quality have a relationship to land uses in the study area and are considered in other sections of this Supplemental Final EIS.

4.1.1 Regulatory Context and Methodology

NEPA (42 USC § 4321 et seq.) and MEPA (Minn. Stat. ch. 116D) form the general basis of consideration for discussing land use issues. Local municipalities have policies addressing land use, including comprehensive plans, as well as official controls including zoning and subdivision codes that regulate development.

This section focuses on the compatibility of the Project with local and regional land use planning on a broader scale. To assess land use plan compatibility, the Council reviewed each city's comprehensive and land use planning documents and land use maps to determine consistency with the Project. This included evaluating existing land use adjacent to LRT station locations, identification of LRT-related policies, and any ongoing planning efforts that might be impacted by the Project.

The Council's assessment of the Project's compatibility with existing and planned land uses was based on the land use inventories and comprehensive planning documents for the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. Comprehensive plans are locally approved planning documents that guide planning policy and land use. Hennepin County's land use plans and policies were also reviewed to evaluate Project alignments with regional land use planning and regional transit policies.

The Council also obtained specific land use data from existing and planned land use maps for each Project city. Land use planning information was reviewed to evaluate compatibility with the LRT station locations.

4.1.2 Study Area

The study area for land use compatibility is defined as the jurisdictions in which the Project would be located.

4.1.3 Affected Environment

This section summarizes land use in comprehensive plans and other planning documents. All communities in the study area have updated their comprehensive land use plans since the 2016 Final EIS was completed.

4.1.3.1 Local Plans and Policies

The Council reviewed local and regional plans and policies to determine their compatibility with the Project. The Project is consistent with local and regional plans as discussed below.

The Cities of Brooklyn Park, Crystal, and Robbinsdale have adopted TOD zoning ordinances because of work done through the FTA TOD planning grant. Hennepin County Plans and Policies are summarized in Chapter 4, Section 4.1.3.

City of Brooklyn Park

The Project is compatible with the City of Brooklyn Park's local land use planning policies. The City of Brooklyn Park 2040 Comprehensive Plan acknowledges that CR 81 is planned for use as a transit corridor and has updated the future land use map to reflect LRT station area plans. These station areas include Oak Grove Pkwy, 93rd Ave N, 85th Ave N, Brooklyn Blvd, and 63rd Ave N. The City of Brooklyn Park's Station Area Plan was adopted in July 2016, and specific overlay zoning in these areas has been developed. Minimum density for development within one-half mile of station areas is 20 units per acre.

Along the Project Alignment, Development/Redevelopment Areas within one-half mile of LRT stations are mapped as an LRT Overlay district. In these districts, underlying primary zoning districts will govern land uses, except that residential development occurring in the overlay must be at a minimum of 20 dwelling units per acre. The overlay indicates that residential development should be well-connected to and accessible by those traveling by LRT.

Additionally, the City of Brooklyn Park 2040 Comprehensive Plan includes Station Area Plans with primary initiatives for each of the five stations in the City of Brooklyn Park portion of the Project Alignment. The vision for these LRT station areas is to reinforce and strengthen the unique characteristics of each of the neighborhoods surrounding the five stations. The plans identify infrastructure improvements, redevelopment options, and opportunity sites within

one-half mile of each stop. The LRT station locations would provide access to employment centers and other major destinations in the City of Brooklyn Park, which would be compatible with these goals. The City of Brooklyn Park's 2040 Comprehensive Plan indicates the future land uses and characteristics at five LRT stations as shown in Table A4-1.

Table A4-1 Future Land Uses and Characteristics for LRT Station Areas in the City of Brooklyn Park

Station Area	Future Land Uses and Characteristics
Oak Grove	■ Parking ramp and TOD liner ■ Street network ■ Grand boulevard ■ Future development
93rd Ave N	■ Improved pedestrian connections ■ Incentivize TOD
85th Ave N	■ Hennepin County Brooklyn Park Branch Library ■ NHCC Master Facilities Plan (2015) ■ Civic plaza ■ Long-term redevelopment sites
Brooklyn Blvd	■ Pedestrian connections ■ TOD overlay ■ Short-term redevelopment sites
63rd Ave N	■ A local ethnic marketplace or pop-up market space ■ Long-term redevelopment sites ■ Pedestrian enhancements at the intersection

City of Crystal

The Project is compatible with the City of Crystal's local land use planning policies. The City of Crystal 2040 Comprehensive Plan references the 2016 Alignment. Land use changes around the LRT stations since the 2016 Final EIS was published are minimal.

The City of Crystal relies on Metro Transit for public transit service. The following public transit implementation items are identified in the City of Crystal's 2040 Comprehensive Plan:

- Monitor and, as needed, participate in any Metro Transit consideration of modifying, expanding, or eliminating transit service to the city
- Exercise the City of Crystal's land use authority and any applicable municipal consent powers regarding any such changes in service or new facilities proposed by Metro Transit
- Continue to assist with the development of the Project

Beginning in 2015, Hennepin County and the City of Crystal collaborated on a station area plan for the Bass Lake Rd Station. The plan identified opportunity sites, improvements to Bass Lake Rd between the LRT station and W Broadway Ave, park ideas, and redevelopment options around the LRT station. Land use suggestions, placemaking, and strategies to achieve health benefits were also discussed. The LRT station would provide additional access to employment centers and commercial and retail destinations in Downtown Crystal and would be compatible with the City of Crystal's goals and policies.

City of Robbinsdale

The Project is compatible with the City of Robbinsdale's local land use planning policies. The City of Robbinsdale 2040 Comprehensive Plan was adopted before the Project Alignment was identified, but the plan acknowledged that the 2016 Alignment for the Project was being altered.

The City of Robbinsdale's 2040 Comprehensive Plan recognizes that an LRT station would be located on the western edge of Downtown Robbinsdale between 40th Ave N and 42nd Ave N. The LRT station would provide additional access to employment centers and commercial and retail destinations in Downtown Robbinsdale. The Project Alignment would include an additional LRT station in Southeast Robbinsdale, located on CR 81 near the North Memorial Medical Center. The North Memorial Medical Center is the City of Robbinsdale's largest employer and provides a variety of medical services to the region.

Land use planning information was reviewed for the LRT stations in the City of Robbinsdale. Changes to current land use are minimal around the LRT stations (since the 2016 Final EIS was published). The transportation chapter of the City of Robbinsdale's 2040 Comprehensive Plan mentioned, "City policies should provide for efficient alternative choices of transportation (including transit), which reduce congestion within neighborhoods and commercial areas. Significant regional transit infrastructure investment is expected with the Blue Line Light Rail Extension."

The City of Robbinsdale's 2040 Comprehensive Plan indicates that future land uses near the Downtown Robbinsdale Station include downtown businesses (retail, commerce, entertainment, and employment), TOD, and future development. Future land uses near the proposed North Memorial Medical Center Station include North Memorial Medical Center, other medical services, and Theodore Wirth Pkwy and surrounding parks and open spaces.

City of Minneapolis

The transportation chapter of *Minneapolis 2040*—the City of Minneapolis's Comprehensive Plan[1]—states that public transit is essential to providing transportation and accessibility and reducing economic disparities. Additionally, *Minneapolis 2040* indicates that the City of Minneapolis will continue to play an active role in the development of transitway projects within and across borders, including this Project. Future land use and built form guidance in *Minneapolis 2040* was prepared in part to support future planned transit service. The "Map of Planned Transitways and Transit Stations" in *Minneapolis 2040* includes the Project in the Increased Revenue Scenario.

Land use on both sides of the Project Alignment west of N James Ave is predominantly urban neighborhood. A mix of urban commercial, retail, and residential uses abut W Broadway Ave with a larger concentration of higher-density mixed-use commercial and residential land use between N 26th Ave and N James Ave. *Minneapolis 2040* indicates that future land uses will remain the same with a focus on community and destination mixed land uses centered near the N Penn Ave intersection, the location of the proposed Penn Ave Station.

Land uses along N 21st Ave are urban commercial, institutional, and vertical mixed use along the south side, and residential uses of varying densities along the north side. *Minneapolis 2040* indicates that future land uses on the south side of N 21st Ave will continue to consist of mixed use, while the north side will continue to consist of urban neighborhood.

When the alignment transitions east of I-94, the current land uses along the west side include I-94 and commercial (office and institutional) and industrial (production) uses along the east side (west of N Washington Ave). Entering Downtown Minneapolis, commercial and industrial land uses continue along both sides of this alignment option. Future land uses along the East of I-94 option are anticipated to remain a mix of industrial, commercial, and mixed use.

4.1.4 Environmental Consequences

This section identifies the long-term (operating-phase) and short-term (construction-phase) planning and policy-related impacts from the No-Build and Build Alternative.

4.1.4.1 Operating-Phase (Long-Term) Impacts

The Project remains consistent with the local and regional planning policies. The following sections describe potential long-term planning and policy impacts.

No-Build Alternative

The No-Build Alternative would not fulfill the key goals of the city and regional plans described above. These plans indicate support for the enhancement, development, and implementation of transit improvements. In addition, these plans prioritize a diversity of transportation modes and the efficiency of land use offered by transit.

Build Alternative

The Project is compatible with the regional land use planning policies and local comprehensive plans and land use and other planning policies of the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park.

4.1.4.2 Construction-Phase (Short-Term) Impacts

Construction-phase impacts are defined as the temporary impacts that occur during Project construction only. The following sections describe potential short-term planning and policy impacts.

No-Build Alternative

No construction-phase impacts would occur with the No-Build Alternative. Therefore, this alternative would have no construction-related land use compatibility issues.

Build Alternative

Construction-phase impacts could include temporary noise, dust, and visual impacts; impacts to land use; or traffic detours resulting in traffic increases through residential neighborhoods. These impacts would not pose compatibility issues with comprehensive plans, land use plans, or other planning policy documents.

4.2 Community Amenities, Character, and Cohesion

This section summarizes the potential impacts from the Project to community amenities, character, and cohesion.

4.2.1 Regulatory Context and Methodology

No specific laws or executive orders regulate how impacts to community amenities, character, and cohesion resulting from transit projects are evaluated. NEPA (42 USC § 4321) and MEPA (Minn. Stat. ch. 116D) form the general basis of consideration of these social impacts.

Information on the community amenities identified in this section was provided by Hennepin County records of community destinations and resources and enriched by community outreach[2]. Information on community access was summarized from descriptions of transit, pedestrian, bicycle, and vehicular traffic conditions in Chapter 3. The Council obtained information on community character from comprehensive plans for the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. Comprehensive plan compatibility is reviewed in Section 4.1. Neighborhood and community impact topics are shown in Table A4-2.

Table A4-2 Neighborhood and Community Impacts Topics and Criteria

Topic	Criteria[a]
Community amenities	■ Physical property acquisition and/or displacement of the facility ■ Noise and vibration impacts to individual community amenities ■ Changes to roads and transit service serving community amenities ■ Changes to parking serving community amenities
Community character	■ Noise and vibration impacts to neighborhoods ■ Visual changes within neighborhoods
Community cohesion	■ Changes to the local road network ■ Changes to the bicycle and pedestrian network ■ Changes to parking

[a] All criteria are derived from findings in this Supplemental Final EIS for the respective environmental categories.

Parks are subject to evaluation in the context of Section 4(f) of the USDOT Act of 1966 and Section 6(f) of the LWCF Act of 1965. Section 4(f) and Section 6(f) resources are specifically addressed in Chapter 8 and Appendix A-8 of this Supplemental Final EIS.

4.2.2 Study Area

The study area for community amenities, character, and cohesion is the area within one-half mile of the LRT stations and one-quarter mile along the Project Alignment.

4.2.3 Affected Environment

This section identifies community amenities within the study area, describes the general character of each Project city, and identifies key existing barriers and connections. The analysis in this section is organized by Project city from north to south.

4.2.3.1 City of Brooklyn Park

The City of Brooklyn Park is characterized by residential neighborhoods in a low- to medium-density suburban environment. Residential neighborhoods often have winding internal circulation streets and are typically separated by major cross-community connectors, including 63rd Ave N, W Broadway Ave, Brooklyn Blvd, and 85th Ave N. I-94 and TH 169 are major barriers separating residential areas. The City of Brooklyn Park does not have any individually named neighborhoods within its boundaries.

Commercial and industrial activities in the area include the Parksquare Shopping Center and Starlite Center located at Brooklyn Blvd and W Broadway Ave. Other areas of commercial activity include Target's North Campus, which is located east of the Oak Grove Pkwy Station. The Project Alignment within the City of Brooklyn Park would include its terminus at Oak Grove Pkwy Station and the future site of the OMF. This area is currently undeveloped, and TH 610 would separate the site of future OMF development from existing residential neighborhoods to the south.

Community amenities are located along the City of Brooklyn Park portion of the Project Alignment, including assisted care, professional services, pharmacies, restaurants, and places of worship. NHCC and the City of Brooklyn Park branch of the Hennepin County Library are located at the intersection of 85th Ave N and W Broadway Ave. The Rush Creek Regional Trail, part of the TRPD, is directly north of the OMF. Community amenities and park resources are presented in Table A4-3 and Table A4-4, respectively.

Table A4-3 Community Amenities in the City of Brooklyn Park

Facility Name	Station Area	Address	Facility Type
NW Suburban Integration District	93rd Ave N	9201 W Broadway Ave	School
Ebenezer Community Church	93rd Ave N	9200 W Broadway Ave	Place of worship
Prestige Home Health Care LLC	93rd Ave N	9019 Nevada Ave N	Assisted care
Berean Baptist Church	85th Ave N	8825 W Broadway Ave	Place of worship
Hennepin County Library: Brooklyn Park	85th Ave N	8500 W Broadway Ave	Library
Mt Noodles	85th Ave N	8459 W Broadway Ave	Restaurant
China Bowl	Brooklyn Blvd	8089 Brooklyn Blvd	Restaurant
Panda Garden	Brooklyn Blvd	8089 Brooklyn Blvd	Restaurant
Phuong Trang Restaurant (Pho 99)	Brooklyn Blvd	8072 Brooklyn Blvd	Restaurant
Affordable Dentures	Brooklyn Blvd	8066 Brooklyn Blvd	Dental clinic
Cajun Deli Brooklyn Park	Brooklyn Blvd	8038 Brooklyn Blvd	Restaurant
Dragon Star Supermarket	Brooklyn Blvd	8020 Brooklyn Blvd	Grocery
Vietnam House	Brooklyn Blvd	7962 Brooklyn Blvd	Restaurant
Tii Cup	Brooklyn Blvd	7958 Brooklyn Blvd	Restaurant
Revive Brooklyn Park Church	Brooklyn Blvd	7849 W Broadway Ave	Place of worship
United Central SDA Church	Brooklyn Blvd	7831 Brooklyn Blvd	Place of worship
Cub Pharmacy	Brooklyn Blvd	7555 W Broadway Ave	Pharmacy
Empowerment Healthcare Stanley	Brooklyn Blvd	7549 Hampshire Ave N	Assisted care
CVS Pharmacy #16213	Brooklyn Blvd	7535 W Broadway Ave	Pharmacy
Empowerment Healthcare Rylee's	Brooklyn Blvd	7517 69th Ave N	Assisted care
NHCC	85th Ave N	7411 85th Ave N	School
Fortunate Homes LLC	Brooklyn Blvd	7409 Louisiana Ave N	Assisted care
Sisaket Asian Market	Brooklyn Blvd	7324 Lakeland Ave N	Grocery
Primus Incorporated	Brooklyn Blvd	7309 Kentucky Ave N	Assisted care
American Furniture Mart	Brooklyn Blvd	7308 Lakeland Ave N	Other
Brooklyn Park Fire Station 3-West	Brooklyn Blvd	7301 W Broadway Ave	Fire station
Prince Of Peace Lutheran Church	Brooklyn Blvd	7217 W Broadway Ave	Place of worship
Evergreen Apartments	Brooklyn Blvd	7108 W Broadway Ave	Assisted care
ComfortHomes Realty LLC [a]	Brooklyn Blvd	7040 Lakeland Ave N	Founder/CEO
Golden Touch Health Care LLC	63rd Ave N	330 County Rd N	Assisted care
Nasha Shkola	85th Ave N	6717 85th Ave N	School
Northern Light Church of Christ	85th Ave N	6717 85th Ave N	Place of worship
Cathie's Childcare	63rd Ave N	6441 Edgewood Ave N	Daycare
Golden Touch Health Care LLC	63rd Ave N	6433 Georgia Ave N	Assisted care
Strategies Africa, Inc.	63rd Ave N	6248 Lakeland Ave N	Cultural organization
DATAAIM, Inc.	63rd Ave N	6248 Lakeland Ave N	IT services
Dominion Income Tax	63rd Ave N	6248 Lakeland Ave N	Financial services
The Church in Brooklyn Park	63rd Ave N	6241 W Broadway Ave	Place of worship
Prairie Seeds Academy ESY	63rd Ave N	6200 W Broadway Ave	School
Prairie Seeds High, Middle, Elementary Schools	63rd Ave N	6200 W Broadway Ave	School

[a] Organization supports minority-owned businesses.

Table A4-4 Parks in the City of Brooklyn Park

Park	Acres	Station Area	Amenities
Oak Grove Park	67.8	Oak Grove Pkwy	Horseshoe court, playground
Rush Creek Regional Trail	232.8	Oak Grove Pkwy	Multi-use trail
Brooklyn Acres Park	5.4	93rd Ave N	Playground
NHCC	74.9	85th Ave N	Soccer/softball fields, gym
Hamilton Park	18.6	85th Ave N	Playground, softball field, tennis court
College Park	5. 9	85th Ave N	Skating rink (winter), playground
Tessman Acres Park	7.6	85th Ave N	Playground
Park Brook Elementary	9.6	Brooklyn Blvd	Basketball court, playground, soccer/softball fields
Park Lawn Park	3.2	Brooklyn Blvd	Basketball court, playground
Tessman Park	16.2	Brooklyn Blvd	Playground
Edgewood Park	3.3	63rd Ave N	Playground
Lakeland Park	9.7	63rd Ave N	Basketball court, cricket pitch, softball, playground
Prairie Seeds Academy	10.0	63rd Ave N	Sports field
Southbrook Park	8.7	63rd Ave N	Walking path

Within the neighborhood and community study area.

4.2.3.2 City of Crystal

The City of Crystal comprises 14 officially recognized neighborhoods. The six neighborhoods adjacent to the Project Alignment are Lions Park, Skyway, Becker, Twin Oaks, Welcome Park, and Cavanagh Oaks. These neighborhoods are residential, with a mix of neighborhood commercial and industrial land uses concentrated at Crystal Town Center located at the intersection of Bass Lake Rd and W Broadway Ave. Low-density, auto-oriented land uses have heavily influenced the existing development patterns in the Cities of Crystal and Brooklyn Park. This portion of the Project reflects primarily highway-oriented regulations and traditional suburban development forms.

Bass Lake Rd (east-west) and CR 81 (north-south) are major connections. The CPKC (east-west) and BNSF (north-south) railways are barriers for movement between neighborhoods. The Crystal Airport interrupts the grid pattern of the surrounding neighborhoods directly northeast of the proposed Bass Lake Rd Station.

Community amenities in the City of Crystal include restaurants, medical amenities, pharmacies, professional services, places of worship, and assisted care. Becker Park is adjacent to the proposed Bass Lake Rd Station. Community amenities and park resources are presented in Table A4-5 and Table A4-6, respectively.

Table A4-5 Community Resources in the City of Crystal

Resource Name	Station Area	Address	Facility Type
Walgreens #5883	Bass Lake Rd	6800 Bass Lake Rd	Pharmacy
K&E Ethnic Food Market	Bass Lake Rd	5600 Bass Lake Rd	Grocery
N&V Helpful Hear Care	Bass Lake Rd	6000 Bass Lake Rd	Health care
LaVien Tax & Accountant Services	Bass Lake Rd	6000 Bass Lake Rd	Financial services
Bass Lake Residence	Bass Lake Rd	5802 56th Ave N	Assisted care
Amazing Love Assisted Living	Bass Lake Rd	5724 Bass Lake Rd	Assisted care
Herzing University	Bass Lake Rd	5700 W Broadway Ave	School
Northwest Family Clinics: Crystal Urgent Care	Bass Lake Rd	5700 Bottineau Blvd	Urgent care
Crystal Gallery Urgent Care	Bass Lake Rd	5502 W Broadway Ave	Urgent care
West Metro Fire-Rescue District Station 1	Bass Lake Rd	5354 Douglas Dr N	Fire station
North-Suburban Emergency Assistance Response	Bass Lake Rd	5209 W Broadway Ave	Food shelf
H&B Building	Bass Lake Rd	5170 W Broadway Ave	Other
Cornerstone Church Crystal	Bass Lake Rd	5000 W Broadway Ave	Place of worship
Full Proof Ministry C.O.G.I.C.	Robbinsdale	4835 W Broadway Ave	Place of worship
Jin's Chow Mein	Bass Lake Rd	129 Willow Bend	Restaurant
African Foods & Gift	Bass Lake Rd	117 Willow Bend	Grocery store

Within the neighborhood and community study area.

Table A4-6 Parks in the City of Crystal

Park	Acres	Station Area	Amenities
North Lions Park	12.6	63rd Ave N	Ballfield, tennis, basketball, volleyball, skating rink (winter), picnic shelter, sledding
Skyway Park	4.0	63rd Ave N	Ballfields, playground, picnic shelter, basketball court
North Bass Lake Park	2.3	Bass Lake Rd	Playground, picnic shelter, basketball court
Becker Park	12. 2	Bass Lake Rd	Playground, splash pad, picnic area, walking/biking paths, skating rink (winter), basketball, pickleball
Soo Line Park	1.1	Bass Lake Rd	Playground, community garden
Cavanagh Park	8.9	Bass Lake Rd	Sports fields, playground, picnic shelter
Welcome Park	9.5	Robbinsdale	Ballfields, playground, basketball court, skating rink (winter)

Within the neighborhood and community study area.

4.2.3.3 City of Robbinsdale

The City of Robbinsdale is primarily residential, with some commercial and industrial activities, and has no officially designated neighborhoods within its boundaries. Residential neighborhoods have a suburban residential character with a grid street pattern. Existing development in the City of Robbinsdale reflects the history of W Broadway Ave as a commercial streetcar corridor, with strips of auto-oriented commercial activity developed more recently. Commercial and industrial activities are concentrated along CR 81 and around the Downtown Robbinsdale area, which is an important community asset and a destination for both residents and visitors to the area.

Primary connectors within the City of Robbinsdale include CR 81, N 36th Ave, N 42nd Ave, and TH 100. Residential neighborhoods are cohesive within themselves but are separated by TH 100, CR 81, and the BNSF right-of-way. The grid street pattern is also interrupted by several lakes within the city boundaries. Crystal Lake, Ryan Lake, and South Twin Lake present natural barriers that influence access and connectivity within the city.

Several community amenities are located along the City of Robbinsdale portion of the Project Alignment, including restaurants, medical amenities, pharmacies, groceries, food shelves, and places of worship. Victory Memorial Dr

intersects with the Project Alignment near the Lowry Ave Station and passes near other park resources, including Lakeview Terrace Park and the Twin Lakes Boat Launch. Community amenities and park resources are presented in Table A4-7 and Table A4-8, respectively.

Table A4-7 Community Amenities in the City of Robbinsdale

Resource Name	Station Area	Address	Facility Type
Faith Evangelical Free Church	Downtown Robbinsdale	4505 Halifax Ave N	Place of worship
TotalCare Assisted Living Services	Downtown Robbinsdale	4301 France Ave N	Assisted care
Redeemer Evangelical Lutheran Church	Downtown Robbinsdale	4201 Regent Ave N	Place of worship
Robbinsdale United Church of Christ	Downtown Robbinsdale	4200 Lake Rd	Place of worship
Northside Asian Market & Deli	Downtown Robbinsdale	4165 Hubbard Ave N	Grocery
CVS Pharmacy #1129	Downtown Robbinsdale	4152 Lakeland Ave N	Pharmacy
Lakeview Elementary and Preschool	Downtown Robbinsdale	4110 Lake Dr N	School
Robbinsdale Police and Fire Department	Downtown Robbinsdale	4101 Hubbard Ave N	Police station
Fresenius Medical Care Robbinsdale Dialysis	Downtown Robbinsdale	4094 Lakeland Ave N	Dialysis center
Sacred Heart Catholic Church	Downtown Robbinsdale	4087 W Broadway Ave	Place of worship
Clear Lakes Dental	Downtown Robbinsdale	4080 W Broadway Ave	Dental clinic
Sacred Heart	Downtown Robbinsdale	4050 Hubbard Ave N	School
Robbinsdale Food Market	Downtown Robbinsdale	4005 W Broadway Ave	Grocery
Elim Lutheran Church	Downtown Robbinsdale	3978 W Broadway Ave	Place of worship
Lao Evangelical Lutheran Church	Downtown Robbinsdale	3978 W Broadway Ave	Place of worship
Bethel Robbinsdale	Downtown Robbinsdale	3900 Hubbard Ave N	Place of worship
Mai Thai Restaurant	Downtown Robbinsdale	3839 Lakeland Ave N	Restaurant
Good Samaritan Specialty Care	Downtown Robbinsdale	3815 W Broadway Ave	Nursing home
Hy-Vee	Lowry Ave	3505 CR 81	Pharmacy, grocery, restaurant
Allina Health Everyday Clinic: Robbinsdale	Lowry Ave	3505 CR 81	Clinic
North Memorial Hospice Care	Lowry Ave	3500 France Ave N	Hospice
Robbinsdale Dialysis of DaVita	Lowry Ave	3461 W Broadway Ave	Dialysis center
North Memorial Health Cancer Center	Lowry Ave	3435 W Broadway Ave	Pharmacy
Community Dental Care Robbinsdale	Lowry Ave	3359 W Broadway Ave	Dental clinic
North Memorial Health	Lowry Ave	3300 Oakdale Ave N	Hospital
Robbinsdale North Memorial Health Pharmacy	Lowry Ave	3300 Oakdale Ave N	Pharmacy
St. Therese Transitional Care Unit North	Lowry Ave	3300 Oakdale Ave N	Nursing home
Trevilla Of Robbinsdale Inc.	Lowry Ave	3130 Grimes Ave N	School
Robbinsdale A Villa Center	Lowry Ave	3130 Grimes Ave N	Nursing home

Within the neighborhood and community study area.

Table A4-8 Parks in the City of Robbinsdale

Park	Acres	Station Area	Amenities
Twin Lakes Boat Access	2.1	Downtown Robbinsdale	Boat launch
Triangle Park	1.0	Downtown Robbinsdale	Picnic area, baseball, playground
Spanjers Park	4.5	Downtown Robbinsdale	Sports field
Mielke Park	0.8	Downtown Robbinsdale	Picnic area
Lee Park	6.7	Downtown Robbinsdale	Picnic area, sports fields, playground, walking path
Sanborn Park	8.8	Downtown Robbinsdale	Picnic area, sports fields, playground, tennis, basketball court, walking path, horseshoe court, fishing dock, skating rink (winter)
Hollingsworth Park	3.9	Downtown Robbinsdale	Picnic area, fishing dock, walking path
Lakeview Terrace Park	26.0	Lowry Ave/Robbinsdale	Sports fields, playground, picnic area, walking path, boat launch
Manor Park	3.7	Lowry Ave	Picnic area, sports fields, playground, tennis, walking path, wading pool
Parkview Park	0.3	Lowry Ave	Playground
Graeser Park	1.8	Downtown Robbinsdale	Picnic area

Within the neighborhood and community study area.

4.2.3.4 City of Minneapolis

Within the City of Minneapolis, the Project passes through six officially designated neighborhoods: North Loop, Sumner-Glenwood, Near North, Hawthorne, Jordan, and Willard-Hay. North Loop is a mixed-use downtown neighborhood that has experienced redevelopment of warehouse buildings into apartments, condominiums, lofts, offices, and artist studio spaces in recent decades. The remaining residential neighborhoods are characterized by richly diverse, dense, urban areas with a grid street pattern. Pockets of commercial and industrial development are scattered throughout the area, concentrated in the North Loop neighborhood and along W Broadway Ave.

Olson Memorial Pkwy (TH 55) (east-west) and I-94 (north-south) provide vehicle connections to the area but act as barriers to connectivity between neighborhoods. Other key connections include N Washington Ave, N Plymouth Ave, Lyndale Ave, Glenwood Ave, and W Broadway Ave. The Mississippi River forms a natural barrier at the eastern edge of several eastern neighborhoods.

Several community amenities are located within the study area, including restaurants, medical amenities, fire stations, food shelves, and places of worship. Park and trail amenities are also scattered throughout the area, including basketball courts, picnic areas, and walking paths. Multi-use trails (Wirth/Victory Memorial Pkwy Regional Trail and Cedar Lake Trail) provide connections for bicyclists and pedestrians. The City of Minneapolis Farmers Market is located within the study area, which is held outdoors from May to October.

Temporary street festivals take place within the study area. Street festivals, such as the Juneteenth Minnesota Block Party and Open Streets—West Broadway, close off W Broadway Ave and provide space for residents to gather, share music and food, and learn more about their community.

Community amenities and park resources are presented in Table A4-9 and Table A4-10, respectively.

Table A4-9 Community Amenities in the City of Minneapolis

Resource Name	Station Area	Address	Facility Type
Parkway United Church of Christ	Lowry Ave	3120 Washburn Ave N	Place of worship
The Purpose Church	Lowry Ave	3001 Russell Ave N	Place of worship
Good News Minneapolis Church	Lowry Ave	3000 W Broadway Ave	Place of worship
Zang Xiong	Penn Ave	2903 Penn Ave N	Daycare
City Life Works	Penn Ave	2827 Newton Ave N	Place of worship
Calvary Evangelical Church (Good in the 'Hood)	Penn Ave	2827 Newton Ave N	Place of worship, food shelf
Yang M Moua	Lowry Ave	2816 W Broadway Ave	Daycare
Lao Cultural Center Building	Lowry Ave	2648 W Broadway Ave	Food shelf
True Vine Missionary Baptist Church	Penn Ave	2639 Thomas Ave N	Place of worship
The Church of Saint Anne: St. Joseph Hiển	Penn Ave	2627 Queen Ave N	Place of worship
KIPP Legacy Academy	Penn Ave	2620 Russell Ave N	School
Iglesia Vino Nuevo El Rey Jesus Minnesota	Lyndale Ave	2519 Lyndale Ave N	Place of worship
Neng Lee Xiong	Penn Ave	2514 N Irving Ave	Daycare
Minnesota Internship Center Unity Campus	James Ave	2507 Fremont Ave N	School
New Salem Baptist Church	Lyndale Ave	2507 Bryant Ave N	Place of worship
Early Childhood Family Education	James Ave	2410 Girard Ave N	School
End Time Apostolic Church	Lyndale Ave	2401 Aldrich Ave N	Place of worship
All Nations Seventh-Day Adventist Church	Penn Ave	2315 24th Ave N	Place of worship
Holding Forth the Word of Life	James Ave/Lyndale Ave	2304 Emerson Ave N	Place of worship
Agape Child Care Development Center	James Ave/Lyndale Ave	2304 Emerson Ave N	School
Morning Star Assembly of God	Penn Ave	2229 W Broadway Ave	Place of worship
Iglesia Pentecostes Alfa y Omega	James Ave	2226 Lyndale Ave N	Place of worship
Plymouth Youth Center	Penn Ave	2210 Oliver Ave N	School
Family Baptist Church (SOAR Campus, Operation Living Hope)	James Ave	2201 Girard Ave N	Place of worship, school, food shelf
River Of Life Lutheran Church	James Ave	2200 Fremont Ave N	Place of worship
United Deliverance Temple	James Ave	2119 Lyndale Ave N	Place of worship
Liberty Community Church	James Ave/Lyndale Ave	2100 Emerson Ave N	Place of worship
Garden Of Gethsemane Church	Penn Ave	2054 James Ave N	Place of worship
Faith Tabernacle Gospel Fellowship	James Ave	2025 4th St N	Place of worship
North Minneapolis Salvation Army	James Ave	2024 Lyndale Ave N	Food shelf
Sanctuary Covenant Church	James Ave	2018 Aldrich Ave N	Place of worship
World Harvest Christian Church	James Ave	2015 Girard Ave N	Place of worship
Real Believers Faith Center	James Ave	2010 Fremont Ave N	Place of worship
Mount Olive Church of God in Christ	James Ave	2006 James Ave N	Place of worship
New Creation Church	Penn Ave	1922 25th Ave N	Place of worship

Resource Name	Station Area	Address	Facility Type
Northpoint Health And Wellness Center	Penn Ave	1835 Penn Ave N	Food shelf, medical/lab
Community Missionary Baptist Church	Penn Ave	1832 Penn Ave N	Place of worship
Saint Andrew's Episcopal Church	James Ave	1832 James Ave N	Place of worship
North Minneapolis Christian Fellowship	James Ave/Lyndale Ave	1823 Emerson Ave N	Place of worship
Vietnamese Catholic Church	James Ave	1814 Dupont Ave N	Place of worship
Greater Mount Vernon Missionary Baptist Church	James Ave	1800 Dupont Ave N	Place of worship
Al-Maa'uun	James Ave	1729 Lyndale Ave N	Free meals
Masjid An-Nur	James Ave	1729 Lyndale Ave N	Place of worship
Ascension Catholic	James Ave	1726 Dupont Ave N	School
Ascension Catholic Church	James Ave	1723 Bryant Ave N	Place of worship
Harold Mezile North Community YMCA	James Ave/Lyndale Ave	1711 W Broadway Ave	Free meals
Visitation Monastery: Girard	James Ave	1619 Girard Ave N	Place of worship
Elizabeth Hall International	James Ave	1601 Aldrich Ave N	School
Visitation Monastery of Minneapolis	James Ave	1527 Fremont Ave N	Place of worship
Franklin Middle School	Plymouth	1501 Aldrich Ave N	School
North Academy Arts & Communication	James Ave	1500 James Ave N	School
Broadway High School	James Ave/Lyndale Ave	1250 W Broadway Ave	School
Temple Shiloh International Ministries	James Ave/Lyndale Ave	1201 W Broadway Ave	Place of worship
United Faith Pentecostal Church	Plymouth Ave	1156 Aldrich Ave N	Place of worship
High Praise Ministries	Plymouth Ave	1130 7th St N	Place of worship
MTS Banaadir Academy	Plymouth Ave	1130 7th St N	School
Tabernacle of Praise E&H Ministry	Plymouth Ave	1121 12th Ave N	Place of worship
Douglas Chapel	Plymouth Ave	1118 6th St N	Place of worship
Four Directions Charter School	James Ave/Lyndale Ave	1113 W Broadway Ave	School
Minneapolis Fire Department Station 4	Plymouth Ave	1101 6th St N	Fire station
Yuan Yuan	James Ave/Lyndale Ave	1010 W Broadway Ave	Restaurant
Salvation Army Harbor Light Center	Target Field	1010 Currie Ave	Free meals
North Minneapolis Human Services Center	Plymouth Ave	1001 Plymouth Ave N	Office
Summit Academy OIC	Plymouth Ave	935 Olson Mem Hwy	School
Bethune	Plymouth Ave	919 Emerson Ave N	School
Dong Hae Korean Grill & Sushi	Plymouth Ave	903 S Washington Ave	Restaurant
Urban Life Christian Center	James Ave	815 N 21st Ave	Place of worship
Northpoint Workforce Center	James Ave	800 W Broadway Ave	Office
HCMC North Loop Clinic Pharmacy	Plymouth Ave	800 Washington Ave N	Pharmacy/clinic

Resource Name	Station Area	Address	Facility Type
Jun Szechuan Kitchen & Bar	Target Field	730 N Washington Ave	Restaurant
Institute For New Americans	Target Field	730 Hennepin Ave	School
Kindee Thai Restaurant	Target Field	719 S 2nd St	Restaurant
The Sanctuary Covenant Church	James Ave	710 W Broadway Ave	Office
Cub Pharmacy	James Ave	701 W Broadway Ave	Pharmacy
Walgreens #16275	Target Field	655 Nicollet Mall	Pharmacy
Dayton At Gaviidae YMCA	Target Field	651 Nicollet Mall	Free food box
Minneapolis North Memorial Health Clinic	Target Field	651 Nicollet Mall	Clinic
Walgreens #15983	James Ave	627 W Broadway Ave	Pharmacy
Prodeo Academy	Target Field	620 Olson Mem Hwy	School
Metro Schools College Prep	Target Field	620 Olson Mem Hwy	School
Broadway Chow Mein	James Ave	609 W Broadway Ave	Restaurant
Lyndale Manor	James Ave	600 18th Ave N	Assisted care
Sumner Library	Plymouth Ave	611 Van White Mem Blvd	Library
Life Time Academy	Target Field	600 1st Ave	School
Sharing & Caring Hands Clinic	Target Field	525 N 7th St	Clinic, food shelf
Hennepin Energy Recovery Center	Target Field	505 N 6th Ave	Public works
Target Field Station Parking Ramp	Target Field	435 N 5th St	Other
Minneapolis Farmers Market	Target Field	312 E Lyndale Ave N	Grocery
Minneapolis Central Library	Target Field	300 Nicollet Mall	Library
Institute of Production and Recording	Target Field	300 N 1st Ave	School
Twin Cities International Schools	Plymouth Ave	277 12th Ave N	School
Wow Bao: North Loop	Plymouth Ave	217 W Broadway Ave	Restaurant
Yoga Center of Minneapolis	Target Field	212 3rd Ave N	School
Capsule Pharmacy	Target Field	117 Washington Ave N	Pharmacy
Salvation Army: Metro Area	Target Field	53 Glenwood Ave	Food shelf
Social Services Office: Minneapolis	Target Field	53 Glenwood Ave	Food shelf
YouthLink/Youth Opportunity Center	Target Field	41 12th St N	Food shelf
Origami Restaurant	Target Field	30 1st St N	Restaurant
International Dermal Institute	Target Field	15 S 5th St	School

Within the neighborhood and community study area.

Table A4-10 Parks in the City of Minneapolis

Park	Acres	Station Area	Amenities
Bethune Park	12.2	Plymouth Ave	Basketball court, picnic area, playground, wading pool
Sumner Field	4.2	Plymouth Ave	Walking path
North Commons Park	25.7	James Ave	Baseball, football, soccer, softball fields, basketball, tennis courts, biking path, skating rink (winter), picnic area, playground, wading pool, walking path, water park
Glen Gale Park	1.5	James Ave	Horseshoe pit, playground
Cleveland Park	1.4	Lowry Ave	Baseball, softball fields, basketball court, picnic area, playground, wading pool
Theodore Wirth Pkwy	679.5	Penn Ave/Lowry Ave	Multi-use trails
Victory Memorial Dr	100	Lowry Ave	Multi-use trails
Cottage Park	0.5	James Ave	Playground
Hall Park	6.2	Plymouth Ave	Basketball court, biking path, picnic area, playground, wading pool, walking path
Glenview Terrace/Valley View Park	18.6	Penn Ave	Biking path, picnic area, walking path
North Loop Park	0.6	Plymouth Ave	Lawn and green space

Within the neighborhood and community study area.

4.2.4 Environmental Consequences

This section identifies the long- and short-term direct impacts to neighborhoods and communities from the Project. The Council's evaluation of neighborhood and community impacts includes an assessment of changes to community amenities, access, community character, and community cohesion. This analysis considers evaluation measures that are based on the analysis of other environmental categories documented in this Supplemental Final EIS. Refer to other sections of this Supplemental Final EIS for additional information regarding transportation (Chapter 3), land use plan compatibility (Section 4.1), visual quality and aesthetics (Section 4.5), noise (Section 5.6), and vibration (Section 5.7).

4.2.4.1 Operating-Phase (Long-Term) Impacts

Long-term impacts to community amenities, character, or cohesion are described in the following sections for the No-Build and Build Alternative.

No-Build Alternative

No changes to community amenities, character, or cohesion within communities are anticipated under the No-Build Alternative.

Build Alternative

This section summarizes the potential impacts of the Project on community amenities, community character, and community cohesion. Analysis in this section is organized by Project city (i.e., the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park) from north to south and identifies the significance of impact to community amenities, community character, and community cohesion as described in Table A4-11. Generally, options where there are a greater number of community amenities and resources adjacent to the Project Alignment would experience more potential impacts over the long term. The approach for analysis of impacts to community amenities, character, and cohesion shown in Table A4-11 was refined to identify impacts for the Build Alternative (see Chapter 4, Section 4.2.3).

Table A4-11 Approach for Analysis of Impacts to Community Amenities, Character, and Cohesion

Impact Category	Additional Analysis Required (yes/no)	Rationale
Community amenities	Yes	■ Analyze acquisitions and relocations of identified community amenities ■ Summarize results of noise and vibration impacts and identify specific impacts to identified community amenities ■ Identify roadway access changes adjacent to identified community amenities ■ Explore impact of parking changes to adjacent community amenities
Community character	Yes	■ Summarize results of noise and vibration impacts to community character ■ Evaluate neighborhood-level impacts to visual character
Community cohesion	Yes	■ Identify alterations to roadway, bicycle, and pedestrian network impacting community cohesion ■ Explore impact of parking changes to community cohesion

4.2.4.2 Construction-Phase (Short-Term) Impacts

Construction-phase impacts are defined as the temporary impacts that occur during Project construction only.

No-Build Alternative

No construction-phase impacts would occur with the No-Build Alternative. Therefore, this alternative would have no construction-related impacts to community amenities.

Build Alternative

Although temporary in nature, construction-phase impacts could affect community amenities, character, and cohesion. Traffic detours could increase traffic through residential neighborhoods or change access to community amenities. Similarly, sidewalk closures and detours could affect pedestrian traffic patterns, particularly for people with limited mobility. Construction impacts such as increased levels of noise and dust could temporarily affect neighborhood character, primarily in areas that are relatively quiet. Fenced-in construction work sites could also present physical and visual barriers to connectivity and community character. The presence of large construction equipment could be perceived as visually disruptive, resulting in temporary effects on community character, particularly in residential settings.

4.2.5 Avoidance, Minimization, and Mitigation Measures

Although the Council does not anticipate that impacts associated with the Project would be severe enough to affect overall community character and cohesion, mitigation would be implemented as required for specific locations where long-term operational impacts and short-term construction impacts are anticipated.

4.2.5.1 Long-Term Mitigation Measures

Specific mitigation for the long-term impacts such as property acquisitions and displacements, visual quality, and noise are discussed in other sections of this Supplemental Final EIS (Section 3.4 and Section 3.5 in Appendix A-3, Section 4.3 and Section 4.5 in this appendix, and Section 5.6 and Section 5.7 in Appendix A-5).

4.2.5.2 Short-Term Mitigation Measures

Potential mitigation options for short-term construction impacts could include deliberate construction staging or phasing, signage, and signal control requirements during construction for roads, trails, and sidewalks to maintain

access to neighborhoods and community amenities throughout the construction period. Potential BMPs would include working with residents and community facility managers to provide alternative access, giving residents and community amenities adequate notice about construction plans and phasing, and alerting the public to detours and access changes.

Mitigation measures for short-term impacts to community amenities would be identified in the Construction Mitigation Plan and Construction Communication Plan, which would be implemented by the Council prior to and during construction. Mitigation measures included in the Construction Communication Plan may be developed as the Project advances to construction.

In addition, the Council could develop and implement a Construction Mitigation Plan, including a Construction Staging Plan to be reviewed with the appropriate partners and stakeholders. A Construction Communication Plan and a Construction Noise Plan could also be developed to ensure that construction updates are shared in a timely manner.

4.3 Acquisitions and Relocations

The Project would require the acquisition (both partial and full) of real property to include permanent and temporary easements for the construction and operation of the Project. This includes acquisitions of land not currently dedicated to transportation purposes, which would require the relocation of current residents and businesses. This section summarizes acquisitions and relocations required for the Project.

4.3.1 Regulatory Context and Methodology

Specific regulations govern the displacement and relocation of residents and businesses resulting from publicly funded transportation projects. Public agencies are required by law to compensate landowners for property acquired for public use. Acquisition of property required for the Project would be in accordance with the Uniform Act (Public Law 91-646), 42 USC § 4601 (the implementing regulations); FTA's Circular 5010.1D, Grants Management; and Minn. Stat. ch. 117. The objective of the Uniform Act is to provide fair and equitable treatment of people whose real property is acquired or who are displaced in connection with federally funded projects; to ensure that relocation assistance is provided; and to ensure that decent, safe, and sanitary housing is available within the displaced person's financial means.

The analysis in Section 4.3.4.1 identifies parcels that would be acquired to accommodate the Project. Parcel impacts, building acquisitions, and relocations have been estimated using the LOD and approximate right-of-way requirements for the Project. The following types of impacts and transactions are discussed in this section:

- ***Parcel impacts:*** Any area of a property that would overlap with the LOD for the Project. This includes full and partial impacts.
- ***Partial acquisition:*** Purchase of a portion of an overall property. A partial acquisition could include a fee-simple or easement acquisition.
- ***Full acquisition:*** Purchase of all fee-simple landownership rights of a property.
- ***Relocation:*** Relocation results from full acquisition and conversion of the existing land use to a transportation use. Relocations are measured by housing units or businesses, not tax parcels. For example, the acquisition of an apartment building on a single tax parcel with six units would result in six residential relocations.
- ***Easement:*** An easement provides for the temporary (during construction) or permanent use of a property for a particular purpose.

4.3.2 Study Area

The study area for displacement of residents and businesses is defined as the area within the LOD of the Project, which provides a conservative estimate of right-of-way requirements.

4.3.3 Affected Environment

Development along the Project Alignment includes primarily residential, commercial, public, and industrial uses. Existing land uses are identified and described in Section 4.2.3 and the specific regulations associated with parkland acquisition are described in Chapter 8. Utilities and potential utility relocations are discussed in Section 5.1.

4.3.4 Environmental Consequences

This section identifies potential long-term (operating-phase) and short-term (construction-phase) parcel impacts from the No-Build and Build Alternative.

4.3.4.1 Operating-Phase (Long-Term) Impacts

The operating phase of the Project would require the permanent acquisition of right-of-way from residential, commercial, and industrial properties and permanent easements on park properties.

No-Build Alternative

The No-Build Alternative would not require acquisition of any properties for the Project.

Build Alternative

The operating phase of the Project would likely have long-term impacts to residential, commercial, industrial, and undeveloped properties in the study area because of permanent property acquisitions. As design advances, the Project would consider modifications or adjustments to avoid property impacts or lessen the severity of the impact. Land use types included in each of these categories are shown in Table 4-9 in Chapter 4, Section 4.3.

Parcel impacts, acquisitions, and relocations are presented in Chapter 4, Section 4.3 of this Supplemental Final EIS, including Table 4-10 for the City of Brooklyn Park, Table 4-11 for the City of Crystal, Table 4-12 for the City of Robbinsdale, and Table 4-13 for the City of Minneapolis.

4.3.4.2 Construction-Phase (Short-Term) Impacts

Construction activities would result in short-term impacts primarily because of activities requiring temporary construction easements. In addition, Project construction would likely require temporary modification or closure of some existing property access. Refer to Chapter 3, Sections 3.3, 3.4, and 3.5 in this Supplemental Final EIS for further discussion of construction impacts related to access closures and impacts to on-street parking.

4.3.5 Avoidance, Minimization, and Mitigation Measures

Information on avoidance, minimization, and mitigation can be found in Chapter 4, Section 4.3.5.

The information in this section provides additional detail to supplement the content in Chapter 4, Section 4.4. Technical reports documenting the archaeological assessments and survey, architecture/history surveys, and assessment of effects are provided in Appendix A-4.

4.3.5.1 Area of Potential Effects

The Project has two APEs, one for architecture/history properties and one for archaeological resources, which are the geographic areas within which an undertaking could directly or indirectly cause alterations in the character or use of historic properties. Figures of these APEs are included in Chapter 4, Section 4.4. The APE for the Project was originally defined in 2011 and refined in 2018 by FTA based on the former preferred alternative reviewed in the 2016 Final EIS. Although the Project traverses almost all the same municipalities and has similar features (stations, park-and-ride facilities, OMF), the 2016 Alignment has altered, a substantive change as defined in Stipulation III.A of the MOA necessitating a reexamination of and a revision to the APE. Based on the potential effects of the Project Alignment and to align with APEs for similar FTA transit projects throughout the region and nationally, changes to the parameters of the previously defined APE were identified in consultation with SHPO. The rationale for the updated

architecture/history and archaeological APEs can be found in the Project Section 106 Compliance Plan in Appendix A-4. As design of the Project advances, FTA may revise the APE as appropriate in consultation with SHPO.

Architecture/History Area of Potential Effects

The updated APE for architecture/history properties includes the following:

- ***Alignment:*** 200 feet on either side of the Project Alignment
- ***LRT stations:*** 500-foot radius from the center point of the station
- ***OMFs:*** 750-foot buffer from the perimeter of the OMF site
- ***New structures or replacements of an existing bridge with a profile no more than 12 feet above an existing grade:*** 200-foot buffer from the perimeter of the structure (assumes the potential for pile driving)
- ***New locations or replacements of an existing bridge with a profile no more than 12 feet above (higher) an existing grade:*** 500-foot buffer from the perimeter of the structure (assumes the potential for pile driving)
- ***Modification to existing collector (local) streets, major arterial streets, and highways:*** construction limits/LOD
- ***New and relocated/realigned collector (local), major arterial streets, and highways:*** first tier of properties directly fronting the roadway and intersections
- ***New surface parking facilities (no buses), modification to existing surface parking facilities (no buses), and new access roads:*** first tier of adjacent properties
- ***Pedestrian (ADA-compliant) ramps, sidewalk and trail improvements, pedestrian enhancements, utility lines (above and below grade) except for high-voltage transmission lines, and borrow/fill and floodplain/stormwater/wetland mitigation areas:*** construction limits/LOD
- ***Noise walls (no pile driving):*** 100-foot buffer of the construction limits/LOD

Archaeological Area of Potential Effects

The updated APE for archaeology includes all areas of proposed construction activities or other potential ground-disturbing activities associated with construction and is the same as the construction limits/LOD.

4.3.5.2 Identification and Evaluation of Historic Properties

Section 106 gives equal consideration to historic properties listed in or determined eligible for listing in the NRHP. The NRHP Criteria for Evaluation (54 USC § 3021) are used to evaluate a historic property to determine whether it possesses historic significance, is of sufficient age, and retains sufficient integrity to convey any potential significance. A historic property can be eligible for the NRHP individually, as part of a historic district, or both.

FTA evaluates the significance of each historic property in relation to the following NRHP eligibility criteria:

- ***Criterion A:*** association with events that have made a significant contribution to broad patterns of history
- ***Criterion B:*** association with the life of a historically significant person
- ***Criterion C:*** embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction
- ***Criterion D:*** has yielded, or is likely to yield, information important in history or prehistory (this generally is understood to refer to archaeological significance)

To be eligible for listing in the NRHP, a property must be 50 years old, or, if it is less than 50 years old, must possess exceptional significance. A property must also retain sufficient integrity to convey its significance.

To identify historic properties within the Project's updated architecture/history and archaeological APEs, four architecture/history surveys, three archaeological literature review and assessments, and a Phase I archaeological survey have been completed since 2022. The architecture/history investigations document previously identified or evaluated historic properties and included field surveys to document previously unidentified properties more than

50 years of age within the Project's APEs. The archaeological literature review and assessments included research to document previously identified historic properties and a field visit to assess the potential for the APE to contain unknown intact archaeological resources. The Phase I archaeological survey included field survey of one area of archaeological potential and recommendations of eligibility for archaeological resources.

These additional studies were completed in accordance with Stipulation I of the existing MOA, which includes a process for identifying and evaluating additional historic properties, if needed, if there are changes in the Project and/or modifications to the Project's APEs as Project engineering advances.

4.3.5.3 Standards Used to Assess and Resolve Adverse Effects

An adverse effect on a historic property is found when an undertaking could alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. An assessment of the effects that the Project would have on historic properties within the APE was completed.

The Project's MOA includes a process for resolving any newly identified adverse effects (Stipulation XIV). Further consultation with SHPO and consulting parties to resolve adverse effects to historic properties will be completed pursuant to Stipulation XIV of the existing MOA and will be documented in an amendment to the MOA.

4.3.6 Affected Environment

Twenty-one NRHP-listed or NRHP-eligible properties, including eight historic districts and one multiple-property complex, have been identified in the Project's APE (architecture/history and archaeological). No previously recorded or reported archaeological sites, nor any new sites, have been identified within the Project's APE to date.

4.3.6.1 NRHP-Listed and NRHP-Eligible Architecture/History Properties

Osseo Branch, St. Paul Minneapolis & Manitoba Railway Historic District (HE-RRD-00002 [including HE-BPC-00084, HE-CRC-00238, HE-RBC-00304, and HE-MPC-16389]), Cities of Brooklyn Park, Crystal, Robbinsdale, Golden Valley, and Minneapolis

The Osseo Branch Line (StPM&M/GN) (aka Minneapolis & Northwestern Railroad Company [M&NW]/BNSF Railway) of the StPM&M is an approximately 13-mile-long segment of the railroad line originally constructed by M&NW between the Cities of Minneapolis and St. Cloud in 1881–1882. The Osseo Branch Line became an essential component in the development of the City of Osseo as a major potato growing, marketing, and distribution center. With the coming of the railroad, City of Osseo potato distributors could transport their product quickly and efficiently to markets in the City of Minneapolis and beyond. As a result, area farmers could grow potatoes as a cash crop on a relatively large scale because they were now able to ship their crops before they spoiled. The Osseo Branch, StPM&M Historic District has been determined eligible for listing in the NRHP under Criterion A as an important transportation corridor that linked the City of Osseo with the Twin Cities Metropolitan Area and its agricultural markets. Additionally, the railroad line established a connection that did not previously exist and resulted in the significant expansion of the potato-growing region in northern Hennepin County.

Minneapolis & Pacific Railway Historic District (Soo Line) (HE-CRC-00199), City of Crystal

The Minneapolis & Pacific Railway Company (M&P) was incorporated in 1884 to construct a single-track mainline from the City of Minneapolis to the Red River Valley. The M&P Railway Historic District has been determined eligible for listing in the NRHP under Criterion A for its association with the City of Minneapolis mill owners who built the line to secure their own connection to wheat growers in western Minnesota and North Dakota. The M&P line was critical in bringing wheat directly from its source in the Red River Valley to the flour mills of the City of Minneapolis. Additionally, the M&P line was the first successful effort of the City of Minneapolis mill owners to reach the large, profitable markets in the east and Europe directly. In 1888, the M&P was consolidated, along with three other railroads, into the Minneapolis, St. Paul & Sault Ste. Marie Railway Company (Soo Line). CPKC took control of the Soo Line in 1990.

West Broadway Ave Residential Historic District (HE-RBC-00158), City of Robbinsdale

The West Broadway Ave Residential Historic District encompasses approximately three city blocks in the City of Robbinsdale. The West Broadway Ave Residential Historic District has been determined eligible for listing in the NRHP under Criterion A for its association with the development of the City of Robbinsdale as an early twentieth-century suburb of the City of Minneapolis. Built between 1919 and 1940, the houses in the district are examples of styles that were popular among suburban homebuilders before World War II. The residential styles in the district include Colonial Revival, Tudor Revival, Prairie, and Craftsman. The district represents the expansion of the City of Robbinsdale between World War I and World War II. Additionally, the district was home to many locally prominent members of the community, who lived there during the Interwar period.

Graeser Park (HE-RBC-00025), City of Robbinsdale

Graeser Park was developed in 1940–1941 as the last and largest of seven roadside parks constructed along the first 12.5-mile section of the Belt Line Hwy (TH 100). The Park is located to the north of TH 100, between W Broadway Ave and Bottineau Blvd. Consulting Landscape Architect Arthur R. Nichols is credited with the landscape design, and Minnesota Department of Highways project engineer Carl F. Graeser, whom the park was later named after in the 1940s, is credited with the beehive fireplace design. Graeser Park has been determined eligible under NRHP Criterion C in the area of landscape architecture. The period of significance is the date of construction, 1940–1941. The park is an outstanding expression of the National Park Service Rustic Style, which characterized federal-relief era roadside park design in Minnesota and encompassed naturalistic landscape design as well as that of structures, buildings, and objects.

Hennepin County Library, Robbinsdale Branch (HE-RBC-00024), 4915 42nd Ave N, City of Robbinsdale

The Robbinsdale Library was established by the Robbinsdale Library Club, which was organized in 1907. The club raised money for both the first library materials and the library building, which was completed in 1925 by architect H.H. Livingston. The club owned and maintained the library until 1976, when it was donated to the City of Robbinsdale. The Robbinsdale Library is listed in the NRHP under Criterion A for its representation of the efforts of the Robbinsdale Library Club to provide the area residents of the City of Robbinsdale with the opportunity to improve their lives and gain enjoyment through reading. Additionally, the club represents the self-help culture prevalent in America at the beginning of the twentieth century by funding the library without the aid of the government or an outside foundation.

Guaranty State Bank of Robbinsdale (HE-RBC-01513), 3700 W Broadway Ave, City of Robbinsdale

This property is an outstanding example of Mid-Century Modernism, especially as it was applied to banks to create a distinct, inventive visual identity after decades of traditional bank design. This property is eligible under NRHP Criterion C in the area of architecture with a period of significance from 1963–1964.

Grand Rounds Historic District (Theodore Wirth Pkwy Segment and Victory Memorial Dr Segment) (XX-PRK-00001), Cities of Robbinsdale, Golden Valley, and Minneapolis

In 1883, Horace Cleveland, a landscape architect, brought his idea for a continuous green necklace of parkway and open space around the City of Minneapolis to the newly formed Board of Park Commissioners (renamed MPRB in 1969). The Grand Rounds was subsequently acquired and built over many years by the Board of Park Commissioners primarily during the late nineteenth and early twentieth centuries. Theodore Wirth, Superintendent of Parks from 1906 until 1935, had a prominent role in the acquisition of lands and development of the Grand Rounds. Comprising seven districts, the Grand Rounds passes through almost every part of the City of Minneapolis. Each of the seven segments was acquired and developed at a different time and contributes its own history and significance to the Grand Rounds as a whole. The seven districts include a dozen lakes and ponds, four golf courses, two waterfalls, natural and planned gardens, creek and river views, and 50.1 miles of trails. The Grand Rounds has been determined eligible for listing in the NRHP under Criteria A and C in the areas of community planning and development, entertainment/recreation, and landscape architecture as a superb example of an urban byway and park system. A

non-contributing segment of the Grand Rounds Historic District crosses the Build Alternative. This non-contributing segment is located in the City of Robbinsdale and is located roughly even with 33rd Ave N on the north to slightly north of Parkview Blvd on the south.

All Pets Animal Clinic (HE-MPC-22664), 2727 W Broadway Ave, City of Minneapolis

All Pets Animal Clinic was determined individually eligible for listing in the NRHP for its local significance under NRHP Criterion C, in the area of Architecture. The building is one of the only extant examples of a Mid-Century Modern style building in the City of Minneapolis with prominent breezeblock details, an increasingly rare material and high-style characteristic of the architectural style. The property boundary is the current parcel boundary, as the triangular parcel contributed to the unique, setback siting of the building in relation to W Broadway Ave. The period of significance for this property is 1970, the year in which the building was constructed.

Pilgrim Heights Community Church (HE-MPC-08277), 3120 Washburn Ave N, City of Minneapolis

The Pilgrim Heights Community Church is an example of an Early Modern community church by the Minneapolis firm of McEnary and Krafft. The use of structural glass at the narthex, the steep roof pitch and relatively low height of the roof eaves from the ground, and the exposed roof beams are all typical characteristics of the Mid-Century Modern movement. Pilgrim Heights is the first of McEnary and Krafft's forays into the design of churches and, therefore, represents the change in the firm's architectural interests. The church also represents the development of the design aesthetic McEnary and Krafft used for future ecclesiastical commissions, which embraced Mid-Century Modernism. The church is eligible for listing in the NRHP under Criterion C as an important contribution to the development of mid-century modern ecclesiastical architecture.

Forest Heights Addition Historic District (HE-MPC-22600), City of Minneapolis

When the Forest Heights addition was platted in 1883, North Minneapolis was connected to Downtown by a single horsecar line that ran along Washington Ave N and 20th Ave N (now named W Broadway Ave) but only as far west as Emerson Ave N. By 1890, the system had been improved with steam-, and later electric-, powered streetcars, and the lines were extended as far north as 32nd Ave N along both Washington Ave N and Fremont Ave N. Extensions were also made as far west as Penn Ave N along W Broadway Ave, 6th Ave N, and Western Ave. Access to this portion of North Minneapolis was further improved by the construction of a truss bridge across the Mississippi River in 1887 that connected North Minneapolis with Northeast Minneapolis at W Broadway Ave. These infrastructure improvements transformed W Broadway Ave into a central commercial corridor and attracted many new residents. Because of its role in the development of North Minneapolis, this historic district is eligible under NRHP Criterion A in the area of community planning and development.

This addition is also associated with the property developers Gale and Company. Led by Samuel Gale, Gale and Company was a prominent development firm in the late nineteenth century in the City of Minneapolis and was responsible for platted additions like Forest Heights and Oak Lake Park in North Minneapolis. As a result, this historic district is also eligible under NRHP Criterion B.

Furthermore, Forest Heights features curvilinear streets that take advantage of the hilly topography of the area and incorporate multiple public parks and green space. Additions designed in a picturesque style are not common in the City of Minneapolis, and this is the only nineteenth-century picturesque style addition in North Minneapolis. As a result, this historic district is eligible under NRHP Criterion C in the area of landscape architecture.

North Community YMCA (HE-MPC-08033), 1711 W Broadway Ave, City of Minneapolis

The North Community YMCA stands out in the history of North Minneapolis because of the role it played in redeveloping the W Broadway Ave corridor. The 1960s and 1970s in North Minneapolis were characterized by concerted efforts to revitalize that portion of the City following decades of economic decline and the destruction of the Plymouth Ave business district that resulted from widespread social unrest in July 1967, brought on by long-

standing racial inequality experienced locally and across the country. In response, City officials developed a plan for a "New North Side" in 1968. In the early 1970s, the Minneapolis Housing and Redevelopment Authority, in conjunction with the W Broadway Business Association, began developing plans to redevelop the W Broadway Ave corridor. Construction of this property was likely part of the broader effort to redevelop North Minneapolis and W Broadway Ave in particular. Therefore, this property is eligible under NRHP Criterion A in the area of community planning and development.

Durnam Hall (HE-MPC-08028), 927–931 W Broadway Ave, City of Minneapolis

Durnam Hall is NRHP eligible under Criterion A for its association and use as a social and entertaining gathering place that made a significant contribution to the cultural neighborhood patterns of North Minneapolis. Many civic leaders and groups spoke and met in the building, including former Minnesota senator and Pillsbury Company co-founder Charles Alfred Pillsbury in 1896, women candidates for library and school boards, and then-Governor John Lind in 1900. It was also home to chapters of fraternal organizations that were significant in civic engagement at that time and used for community social events.

Reno Land and Improvement Company Addition Historic District (HE-MPC-22244), City of Minneapolis

This eligible historic district includes seven extant working-class houses that are associated with builder Maurice Schumacher. At the time of these homes' construction in 1901, Schumacher had been a practicing carpenter and builder for only a few years. While Schumacher had built larger and more opulent homes by the time of the construction of this district, this is the earliest extant example of Schumacher undertaking a more comprehensive project beyond one single residence. As Schumacher eventually made his name in part by effectively overseeing large-scale developments such as Foshay Tower, the Sheridan Hotel, and the Burns Heights affordable housing complex, this district appears to be the first instance of Schumacher refining and scaling up the construction skills for which he would eventually become famous for in the City of Minneapolis. Therefore, with regard to its role as the earliest extant large-scale development in Schumacher's 50-year-long career as one of the City of Minneapolis's most sought-after builders, this district has significance under NRHP Criterion C as the work of a master.

Sundseth Undertaking/Sundseth-Anderson Funeral Home (HE-MPC-22130), 2024 Lyndale Ave N, City of Minneapolis

This property is designed in the Italian Renaissance style and features many notable characteristics of the style. This property was originally designed in 1925 by architect Carl J. Bard, who is known to have designed several properties in the City of Minneapolis area, including several churches. This property is eligible for listing in the NRHP with local significance under NRHP Criterion C in the area of Architecture as one of the only extant examples of an Italian Renaissance style cultural institution building in the City of Minneapolis; in the area of the work of a master, for association with Carl J. Bard, especially because the mortuary was during pivotal years in a solo career that solidified his personal style and influenced later Mediterranean revival designs and is his only known mortuary building; and for its type, period, or method of construction because it exemplifies a recognizable architectural building type as the oldest, extant, purpose-built residential-style mortuary in the City of Minneapolis.

Control-Data Institute and Control Data – Northside Manufacturing Plant (HE-MPC-00477/HE-MPC-16694 and HE-MPC-16699), 1001 Washington Ave N/227 12th Ave N, City of Minneapolis

Control-Data Institute and Control Data – Northside Manufacturing Plant are NRHP eligible under Criterion A in the area of social history. The buildings are associated with the historic period in North Minneapolis that is defined by the unrest that occurred along the Plymouth Ave commercial corridor during summer 1967. The 1967 unrest forced the City of Minneapolis officials to acknowledge the history of resource deprivation and material degradation that had come to characterize North Minneapolis during the previous decades. By October 1967, the Minneapolis Housing and Redevelopment Authority developed a widespread plan to bring a variety of social services to North Minneapolis. Construction of the Control Data – Northside Manufacturing Plant in 1968 and the Control-Data Institute in 1970 was part of this larger renewal initiative.

Franklin Co-Operative Creamery Association North Side Complex (HE-MPC-22706), 2017 2nd St N/2108 Washington Ave N, City of Minneapolis

Construction of the Franklin Co-Operative Creamery Association North Side Plant on Washington Ave N and a Garage and Barn on 2nd St N in 1922 occurred before industrial buildings and warehouses encroached on the commercial corridors from the east and potentially contributed to trends that characterized commercial development in the area after 1930. The claim at the time of its construction that the property was "the largest barn west of Chicago" also suggests that the building may have been unique within the broader dairy industry. Furthermore, this property stands out because of its association with the Franklin Co-Operative Creamery Association, a successful dairy co-operative that was an outgrowth of the Milk Wagon Drivers' Union, Local 471.

The Franklin Co-Operative Creamery Association achieved financial success during the 1920s and 1930s and improved working conditions and pay for local dairy workers. Therefore, this complex is eligible for listing in the NRHP due to its local significance under NRHP Criterion A in the areas of industry and social history. The period of significance is 1922–1959, which constitutes the period between its construction and the year in which the Franklin Co-operative Creamery Association ceased to function as a co-operative and was reorganized as Franklin Creamery, Inc.

Contributing resources within the complex based on this period of significance are the Franklin Co-operative Creamery Association North Side Plant (HE-MPC-22144) and the Franklin Co-operative Creamery Association Barn and Garage (HE-MPC-22160). Both buildings are also individually eligible under NRHP Criterion A in the areas of industry and social history as representations of a rare victory for organized labor at a time when the City of Minneapolis was considered nationally to be a firmly anti-union town.

Northwestern National Bank – North American Office (HE-MPC-16722), 615 7th Street N, City of Minneapolis

The Northwestern National Bank – North American Office building was constructed during the historic period in North Minneapolis defined by ongoing urban renewal initiatives and their effects on surrounding neighborhoods, spanning from the 1930s through the late 1960s. In summer 1967, long-standing, widespread racial inequality and the demolition and displacement caused by the large-scale urban renewal initiative fueled an uprising in the City of Minneapolis, causing significant unrest and property damage along the Plymouth Ave commercial corridor. The 1967 unrest forced the City of Minneapolis officials to acknowledge the history of resource deprivation and material degradation that had come to characterize North Minneapolis during the previous decades. This bank was constructed in 1969 and housed educational opportunities and social services for residents in effort to address inequities that came to the fore during the 1967 unrest. The facility was intended to be a bridge between the commercial center and the poverty-ridden neighborhoods not far to the west and north. Therefore, this property is eligible under NRHP Criterion A in the area of social history with a period of significance from 1969–1974.

Minneapolis Warehouse Historic District (HE-MPC-00441), City of Minneapolis

The Minneapolis Warehouse Historic District covers a 30-block area in Downtown Minneapolis and includes nineteenth- and early twentieth-century commercial buildings, many of which were architect designed. The district is listed in the NRHP under Criteria A and C. The buildings in the district range from three to seven stories in height and include examples of Italianate, Queen Anne, Richardsonian Romanesque, Classical Revival, and early twentieth-century commercial styles. The Minneapolis Warehouse Historic District was an area of early commercial growth in the City of Minneapolis and the warehouse and wholesaling district that expanded when the City of Minneapolis became a major distribution center for the upper Midwest. The district is also architecturally distinct for its intact concentration of commercial buildings designed by the City's leading architects.

St. Paul Minneapolis & Manitoba Railway Historic District/Great Northern Railway Historic District (XX-RRD-010), City of Minneapolis

As a segment of GN's transcontinental route, the StPM&M Historic District corridor helped to solidify the Cities of Minneapolis and St. Paul as the commercial, financial, and manufacturing center of an area extending from eastern Wisconsin to central Montana. Although its importance began to wane by the 1920s because of competition from automobiles and trucks, GN's transcontinental route remained a vital component of Minnesota's and the region's transportation network into the 1950s. As such, the StPM&M Historic District is eligible for listing in the NRHP under Criterion A because it meets registration requirements 2 and 3 from the Railroads in Minnesota, 1862–1956 Multiple Property Documentation Form. The historic district meets registration requirement 2 because it established a railroad connection that did not previously exist and/or served as the dominant transportation corridor. Additionally, the railway facilitated the expansion of the industrial, commercial, and agricultural practice along the corridor. The historic district also meets registration requirement 3 because it was an influential component of the state's railroad network and made important connections within the network and with other modes of transportation.

Saint Anthony Falls Historic District (HE-MPC-08361), City of Minneapolis

The Saint Anthony Falls Historic District was listed in the NRHP in 1971. The District spans both sides of the Mississippi River in Downtown Minneapolis surrounding the falls of Saint Anthony. The District boundaries are generally bound by 2nd Street on the west side of the river; to the south of Plymouth Ave N and Marshall St NE on the northwest, including all of Nicollet Island; University Ave SE on the east side of the river; and 10th Ave S/6th Ave SE on the southeast. The falls of Saint Anthony were instrumental in the development of the City of Minneapolis during its early stages of growth. The District's period of significance spans many time periods between 1858–1941. The District is significant under NRHP Criteria A, C, and D in the areas of Historic – Non-Aboriginal, Commerce, Transportation, Exploration/Settlement, Engineering, Industry, Architecture, and Social History. The District retains industrial, commercial, transportation, and residential properties.

Cameron Transfer and Storage Building (HE-MPC-16391), 756 4th St N, City of Minneapolis

This industrial building was listed in the NRHP in 2014. The property has significance under NRHP Criterion C within the area of Engineering. The period of significance is 1909–1911, the years during which the building was constructed. The historic property boundary is limited to the building itself. The building has local significance for its representation of the shift in local warehouse construction from wood post-and-beam structures to reinforced-concrete mushroom capital structures. Both systems were employed in the construction of this building, making it a rare example in the shift between these two structural techniques that were used in the early twentieth century. The building was designed by Minneapolis engineer Claude Allen Porter (C.A.P.) Turner, who became renowned for his reinforced-concrete mushroom system.

4.3.6.2 Archaeological Resources

No previously recorded or reported archaeological sites, nor any new sites, have been identified within the archaeological APE to date. The archaeology literature review and assessment reports have identified parcels with the potential to contain unknown archaeological resources within the archaeological APE. A Phase I archaeological survey has been completed for one of the nine parcels. This survey recovered post-contact (modern and historical) archaeological materials; however, this site has been recommended as not eligible because this archaeological data and research did not suggest significance for listing in the NRHP. Four parcels were identified during preparation of a supplemental assessment in December 2024–January 2025; therefore, fieldwork has not yet occurred due to winter conditions. Multiple attempts were made to contact property owners of the remaining four parcels to obtain right-of-entry approval to conduct the survey; however, no responses were provided by these property owners, so right-of-entry was unable to be acquired, and the survey could not be conducted. Survey of these eight parcels would be completed prior to construction and, if historic properties are identified that would be adversely affected, the effects would be resolved through Stipulation XIV of the existing MOA.

4.3.7 Environmental Consequences

To inform the understanding of the No-Build Alternative compared to the Build Alternative, FTA completed an assessment of the effects that the Project would have on historic properties. Effects from the Project on historic properties within the updated APE have been assessed pursuant to Stipulation I.C of the MOA.

4.3.7.1 No Build Alternative

The No-Build Alternative would have no long-term direct, long-term indirect, or short-term effects on the identified historic properties.

4.3.7.2 Build Alternative

FTA has made an effect finding for the Project and each historic property listed or eligible for listing in the NRHP within the APE as part of this Supplemental Final EIS/Amended ROD. There will be an Adverse Effect to two historic properties. Therefore, a finding of Adverse Effect has been made for the Project, therefore FTA is consulting with SHPO, the Council, Section 106 consulting parties, other interested parties, and the public pursuant to Stipulation XIV of the MOA to determine the appropriate means to resolve the adverse effects and develop mitigation plans as required

4.3.7.3 Avoidance, Minimization, and Mitigation Measures

Consultation to determine the appropriate measures to avoid, minimize, or mitigate adverse effects would be completed pursuant to Stipulation XIV of the MOA and would be documented in an amendment to the MOA, pursuant to Stipulation XIV. Potential avoidance/minimization/mitigation measures may include the following:

- Development of a construction protection plan in consultation with SHPO and interested parties to mitigate potential construction-related impacts on nearby historic properties
- Educational efforts and incentives aimed at the rehabilitation of historic properties in areas that may experience Project-related redevelopment, including LRT station areas
- Coordination with local municipalities to develop incentives to promote the rehabilitation of historic properties near the Project area, particularly in LRT station areas
- Development of a plan to monitor and address potential noise effects on historic properties during construction
- Development of an interpretive plan to provide public education and interpretation about historic properties in the study area

4.4 Visual/Aesthetics

The information in this section is based on the *Visual Quality Technical Report*, which is provided in Appendix A-4. The objective of the *Visual Quality Technical Report* is to evaluate the Project's potential effects on visual quality, including the character of the natural and built visual features of the visual study area, and how the Project is visually perceived by affected populations in the study area.

4.4.1 Regulatory Context and Methodology

This section contains the definitions and assessment methodology used to determine the visual/aesthetic impacts of the Project.

4.4.1.1 Definition of Terms

Terminology defined in Table A4-12 has been divided into segments to better describe the process of identifying and analyzing the visual/aesthetic features of the Project.

Table A4-12 Visual/Aesthetics Terminology and Definitions

Term	Definition
Visual features	The components of the natural, built, or Project environments that are capable of being seen.
Natural visual features	The land, water, vegetation, and animals that compose the natural environment. Although natural features may have been altered or imported by people, features that are primarily geological or biological in origin are considered natural.
Built visual features	The buildings, structures, and artifacts that compose the surrounding built environment, also known as the cultural environment. These are features that were constructed by people.
Project visual features	The physical components, including new bridges, which compose the Project environment. These are constructed features that would be placed in the environment as part of the Project.
Visual quality	Visual quality refers to what viewers like and dislike about the visual features that compose a particular scene. Visual quality is inherently subjective—different viewers may evaluate visual features differently. In general, people respond favorably to scenes that create a sense of perceived harmony, order, and coherence. Based on the developed urban and suburban context of the study area, specific features were identified as higher-quality visual features when they exemplified one of the following characteristics: ■ A remnant natural feature exemplary of pre-settlement conditions ■ A visually distinct natural or built feature that stands out from the surroundings, and that contributes physically and symbolically in a positive way to the overall community's visual quality ■ A natural or built feature that is an integral component of the broader physical pattern of the community and is generally regarded positively
Affected population	The viewers who occupy land adjacent to the Project—in either the long or short term. These people are those who live, work, shop, recreate, dine, or commute through the area. They can also be characterized by their association with a specific adjacent land use, including residential, commercial, industrial, agricultural, recreational, and institutional parcels. An example of a long-term viewer would be a homeowner with property along the transitway. An example of a short-term viewer would be a runner using a trail in a park adjacent to the transitway.
General visual context	The term "general visual context" is the appearance of the nearby surroundings from the vantage point of a person from ground level (i.e., as one would perceive it from a car, train, bus, bicycle, or on foot). The Project would be located in developed urban and suburban areas with a wide range of development patterns.

4.4.1.2 Assessment Methodology

The methodology that the Council used to evaluate aesthetics and visual quality impacts is based on the FHWA *Guidelines for the Visual Impact Assessment of Highway Projects*[3], which describes four phases used to assess visual impacts: establishment, inventory, analysis, and mitigation. These four phases are described in detail in the *Visual Quality Technical Report*.

Visual Character and Quality

The visual impacts of a project are determined by assessing the visual resource changes that would occur as the result of the project and by predicting viewers' responses to those changes. Visual resource change is the sum of the change in visual character and the change in visual quality. This change can be determined by assessing the compatibility of a project with the visual character of the existing landscape and then comparing the visual quality of the existing resources with the projected visual quality after the project is implemented.

Visual character refers to the description of physical attributes of the study area. It is descriptive and non-evaluative, which means that it is based on defined attributes that are neither good nor bad in and of themselves. A change in visual character cannot be described as having good or bad attributes until it is compared with the viewer's response to that change. Both natural and artificial landscape features contribute to the visual character of an area or view.

Visual quality is the value that viewers place on the existing visual character of the affected environment based on their visual preferences. FHWA defines the following three aspects of visual perception, which determine the visual quality of a particular scene:

- When viewing the components of a scene's natural environment, viewers inherently evaluate the natural harmony of the existing scene to determine whether the composition is harmonious or inharmonious.
- When viewing the components of the cultural environment, viewers evaluate the scene's cultural order to determine whether the composition is orderly or disorderly.
- When viewing the project environment, viewers evaluate the coherence of the project components to determine whether the project's composition is coherent or incoherent.

According to FHWA guidelines, people typically perceive the landscape from or to a linear transportation feature as a composition, and the more the composition meets their visual preferences and expectations, the more they like it. The more they like it, the more memorable, or vivid, it becomes. Therefore, it is useful to evaluate whether the new composition would be as vivid as the existing one and whether the improvements would enhance or detract from the original scene.

Viewer Groups

The population affected by a project is referred to as viewers. Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how a viewer might react to visual changes brought about by a project. Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, the type of viewer activity, the duration of the view, the speed at which the viewer moves, and the position of the viewer.

Low viewer sensitivity results when there are few viewers who experience a defined view, or when they may be less focused on the view, such as a freeway commuter on the freeway. Low viewer sensitivity is also related to viewer expectations resulting from what viewers are used to seeing along the Project.

High viewer sensitivity results when there are many viewers who have a view of frequent or long duration. High viewer sensitivity is also related to familiarity with a view, such as when viewing a resource from a residence, a recreational site, or a commuter route. For example, recreational and residential viewers tend to have extended viewing periods and may be more concerned about changes in views.

The study area for the Project includes several types of viewer groups, such as LRT users, roadway users, pedestrians, residents, workers, and recreational users. A detailed description of these viewer groups is provided in the *Visual Quality Technical Report*.

Levels of Visual Impact

According to FHWA guidelines, impacts are defined as either changes to the environment, measured by the compatibility of the impact, or changes to viewers, measured by sensitivity to the impact. Together, compatibility and sensitivity determine the degree of the impact, which is defined as a beneficial, adverse, or neutral change to visual quality. For example, a project may benefit visual quality by enhancing visual resources and/or views and improving the experience of visual quality. Similarly, a project may adversely affect visual quality by degrading visual resources or obstructing or altering desired views.

Key Viewpoints

KVPs represent specific locations within a landscape unit (defined in Section 4.5.2.2) from which the project would be visible. Within the landscape unit, KVPs were used to characterize the existing visual conditions and to represent examples of visual character and visual quality. They were also used to determine impacts by demonstrating how the Project would change the views within the landscape unit.

The visual impact assessment included evaluating photographic documentation of several key views of the Project. KVPs were selected at critical viewpoints, along commonly traveled routes, or at other likely observation points to document the existing conditions of the study area. For some locations, both an existing-condition photograph and a simulated-condition drawing were provided.

Simulation vantage points were selected to provide representative public views from Project components that would be the most visible to the various types of sensitive receptors that would be located within the landscape units identified for the Project. Alternatively, selection was based on the sensitivity of the resource or locations of key vertical features of the Project that could change the visual character or views of an affected area.

Assessing Visual Change

The visual impacts of the Project were determined by evaluating the changes to existing visual resources that would occur because of Project implementation and assessing the anticipated viewer response to those changes. Aesthetic impacts were determined based on direct field observation from multiple vantage points, including from neighboring properties and roadways, evaluation of existing visual character, and review of Project plans and features. Visual impact assessment was also based on photographic documentation of several key views of the Project.

4.4.2 Study Area and Affected Environment

The visual study area is the right-of-way for the Project, including adjacent properties with a visual connection to the transitway, properties that include residential, commercial, and park properties. In select instances, the Council expanded the analysis to account for specific features that were visible by field observation along the Project Alignment because of topography, physical scale, architectural distinction, or other considerations.

The visual study area includes a diverse array of development patterns, park and natural areas, railways, highways, and local roads. A summary of the general visual context and a listing of identified higher-quality and unique visual features are provided in Section 4.5.3.

4.4.2.1 Project Setting

As described in Chapter 1, the character of the area surrounding the Project transitions from a less dense suburban setting at the terminus in the City of Brooklyn Park, which carries through the Cities of Crystal and Robbinsdale to the moderately dense urban setting in North Minneapolis and connecting at the transportation hub in urban Downtown Minneapolis. The study area includes a variety of land use patterns that have been influenced by the transportation-oriented history of the study area. Low-density land uses have heavily influenced existing development patterns in the Cities of Brooklyn Park and Crystal, which primarily reflect highway-oriented land use regulations and suburban development forms. In the Cities of Robbinsdale and Minneapolis, electric streetcar service provided by Twin City Rapid Transit helped shape early development with concentrations of commercial and moderate-density residential development around Downtown Robbinsdale and in the W Broadway Ave corridor in the City of Robbinsdale.

4.4.2.2 Landscape Units

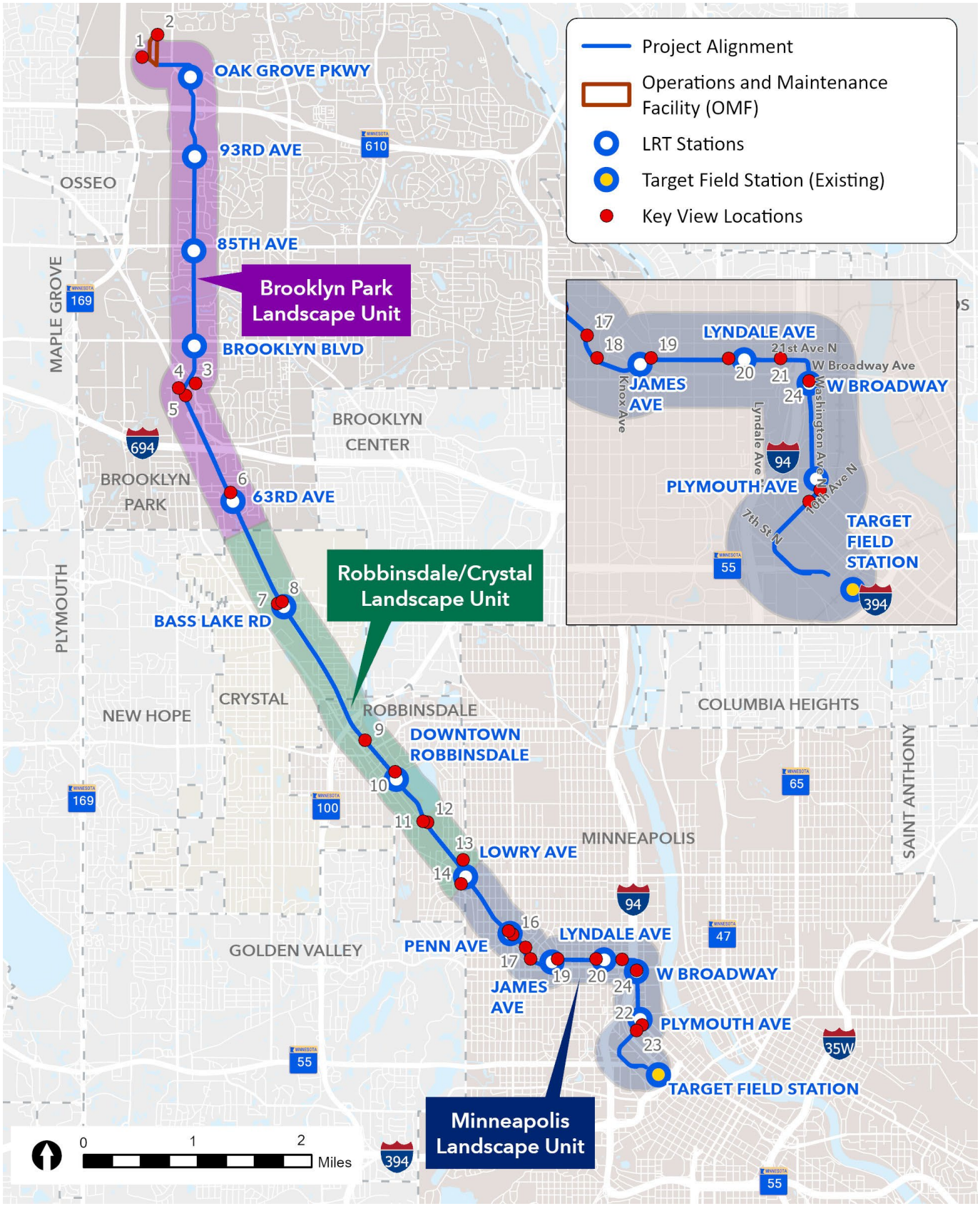
A landscape unit is a portion of the regional landscape. These units are commonly used to divide long, linear projects into logical geographic areas for visual impact assessment purposes. Landscape units are generally made up of areas with similar visual characteristics, although smaller locations within each landscape unit might differ from the overall unit's character. For the purposes of this visual quality analysis, the study area is divided into three landscape units: City of Brooklyn Park, Cities of Crystal/Robbinsdale, and City of Minneapolis. The general visual context of and a list of higher-quality visual features within each landscape unit are described in detail in Appendix A-4.

4.4.2.3 Viewsheds

A viewshed is a subset of a landscape unit; this subset comprises all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the Project. The viewshed also includes the locations of viewers likely to be affected by visual changes resulting from the addition of Project features. The study area for the Project includes the areas that could potentially have views of the Project features and the areas that LRT users could potentially view as they travel through the landscape.

Figure A4-1 shows the landscape units and KVPs evaluated in this assessment.

Figure A4-1 Landscape Units and Key Viewpoints in the Visual/Aesthetics Study Area



4.4.3 Environmental Consequences

The Council determined visual impacts of the Project by evaluating potential changes to existing visual resources that could occur because of Project implementation and assessing anticipated viewer responses to those changes.

4.4.3.1 Operating-Phase (Long-Term Impacts)

The following is an analysis of the long-term visual and aesthetic impacts associated with the Project. The *Visual Quality Technical Report* in Appendix A-4 of this Supplemental Final EIS provides additional information, including impacts to "higher-quality visual features," existing-condition photographs, and a sketch-up of each KVP.

No-Build Alternative

The No-Build Alternative would not result in alteration of the visual quality and character of the study area.

Build Alternative

According to the FHWA guidelines described in Section 4.5.1, the degree of visual impact is defined as a beneficial, adverse, or neutral change to visual quality. The anticipated visual effects during operation of the Project would generally be consistent with existing, similar features, and neutral visual effects are anticipated to result from implementation of the Project along most segments. For KVPs where the Project would have adverse impacts to visual quality, significance of impact is identified, and potential mitigation measures are identified in Section 4.5.4.

City of Brooklyn Park Landscape Unit

In the City of Brooklyn Park Landscape Unit, most of the Project would have neutral effects to visual quality. Most of the transitway would be located in the center of W Broadway Ave and would be generally level with adjacent land uses. At some locations, such as the new bridge over the intersection of 73rd Ave N and CR 81, the trackway would be elevated, resulting in potential visual intrusions to adjacent sensitive receptors (e.g., residential land uses). Visual intrusions for sensitive receptors at these locations would result from both the altered viewshed for residents viewing the Project area and LRVs and the ability for LRT users to view the residential land uses from passing LRVs. Other impacts to visual quality and character would also be associated with the proposed OMF site.

Table A4-13 describes the level of visual sensitivity for viewer groups, the degree of visual change, and the level of impact for each KVP. Visual impacts because of the Project would generally be neutral.

Impacts on the resources identified as higher-quality visual features in the City of Brooklyn Park Landscape Unit are described in the *Visual Quality Technical Report* in Appendix A-4 and summarized in Table A4-14. Visual impacts on these resources because of the Project would generally be neutral.

Table A4-13 Changes to Existing Visual Quality and Character in the City of Brooklyn Park Landscape Unit

Description of View, Higher-Quality Visual Feature, or Primary Project Visual Feature	Level of Visual Sensitivity	Degree of Visual Change in Quality or Character	Level of Impact
KVP 1 (view southwest toward the proposed OMF, from Rush Creek Regional Trail)	Moderately high	Substantially altered	Adverse
KVP 2 (view east toward the proposed OMF, from 101st Ave)	Moderate	Substantially altered	Adverse
KVP 3 (view northwest toward the proposed 73rd Ave N/CR 81 bridge, from W Broadway Ave at 74th Ave N)	Moderate	Character unaltered and quality altered	Neutral
KVP 4 (view east toward proposed 73rd Ave N/CR 81 bridge, from the southwest corner of CR 81 and 73rd Ave N)	Moderate	Character unaltered and quality altered	Neutral
KVP 5 (view north toward the proposed 73rd Ave N/CR 81 bridge, from CR 81 at Prince of Peace Lutheran Church)	Moderate	Character unaltered and quality altered	Neutral
KVP 6 (view south from Lakeland Ave N toward proposed 63rd Ave N Station and park-and-ride garage)	Low	Character and quality unaltered	Neutral

Source: *Visual Quality Technical Report* included in Appendix A-4.

Table A4-14 Summary of Impact at Higher-Quality Visual Features and Primary Project Visual Features in the City of Brooklyn Park

Higher-Quality Visual Feature or Primary Project Visual Feature	KVP	Level of Impact
OMF	KVPs 1 and 2	Adverse
Rush Creek Regional Trail	N/A	Adverse
W Broadway Ave Bridge over TH 610	N/A	Neutral
Hennepin County Library: Brooklyn Park	N/A	Neutral
Shingle Creek	N/A	Neutral
73rd Ave N/CR 81 bridge	KVPs 3, 4, and 5	Neutral
63rd Ave N park-and-ride	KVP 6	Neutral

Source: SEH 2023.

Cities of Crystal/Robbinsdale Landscape Unit

In the Cities of Crystal/Robbinsdale Landscape Unit, the Project area transitway would be located in the center of the roadway, removing the median from CR 81. The impact on visual quality would be neutral because of the existing character of the roadway. The Project Alignment would generally be level with adjacent land uses. However, at some locations, such as the new bridges over the CPKC right-of-way and TH 100, the trackway would be elevated and would result in similar visual intrusions to adjacent sensitive receptors (residential land uses) as described below.

Where sensitive receptors are located adjacent to the Project, visual intrusions would result from changes to vehicle travel in the area, the introduction of new light sources from LRVs and LRT stations, and the altered viewshed for residents viewing the Project and LRVs. Additionally, the ability for LRT users to view the residential land uses from passing LRVs could also constitute a visual intrusion. Visual intrusions for sensitive receptors would result from the altered viewshed for residents viewing the Project. Passengers on the LRT would also have visual intrusions to the residential land uses from passing LRVs. At locations where moderate visual effects are anticipated, including where sensitive receptors are located adjacent to the Project, transitway elements added may be visually screened or softened using landscaping where adequate space permits.

Table A4-15 identifies the level of visual sensitivity for viewer groups, and the degree of visual change and impact for each KVP. Visual impacts because of the Project would generally be neutral.

Impacts to the resources identified as higher-quality visual features of the Cities of Crystal/Robbinsdale Landscape Unit are described in detail in the *Visual Quality Technical Report* in Appendix A-4 and summarized in Table A4-16. Visual impacts to these resources because of the Project would generally be neutral.

Table A4-15 Changes to Existing Visual Quality and Character in the Cities of Crystal/Robbinsdale Landscape Unit

Designation and Description of View	Level of Visual Sensitivity	Degree of Visual Change in Quality or Character	Level of Impact
KVP 7 (view east from the southwest corner of Bass Lake Rd and CR 81 toward Bass Lake Rd Station)	High	Character unaltered, quality highly altered	Adverse
KVP 8 (view south along CR 81 from the northeast corner of Bass Lake Rd and CR 81 looking toward the proposed Bass Lake Rd Station)	High	Character unaltered, quality highly altered	Adverse
KVP 9 (view southeast along CR 81 from Twin Oak Dr toward the proposed Downtown Robbinsdale Station)	Low	Character and quality not substantially altered	Neutral
KVP 10 (view to the north along Bottineau Blvd at the northeast corner of 40th Ave)	Moderate	Character and quality not substantially altered	Neutral
KVP 11 (view north from Parker Station Flats toward Crystal Lake)	Low	Character and quality not substantially altered	Neutral
KVP 12 (view south from Lakeview Terrace Park at CR 81)	Low	Character and quality not substantially altered	Neutral

Table A4-16 Summary of Impact at Higher-Quality Visual Features and Primary Project Visual Features in the Cities of Crystal/Robbinsdale Landscape Unit

Higher-Quality Visual Feature or Primary Project Visual Feature	KVP	Level of Impact
BNSF Rail	N/A	Neutral
City of Crystal gateway area	N/A	Neutral
CR 81 Bridge over CPKC	N/A	Neutral
City of Robbinsdale gateway monument	N/A	Neutral
40th Streetscape	N/A	Neutral
Elm Lutheran Church	N/A	Neutral
Birdtown Flats	N/A	Neutral
Parker Station Flats	N/A	Neutral
Lakeview Terrace Park and Crystal Lake	KVPs 11 and 12	Neutral

Source: SEH 2023.

City of Minneapolis Landscape Unit

The City of Minneapolis Landscape Unit is bound by Target Field to the east and by the Cities of Minneapolis and Robbinsdale city limits to the northwest.

Table A4-17 describes the level of visual sensitivity for viewer groups, the degree of visual change, and the level of impact for each KVP. Visual impacts because of the Project would generally be neutral.

Impacts to the resources identified as higher-quality visual features of the City of Minneapolis Landscape Unit are described in the *Visual Quality Technical Report* in Appendix A-4 and summarized in Table A4-18. Considering the existing industrial character of the visual context east of I-94 approaching downtown, it is anticipated that neutral visual impacts would occur in that area.

Table A4-17 Changes to Existing Visual Quality and Character in the City of Minneapolis Landscape Unit

Designation and Description of View	Level of Visual Sensitivity	Degree of Visual Change in Quality or Character	Level of Visual Impact
KVP 13 (view south from Victory Memorial Dr toward the proposed flyover bridge)	High	Character unaltered, quality moderately altered	Neutral
KVP 14 (view northwest from Theodore Wirth Pkwy toward the proposed flyover bridge)	High	Character unaltered, quality moderately altered	Neutral
KVP 15 (view northwest from northeast corner of Queen Ave N and W Broadway Ave)	Moderate	Character and quality unaltered	Neutral
KVP 16 (view southeast from corner of Penn Ave N and W Broadway Ave)	Moderate	Character unaltered, quality moderately altered	Neutral
KVP 17 (view west from corner of Logan Ave N and W Broadway Ave toward Capri Theater)	Moderately high	Character unaltered, quality moderately altered	Neutral
KVP 18 (view eastward on W Broadway Ave near Morgan Ave N)	High	Character and quality moderately altered	Neutral
KVP 19 (view southwest from the northeast corner of N 21st Ave and Irving Ave N)	High	Character and quality moderately altered	Neutral
KVP 20 (view east from Bell Building apartments and sidewalk at N 21st Ave) with station	Moderately high	Character and quality not substantially altered	Neutral
KVP 21 (view west from Bell Building apartments and sidewalk at N 21st Ave) without station	Moderately high	Character and quality not substantially altered	Neutral
KVP 22 (view north from the southwest corner of 10th Ave and Washington Ave N)	Moderate	Character and quality unaltered	Neutral
KVP 23 (view northeast along 10th Ave N and 3rd Street N toward Washington Ave)	Moderate	Character unaltered, quality moderately altered	Neutral
KVP 24 (view from the corner of W Broadway Ave and N Washington Ave looking south toward the Project)	Moderate	Character and quality unaltered	Neutral

Table A4-18 Summary of Impact at Higher-Quality Visual Features and Primary Project Visual Features in the City of Minneapolis

Higher-Quality Visual Feature or Primary Project Visual Feature	KVP	Level of Impact
Grand Rounds, Theodore Wirth Pkwy and Victory Memorial Dr	N/A	Neutral
MPS and Community Education Head Quarters	N/A	Neutral
Blossoms of Hope Public Art Transit Stop	KVP 16	Neutral
The Capri Theater	KVP 17	Neutral
North Minneapolis Youth Leadership Building (former church)	N/A	Neutral
Bell Building	N/A	Neutral
Club Jaeger building	KVP 22	Neutral
Metro Transit headquarters	N/A	Neutral
HERC site landscaping	N/A	Neutral
Ford Building	N/A	Neutral
Target Field Station Mixed-Use TOD	N/A	Neutral

Source: SEH 2023.

4.4.3.2 Construction-Phase (Short-Term) Impacts

Anticipated visual effects during construction of the Project would be similar to the appearance of typical roadway projects including the temporary presence of heavy equipment, traffic control measures, and construction activities. Areas where construction activities for Project features would be particularly noticeable to sensitive viewer groups include the following:

- Construction of the new bridge for the transitway over TH 610 would be highly visible to travelers along eastbound TH 610.
- The Bass Lake Rd interchange design location option would be disruptive and highly visible to travelers along CR 81.
- Users of Theodore Wirth Pkwy, Victory Memorial Dr, and Hall Park would likely perceive construction activity as undesirable and not consistent with their anticipated recreational experience. Construction of the bridge and elevated Lowry Ave Station would be visible to Grand Rounds users.

In general, the potential short-term impacts that would occur during Project construction would be associated with construction staging areas, concrete and form installation, removal of existing vegetation, lights and glare from construction areas, and generation of dust and debris in the study area, as described in further detail below.

Temporary construction activities are anticipated to include partial or complete road and lane closures, vehicle and pedestrian detours, construction material deliveries, and transport of construction equipment. In general, construction staging areas would most likely be located adjacent to the Project Alignment, where the presence of construction equipment and earthmoving activities are not anticipated to be visually intrusive and would be compatible with the surrounding landscape. Where the transitway passes along recreation areas and residential neighborhoods, construction activities, such as grading, vegetation removal, and lighting of work areas, would likely be perceived as visually disruptive.

Construction impacts would be temporary, and construction staging areas would be restored to pre-Project conditions after construction is completed. At locations where greater visual effects are anticipated, the loss of existing vegetation on side slopes for grading or access purposes would be replaced to the extent feasible. Where applicable, mitigation measures would be implemented to further reduce the impacts of construction of the Project on sensitive viewer groups in the study area.

4.4.4 Avoidance, Minimization, and Mitigation Measures

See Chapter 4, Section 4.5.4 for potential mitigation measures that could reduce the impacts of the Project on sensitive viewer groups in the study area.

4.5 Economic Effects

This section focuses on the economic impacts the Project may have within the region, including effects on the local and regional economy and its residents. Implementation of this Project is expected to result in direct, indirect, and induced effects related to the short-term construction activity, long-term operations and maintenance (O&M) activities, and long-term economic development activities or broader economic impacts. In addition to the direct effects associated with construction, O&M, and economic development activities, the increase in expenditures and employment would generate additional economic activity in the form "spin-off," or indirect effects, arising from spending at supplier firms and induced effects from re-spending of employee wages and salaries by workers engaged in direct and indirect activities. Economic development and broader economic impacts refer to effects that go over and beyond those related to Project construction and operations and capture the changes in productivity and economic activity facilitated by the existence of the Project. All of these effects can be expressed in terms of increased economic output, earnings, and employment.

4.5.1 Regulatory Context and Methodology

This section contains the definitions and assessment methodology used to determine the economic impacts of the Project.

4.5.1.1 Regulatory Context

The Major Capital Investment Projects Final Rule (published in the *Federal Register* on January 9, 2013) specifically includes criteria for assessing economic development effects for fixed-guideway transit projects. The final rule calls for documentation of the degree to which a project would have a positive impact on local economic development as part of the FTA review process.

The implementation and construction, continuing operation, and market reaction to the availability of the Project would affect the level of economic activity in the regional economy. Project construction would create a short-term increase in total wages paid during the Project's construction cycle while the ongoing O&M activities following construction would result in potential long-term growth in employment and associated labor income.

These jobs represent the direct effects of investment in the Project. The earnings of these new construction and transit workers would translate into a proportional increase in consumer demand through the purchase of goods and services in the region. A further increase of new employment across a wide variety of industrial sectors and occupational classifications is expected as employers hire to meet this increase in local consumer demand. This type of hiring represents the Project's indirect impact.

The Project is expected to have positive effects on commercial and residential development located near LRT stations. The Project would contribute to the positive economic impacts by encouraging and supporting higher-density residential and commercial land uses around LRT stations. The Council expects that new development around station areas could also capture an increasing share of residential and employment growth as densities increase. Focused development in areas with existing infrastructure accrues benefits to the taxing jurisdictions. National experience with fixed-rail transit systems has demonstrated that transit investment has had positive effects on residential and commercial development near the LRT stations. National studies have shown that business output and personal income are positively affected by transit investment, growing rapidly over time. These transit investment impacts (see Sections 4.6.3 and 4.6.4) create savings to business operations and increase the overall efficiency of the economy, positively affecting business sales and household incomes.

4.5.1.2 Methodology

The following sections describe the methodology and context for the assessment of economic effects.

Assess Existing Economic Conditions

A starting point for any economic impact analysis is to develop an understanding of the current economic conditions within the study area. As described in Chapter 1, the Cities of Minneapolis and St. Paul and the region are all experiencing significant population and employment growth. This growth is expected to continue at least through 2040.

While these larger geographic areas would experience overall growth and the associated benefits from this growth, the study area contains numerous smaller geographies with varying socioeconomic conditions. As Project planning progresses and additional details become available, specific information on the socioeconomic conditions within these sub-geographic areas that would be affected by the transportation facility would be updated. Developing a more detailed understanding of the socioeconomic conditions would allow for a more robust analysis of the overall impacts of the Project. In general, a greater amount of accurate and detailed information would lead to more accurate and reliable estimates of the potential economic impacts of the Project.

Estimate Direct Effects by Alternative and by Phase

The foundation of the economic impact analysis would be the anticipated direct capital investments, employment, or other similar factors for the Project. As discussed in Chapter 2, the potential alternatives include a No-Build Alternative and the Build Alternative.

In addition, it is necessary to differentiate among the impacts of the various phases of the Project. In the short term, the primary driver of economic impacts is construction. For this analysis, the construction phase includes the actual construction of the transportation facilities as well as other related activities, such as engineering for final design, the purchase of properties along the Project Alignment to secure the right-of-way, and the purchase of LRT vehicles and equipment.

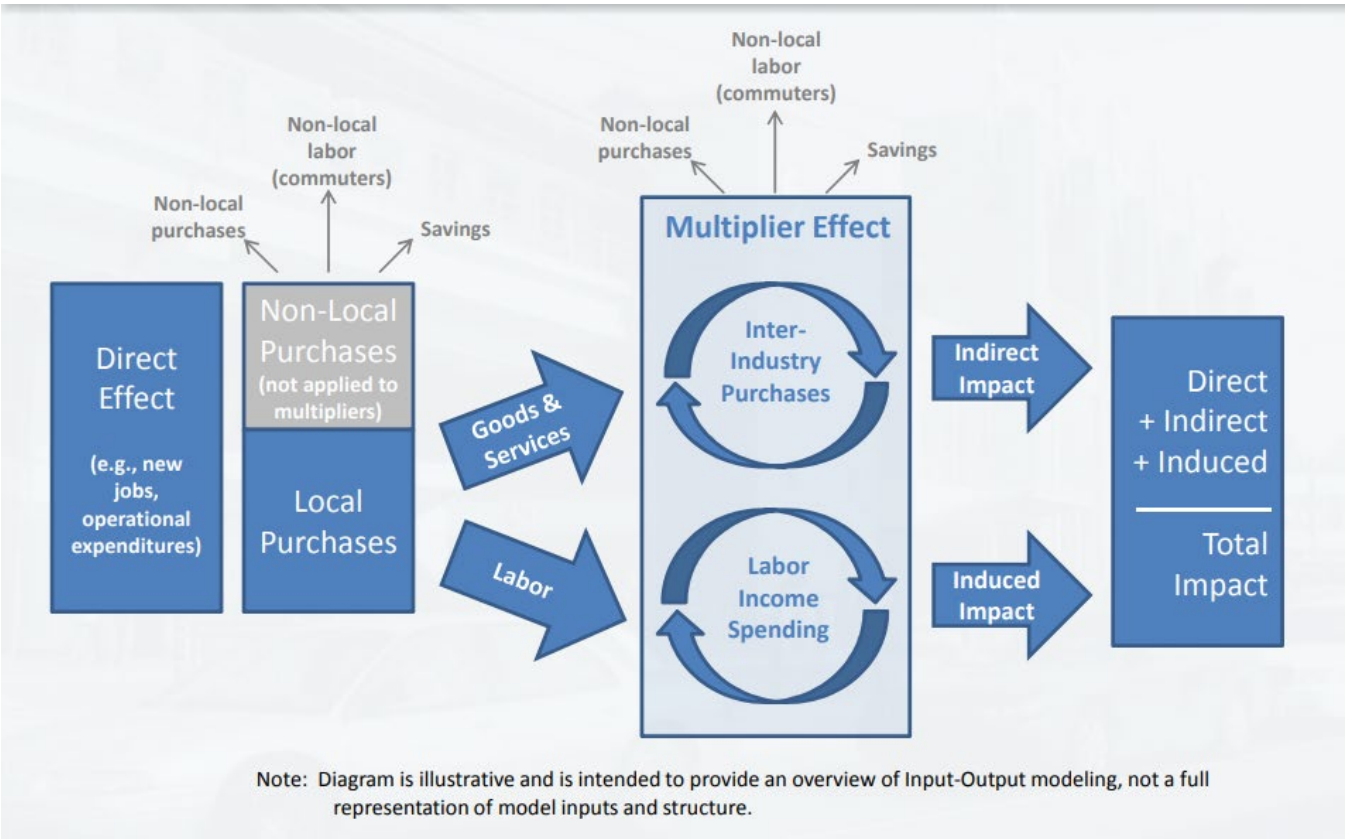
In the long term, there are two categories for estimating economic impacts. First, there are the potential impacts related to the O&M of the transportation facility over time. This would include expenditures for both labor and materials to operate and maintain the facility as well as revenues from its users (ridership).

The second category of long-term economic impacts comes from the potential increase in economic activity associated with the operations of the transportation facility. These broader economic effects stem in large part from improved transportation connectivity that results in improved access to employment centers (for residents) and labor markets (for businesses), leading to increased employment, productivity, and business output.

Estimate Economic Impacts

Using the estimated Project expenditures as inputs into an “input-output” model, subsequent spending and resulting indirect and induced effects throughout the regional economy can be estimated. As shown in Figure A4-2, the direct effects, measured in terms of expenditures or jobs, flow through the economy, generating additional spending, income, and jobs. This additional spending results in what is called the multiplier effect. The multiplier effect refers to the fact that any direct spending or job creation leads to multiple iterations of additional spending resulting in total effects that are larger than the original (direct) expenditure.

Figure B4-2 Input-Output Model Illustration



Total economic impacts are calculated as the sum of the direct, indirect, and induced effects, where:

- ***Direct effects*** are changes in economic activity occurring as a direct consequence of the action or decision to invest (e.g., construction at the Project site).
- ***Indirect effects*** are changes in economic activity resulting from changes in sales from suppliers to directly affected businesses (e.g., manufacturing of construction materials and equipment).
- ***Induced effects*** are changes in economic activity resulting from consumer spending by workers of directly and indirectly affected businesses (e.g., groceries purchased by construction workers).

All the above effects are measured in terms of business output (revenues), earnings (or wages and salaries), employment (i.e., number of jobs), and value added.

The economic effects associated with construction, operation, and maintenance expenditures for the Project were estimated using multipliers from a regional input-output model from the United States Department of Commerce, BEA, referred to as the RIMS II multipliers.

Multipliers from regional input-output models measure the aggregate requirements of one industry from all other industries per $1 dollar of output as well as their own industry requirements, and requirements in industries serving consumers, and are frequently used to estimate direct, indirect, and induced effects. Multipliers are available for a range of industries and aggregations defined based on the NAICS system. Currently, RIMS II multipliers are available for 375 detailed industries (i.e., defined at a detailed activity level) and 63 aggregated industrial sectors.

BEA RIMS II multipliers used in this analysis are for the Minneapolis-St. Paul-Bloomington MSA region and were based on 2017 U.S. benchmark input-output data and 2022 regional data.

Special Considerations

The following are special considerations:

- ***Commercial real estate occupancy rates:*** Construction of transit facilities is generally associated with changes to the use of commercial and residential real estate near LRT stations or stops. This consideration would build on the information presented in Section 4.3 to weigh potential losses and gains in productive commercial real estate along the Project Alignment.
- ***Tax revenues:*** The Project may impact State and local tax revenues in several ways. These range from lost revenue because of existing properties being removed as potential right-of-way needed for the Project that would be permanently converted from private property to public property to increased property values as new developments occur (e.g., properties used for parking converted to productive uses). This analysis may assume that transportation-network improvements included in the No-Build Alternative are also included in the Project. Therefore, this section focuses only on the additional incremental economic impacts attributable to the Project.
- ***Source of funding:*** To isolate the economic effects of the Project on the region's economy, it is necessary to distinguish existing funding sources that would be spent with or without the Project from those external funding sources that would not be spent locally except for the current Project.

Table A4-19 describes sources of funding that are planned for the Project and indicates whether these funds represent new funding that would be invested in the region only if the Project is constructed.

Table A4-19 Potential Funding Sources for Project

Funding Source	Funding Share	New or Existing Funding Source
Federal 5309 New Starts	49%	New
Hennepin County	51%	New
Total funding	100%	NA
Percentage of new funding	49%	FTA Capital Investment Grant New Starts funding

In considering the economic impacts of constructing the transportation facility, identifying the sources of funds used for the capital expenditures allows funds available for use elsewhere in the region to be distinguished from funds that would be new injections of funding to the region due solely to the construction of this Project.

Applying multipliers for the construction industry to the amount of capital expenditures from new sources of funding allows estimates of the net output, earnings, and employment impacts generated by the Project in the short term. Because certain activities related to the Project's construction would occur in multiple years, economic impacts would be estimated for each year of construction based on the level of capital expenditure and the type of construction occurring each year.

4.5.2 Study Area

The study area for assessing the economic impacts related to this Project is the Minneapolis-St. Paul-Bloomington MSA. MSAs, which are designated by the United States Office of Management and Budget, are defined as geographic regions with "a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core."[4]

The Minneapolis-St. Paul-Bloomington MSA includes seven counties: Hennepin, Ramsey, Dakota, Anoka, Washington, Scott, and Carver.

4.5.3 Environmental Consequences

This section identifies estimates of the potential economic impacts associated with the different alternatives as well as the different Project phases.

4.5.3.1 Operating-Phase (Long-Term) Impacts

Operating phase (long-term) impacts are defined as impacts that take place after Project begins operations and are expected to be recurring on an annual basis. The long-term impacts from the Project are described in the following sections.

No-Build Alternative

The No-Build Alternative consists of the future programmed transportation system without the Project. The output, earnings, and employment would be unchanged under the No-Build Alternative.

Build Alternative

The economic impacts of the Build Alternative refer primarily to Project operations and requirements, especially the requirements for labor and supplies from the supply chain perspective. Other potential economic impacts are due to impacts on property prices in the vicinity of stations and stops, the acquisition of parcels for right-of-way, and the relocation of the occupants of those parcels. These impacts are described below.

Project Operations

The Project would create jobs and additional earnings because of O&M expenditures related to the new services. The expansion of transit service associated with the Project would create new demand for labor, including LRT vehicle drivers (operators), vehicle maintenance personnel, supervisors, control and coordination staff, and administrative positions. As discussed in Section 4.6.1.2, new demand/expenditures in an economy generate subsequent rounds of expenditures through business supply relationships, generating new jobs and incomes. These new job opportunities would benefit residents of the MSA.

As of mid-September 2024, the annual O&M costs for the Project (including 13 new LRT stations) are estimated at $54.7 million (in 2024 dollars).[5]

To estimate the economic impacts of the Project O&M expenditures using the input-output methodology described in Section 4.6.1.2, the amount of expenditures was multiplied by the RIMS II multipliers for the industry that represents the best matching sector for LRT transit services, transit and ground passenger transportation (RIMS II code 485A00).[6] The result of the analysis is presented in Table A4-20. The table shows that the Project is expected to generate a total of about 621 jobs, including 210 direct jobs, 179 indirect jobs, and 231 induced jobs. Other metrics of impact include total labor income of $39.5 million (including $17.8 million of direct labor income), $61.4 million of value added, and $131.7 million of business output.

Table A4-20 Economic Impacts of LRT Project Operations in Minneapolis-St. Paul-Bloomington MSA

Impact Type	Employment (Jobs)	Labor Income ($M)	Value Added ($M)	Output ($M)
Direct	210	$17.8	$20.5	$54.7
Indirect	179	$11.2	$19.6	$41.2
Induced	231	$10.6	$21.3	$35.9
Total	**621**	**$39.5**	**$61.4**	**$131.7**

Property Values and Local Land Use Impacts

The increased attractiveness of business and residential properties near the LRT stations and stops and opportunities for their redevelopment, if allowed to unfold in response to traditional market forces, could cause property values to quickly increase. This may result in current and prospective property owners, or tenants, being priced out of the market, potentially displacing them from their homes and businesses to less preferred locations at a higher cost.

Statistical analysis of property prices reported in the literature finds that, in fact, LRT projects tend to increase property values and rental rates, although not always. Any impacts are highly localized and typically diminish at

distances greater than about 0.5 to 1 mile from a station or stop (and sometimes even beyond a 0.25-mile band around a station or stop).

The reported impacts vary widely with a median at around 6 percent to 10 percent for single family homes and 5 percent for rental housing for properties near an LRT station compared to similar properties further away. Research conducted specifically for the Minneapolis-St. Paul area found that properties located at a distance of about 0.4 mile from a LRT station had a price premium in the range of about 5 percent to 7 percent.[7] That research also identified a range of other property attributes that affect prices, including property age, its size, and proximity to highway, which may affect prices even to a greater extent than proximity to an LRT station.

On the other hand, however, LRT projects offer a unique opportunity for redevelopment of underutilized parcels into TOD communities with affordable housing and affordable transportation options that would reduce reliance on private automobiles, transportation costs, and overall cost of living to families/individuals residing in those communities.

The review of community comprehensive plans concluded that the Project is compatible with the regional land use and other planning policies of the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park and that the No-Build Alternative would not fulfill the key goals of the local and regional plans (see Section 4.1).

The alignment for the Project is also compatible with Hennepin County's *Mobility 2040* transit goals. The County has already initiated programs that would provide support to the Project and leverage opportunities, including a TOD program (see Section 4.1).

Acquisitions and Relocations

As discussed in Section 4.3.3, the operating phase of the Project would require the permanent acquisition of right-of-way from residential, commercial, and industrial properties and permanent easements on some park properties. Some acquisitions would require the relocation of existing occupants, mostly in the City of Minneapolis.

Relocations create a range of costs for the affected parties that go beyond moving costs. For residents, these costs may include adjustments to their daily routines, including commuting to work, shopping, or going to school. There may also be other non-monetary and difficult-to-quantify costs, such as moving away from friends and family members and support organizations. For businesses, these costs may include start-up costs, retooling of equipment, adjustment to the distribution and supply chain, marketing expenses to inform customers about the new business location, etc. Impacts on park and recreational parcels could alter the way the park functions and reduce user enjoyment and visits to the park.

The analysis reported in Section 4.3.3 concluded that relocations would be required for 14 residences, 20 businesses, 1 industrial parcel occupant, and 1 institutional parcel occupants. Almost all relocations would be in the City of Minneapolis. The analysis also identified one partial park parcel acquisition requirement in the City of Brooklyn Park.

Other Impacts

LRT transit systems operate at higher average speeds than conventional transit buses while also offering improved accessibility, typically higher frequencies, and a travel experience that is generally perceived as being of higher quality. Therefore, the Project can be expected to generate significant travel time savings to its users and improve transit accessibility, connectivity, and the general travel experience.

Communities in the vicinity of the Project Alignment (within walking distance from an LRT station) can be expected to be the greatest beneficiaries of this improved transit travel. Many low-income individuals rely on transit as their main transportation option. Nearly 66 percent of households in the study area are zero-car households, compared to the County average of 9 percent (see Chapter 7).

The Project has the potential to improve community quality of life by facilitating access to destinations along the Project Alignment, such as health centers, government services, and other essential goods and services (see Chapter 4, Section 4.2, Figures 4-1 through 4-4 for maps illustrating places of interest along the Project corridor). Additionally, by facilitating access to employment centers (such as those in downtown areas, including Downtown Minneapolis), the Project may make it easier to commute to jobs and make better-paying jobs more accessible.

As a result, the Project could help reduce regional disparities and bring transformative benefits to current residents and future generations in the Project area and improve their economic resilience.

4.5.3.2 Design- and Construction-Phase (Short-Term) Impacts

Design- and construction-phase impacts are defined as the temporary impacts that occur during Project development and construction only. Short-term impacts from the Project are described in Chapter 4, Section 4.6.3.2.

4.5.4 Tax Revenue Effects

The Project would require the acquisition (both partial and full) of real property to include permanent and temporary easements for construction and operation of the LRT. These acquisitions could remove properties from the existing local tax base if occupants are to be relocated. The analysis reported in Section 4.3.3 identified a relatively small number of required relocations: 15 residences and 19 businesses, with almost all relocations being in the City of Minneapolis. On the other hand, if the potential opportunities for redevelopment of underutilized parcels along the Project Alignment materialize, new residential and commercial properties would increase the tax base and tax revenues over time. Additionally, the increased property values in the vicinity of the LRT stations would typically lead to a reassessment of valuation by municipal tax authorities and increase the tax revenues from the affected properties. These effects can be expected to offset any reduction in tax revenues due to right-of-way acquisition and displacements.

Estimated loss of annual revenue reported may be based on the assessed values prepared by the Hennepin County Assessor's Office. County assessments rely on their internal policy of developing property values and tend to undervalue the true cost of purchasing right-of-way. The property tax revenue lost is actual value that would be removed from the taxing jurisdictions' tax rolls. The right-of-way acquisition costs described in the Project capital cost estimate will be based on the Council's experience, specifically that actual acquisition of right-of-way results in substantially greater values than values assessed for tax purposes. Therefore, right-of-way acquisition costs assume that the property would be purchased for a price above the tax-assessed value, because speculation and market forces increase the parcels' sales price.

On the other hand, if the potential opportunities for redevelopment of underutilized parcels along the alignment materialize, new residential and commercial properties would increase the tax base and tax revenues. Additionally, the increased values of properties in the vicinity of the LRT stations would typically lead to a reassessment of valuation by municipal tax authorities and increase tax revenues from the affected properties. These effects can be expected to offset (at least to some extent) the reduction in tax revenues due to right-of-way acquisition and displacements.

4.5.5 Broader (or Wider) Economic Impacts

Wider economic impacts of transportation infrastructure projects affect broader business productivity and economic activity by benefitting not just the travelers and direct users of a facility in the form of travel time savings but also the broader economy through creation of conditions that support growth and efficiency improvements. These effects have been a topic of much interest in academia and government organizations in recent years.[8]

High-order transit projects, such as LRT projects, have a potential to generate impacts that go beyond the economic impacts directly associated with the construction or O&M of the facility.[9] These broader economic impacts would manifest as increased output and economic productivity in the local economy due to factors facilitated by the Project in a dense urban area:

- ***Residential access impacts:*** Because of improved transportation connections to employment opportunities and affordable housing, local residents may be able to find and access new and possibly better paid jobs, leading to an overall increase in employment.
- ***Impacts to local businesses:*** Because of increased access to pools of workers, businesses may be able to find employees with skills that better match their job requirements, leading to improved productivity and increased output.
- ***Increased attractiveness of locations around LRT stations:*** Leads to more clustered and higher-density employment, which further attracts new businesses and employees and promotes growth, knowledge sharing and spillovers, and efficiency improvements.

4.5.6 Avoidance, Minimization, and Mitigation Measures

Potential mitigation measures that could reduce the negative economic impacts of the Project are identified in Chapter 4, Section 4.6.6.

4.6 Safety and Security

This section describes the operating-phase (long-term) and construction-phase (short-term) effects of the Project on safety and security. This section includes an overview of the regulatory context and methodology used for the analysis, an assessment of existing conditions related to safety and security, a description of the anticipated impacts of the Project, and a description of mitigation measures to implement with the Project.

4.6.1 Regulatory Context and Methodology

The Council, as the owner and operator of the Project, follows safety and security policies that establish minimum requirements for facilities based on local, State, and federal codes or standards, the Council's guidance, and the SSAP for the Project.

4.6.1.1 Policy and Planning Background

The ASP rule (49 USC § 5329) requires that all modes not overseen by another regulatory agency (e.g., FRA) must be governed by an ASP. Metro Transit applies a mode-specific ASP to comply with this rule. Additionally, Metro Transit has a long-standing practice of maintaining an SSAP for all three of its modes: commuter rail, LRT, and BRT.

The LRT ASP (Revision 3, July 2022)[10] documents how safety is integrated into operations and supporting activities. The purpose of the LRT ASP is to provide Metro Transit with a comprehensive safety outline, including reference to any current policies, procedures, and activities that maximize safe operation and ensure that all required regulatory demands and agency safety requirements are satisfied. The ASP is a useful management tool that identifies both corporate and departmental safety procedures and provides clearly defined safety responsibilities at all levels within the agency.

In June 2022, the Council endorsed the SSAP,[11] which is available on the Metro Transit website. The SSAP work began in response to customer feedback and intentional reflection within the agency. The SSAP summarizes the steps that Metro Transit is taking to make transit feel safer and more welcoming and identifies the following areas of work:

- Improving conditions on the system
- Training and supporting employees
- Engaging customers and partners

Forty action items have been identified that would support Metro Transit's work in these areas. The SSAP continues to be updated as implementation occurs on these action items and public engagement continues.

Other applicable codes, standards, and guidance are identified in Table A4-21.

Table A4-21 Applicable Safety and Security Codes, Standards, and Guidance

Applicable Code, Standard, or Guidance
NFPA 130, *Standard for Fixed Guideway Transit or Passenger Rail Systems*
International Fire Code, 2021 edition
2014 Minnesota State Building Code, as amended by the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park
NFPA 101, *Life Safety Code,* as well as ISO standards
American National Standards Institute (ANSI) and ASTM Standards
49 USC §§ 20102-20103, 20107, 21301-21302, 31304 and 28 USC § 2461
Minnesota Chapter 312 (House File 3172/Senate File 2785), Safety and Operational Standards for Freight Rail Operations
FTA Circular C5800.1, *Safety and Security Management Guidance for Major Capital Projects,* governing the safety and security process from planning through commencement of revenue service
The Council's Regional Transitway Guidelines,[12] Station and Support Facility Design Guidelines User Guide Supplement,[13] and Metro LRT Design Criteria,[14] which provide technical guidance for the design of transitway facilities
Metro Transit's SSAP for the Project, which includes safety and security guidance, requirements, and measurable actions for the operating system.
FTA's ASP (49 USC § 5329)

4.6.1.2 Definition of Terms

Safety and security are defined within the context of this Supplemental Final EIS as follows:[15]

- ***Safety*** means the freedom from harm resulting from unintentional acts or circumstances.
- ***Security*** means the freedom from harm resulting from intentional acts or circumstances.

In response to a survey conducted by Metro Transit, safety and security were further defined by riders as follows:

- "Getting where I need to go without harm."
- "Feeling that I don't need to worry about being robbed or injured."
- "Being able to ride the train without fear or anxiety of being assaulted."
- "Being transported to and from my destination while suffering no mental or physical health consequences."
- "If people don't have to be afraid to be who they are, they are safe. If people can exist in a space without experiencing harm, harassment, or violence, they are safe."

4.6.2 Study Area

The study area for the safety and security evaluation includes planned facilities within the LOD for the Project.

4.6.3 Affected Environment

Existing safety and security conditions of the study area, including current conditions for bicycle and pedestrian safety, freight rail crossings, emergency service providers, accessibility, and personal safety can be found in Chapter 4, Section 4.7.2.

4.6.4 Environmental Consequences

Operating-phase (long-term) and construction-phase (short-term) impacts to safety and security from the Project are included in Chapter 4, Section 4.7.3. Given adherence to Metro Transit design criteria and the oversight of security personnel, the Council does not expect the Project to cause adverse impacts related to safety and security.

4.6.5 Avoidance, Minimization, and Mitigation Measures

This section describes potential mitigation options to reduce long- and short-term safety and security impacts from the Project.

4.6.5.1 Operating-Phase (Long-Term) Mitigation Measures

Avoidance of safety issues at LRT stations related to the Project would be achieved through implementation of the Project's SSAP[16] and the Metro Light Rail Transit Design Criteria.[17] The purpose of the SSAP is to consider safety and security when designing, constructing, and operating the Project. The plan covers requirements for safety and security design criteria, hazard analyses, threat and vulnerability analyses, construction safety and security, operational staff training, and emergency response measures. These plans and programs also specify actions and requirements of the Council and Metro Transit Police to maintain safety and security during operation of the Project.

Incident Prevention and Management

The design of the Project would include safeguards in the catenary system to help minimize the possibility of sparking occurring in the overhead catenary wires. Electrical sparks, or arcing, occurs when there is a gap between the overhead contact wire and the vehicles pantograph. Numerous safeguards are included in the design of the Project to address and minimize electrical sparking. Ice cutters would be used to maintain positive contact between the contact wire and pantograph during winter weather. Additionally, Metro Transit would regularly inspect pantographs for grooves along the pantograph's carbon strip (as it does on its existing light-rail lines) that could cause arcing.

The Council's OEMP for light rail was developed to help identify, respond to, and resolve emergency situations in an efficient, controlled, and coordinated manner. During normal revenue service emergency planning, the Council would plan, schedule, conduct, and evaluate at least one tabletop and one full-scale emergency-preparedness exercise annually. In advance of operation of the Project, several drills would be planned, conducted, and documented in an emergency-preparedness exercise plan. Emergency-preparedness training exercises would be designed to ensure rail equipment familiarization, situational awareness, passenger evacuation, coordination of functions, and hands-on instruction. Training exercises would be coordinated with public safety agencies and the freight railroads. Additional information is provided in the SSAP and the Council's OEMP.

In addition, the Council maintains an emergency-preparedness exercise plan. The emergency-preparedness exercise plan would be carried out by the FLSSC. In advance of operation of the Project, several drills would be planned, conducted, and documented in the emergency-preparedness exercise plan. Emergency-preparedness training exercises would be designed to address areas such as rail equipment familiarization, situational awareness, passenger evacuation, coordination of functions, communications, and hands-on instruction. The FLSSC would coordinate training exercises with the Council and the freight railroad owners and operators, as appropriate. During normal revenue service, the FLSSC would coordinate training exercises to evaluate emergency preparedness. The exact nature of emergency-preparedness exercises would be developed in coordination with the FLSSC prior to construction but could include one tabletop and one full-scale emergency-preparedness exercise, on an annual basis.

To help avoid or minimize delays, the Council would coordinate with emergency service providers by providing them with the light-rail operating schedule and identifying alternative crossing routes. Additional coordination would occur through the FLSSC, as described in the Project's SSAP.[18]

Station Design Elements

Station areas would be designed according to the Project design criteria, incorporating as appropriate BMPs for safety and security, cognizant of Project budget, stakeholder requirements, and technical constraints. LRT stations would include emergency equipment, public address systems, video cameras, emergency telephones, and closed-circuit television. The public address system, with both speakers and signs, would convey information to people with disabilities in compliance with ADA requirements.

Lighting for LRT station areas and park-and-ride facilities, as well as vehicular and pedestrian circulation areas, would be consistent with the Metro Light Rail Transit Design Criteria[19]. Emergency lighting would be provided in all public areas, including platforms, pedestrian facilities, vehicular traffic areas, bus loading zones, and park-and-ride lots.

Safety and security within the proposed right-of-way would be the joint responsibility of Metro Transit and local law enforcement authorities. Metro Transit has its own licensed police force to address public safety on and near the transit system. Transit police would routinely patrol the LRT stations and Project Alignment as well as nearby bus routes and bus stops. Transit police officers routinely patrol the system traveling between LRT stations and in LRVs. In addition, TRPD Department of Public Safety and the Minneapolis Park Police Department are the law enforcement agencies responsible for providing a safe environment on the regional trails and parks in the study area.

At-Grade LRT Crossings

Sixty new LRT crossings at-grade with existing roads would be introduced as part of the Project. LRVs would sound horns or bells and when approaching at-grade roadway crossings. In these locations, additional safety measures (for example, non-traversable medians) would be installed in accordance with the Quiet Zone Final Rule (49 USC §§ 20103, 20107, 20153, 21301, and 21304; 28 USC § 2461 note). See Section 3.6 for more information on freight and Section 3.4 for more information on vehicular traffic.

Where mid-block at-grade light-rail crossings may be added, crossings would be designed based on the Metro Light Rail Transit Design Criteria[20] and would include traffic signals with an audible warning to notify pedestrians of a train's arrival and detectable warnings and signs. Refer to Section 3.4 for more information on pedestrian and bicycle facilities.

Mid-block at-grade light-rail crossings would be equipped with U-shaped crossings, which is a crossing safety control measure that promotes slower crossing speeds and forces sidewalk and trail users to face the direction that LRVs would come from before entering the crossing, and other safety features. The design of specific pedestrian and bicycle safety features would be made during the engineering phase of the Project and finalized prior to construction.

Video Surveillance

Visible surveillance cameras can serve as a crime deterrent if people believe they are being observed. A video surveillance system would also enable Metro Transit to monitor the LRT stations and park-and-rides remotely and in real time. Recorded video provided by camera systems can also play a crucial role in post-event law enforcement investigations and prosecutions.

Metro Transit's Real Time Information Center is part of a team of sworn officers and non-sworn personnel who monitor cameras for most of the day and evening and help submit video needed for evidence. Supervisors in the Rail Control Center, which is always staffed, can also access the cameras. Efforts to install new cameras with instant-replay capabilities, 360-degree views, audio, and high-definition footage began in 2020. The cameras are now in use on all of Metro Transit's LRVs. Metro Transit is implementing actions identified in the SSAP[21] including the possible expansion of real-time camera usage.

In addition to LRVs, police and supervisors can view live video from each of Metro Transit's 44 light-rail and commuter rail platforms. Cameras provide a quick and effective response to incidents by reducing time to gather information or conduct interviews of passengers.

Personal Safety and Security Measures

Several long-term mitigation measures to improve personal safety across the Metro Transit system have already been identified in the updated SSAP and ASP. Ongoing efforts, including those described in Table A4-22, should be continued in support of the Project.

Table A4-22 Areas of Work and Ongoing and Completed Actions Identified in the SSAP[a]

Area of Work	Ongoing Actions
Improving conditions on the system	■ Retaining and budgeting for more positions for the police department, public facilities, and staff who communicate with customers in real time (e.g., Text for Safety) ■ Assigning officers to regularly patrol the transit network and to specialized units, including the Critical Asset Protection on light rail, Transit Response Unit, and Homeless Action Team ■ Increasing investment in the Homeless Action Team and partnering with the Metro Housing and Redevelopment Authority to extend housing vouchers to individuals in need ■ Establishing and increasing staffing for the Real Time Information Center and installing new, high-definition cameras in LRVs ■ Improving real-time information available to customers by investing in new technology ■ Improving conditions at high-traffic facilities ■ Continuing investment in Better Bus Stops program, which includes adding lighting to shelters ■ Continuing investment in public art facilities to deter vandalism and create a more inclusive and welcoming experience ■ Replacing cloth seats with easier-to-clean plastic seats in LRVs ■ Updating the Code of Conduct using customer and employee engagement to create the basis of the Rules for Riding
Training and supporting employees	■ Providing training for employees that supports safety and security, such as aerosol certification and de-escalation training, Red Kite resilience training, apprenticeship and mentorship, and annual Professional Operator Development, including training on mental health ■ Establishing and/or coordinating the Transit Safety & Security Committee, Bus Barrier Committee, and employee engagement ■ Providing free and confidential access to trained counselors through the Council's Employee Assistance Program resources
Engaging customers and partners	■ Engaging in emergency management planning and mutual-aid response to strengthen relationships with local, State, and federal partners ■ Coordinating with governments and social services to address homelessness (e.g., Homeless Action Team's work and participation in Minnesota Interagency Council on Homelessness) ■ Tasking Metro Transit's Champion Facilities Committee to work with customers, local law enforcement, and city officials to reduce unwanted activity within and around transit stops ■ Sharing transit crime data and information with regional law enforcement agencies ■ Partnering with the Transit Accessibility Advisory Committee to create new closed captioned and multi-lingual "How to Ride" videos and on-board advertisements that encourage respectful riding behaviors

[a] Areas of work and examples of work already accomplished or currently underway as of August 22, 2024 (Council 2024).

4.6.5.2 Construction-Phase (Short-Term) Mitigation Measures

Short-term mitigation measures shown in Table A4-23 could be implemented as part of the Project.

Table A4-23 Potential Construction-Phase (Short-Term) Mitigation Measures

Potential Mitigation Measure
Coordinate with emergency service providers to provide schedule for construction activities and identify detour routes to minimize delay for emergency response vehicles
Develop and implement strategies for clear communication of Project activities with communities, partners, and other impacted parties
Maintain required access during established periods or keep one lane of traffic open on main arterials as would be described in the Construction Mitigation Plan
Maintain federal OSHA and Minnesota OSHA standards for safety of construction site personnel to minimize and/or avoid injury to construction workers
Require contractors to prepare safety and health programs along with a site-specific safety plan to ensure that, while on the work site and construction activities, contractor and subcontractor personnel comply with the specified safety practices, codes, and regulations.

[1] City of Minneapolis, Minneapolis 2040. 2020.

[2] Community amenities include medical facilities, religious places of worship, food shelves, and civic buildings, as well as private businesses and nonprofit organizations identified during public engagement events hosted by the Liberian Business Association and Asian Media Access in 2021. Attendees identified community resources that include important community and cultural as priorities for protection against potential project impacts.

[3] Federal Highway Administration. 2015. *Guidelines for the Visual Impact Assessment of Highway Projects.* January. FHWA Document FHWA-HEP-15-029. Accessed at https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.aspx.

[4] U.S. Census Bureau. 2021. About [the Office of Management and Budget]. https://www.census.gov/programs-surveys/metro-micro/about.html.

[5] Cost estimate provided by the Blue Line Project office. This cost estimate was developed based on a high-level summary of the current annual O&M costs (as of September 2024). The Project office is developing final service plan updates prior to developing final O&M costs estimate. If there are changes that impact O&M costs, this will be reflected in Administrative Review #2.

[6] The calculation of direct employment was modified compared to the input-output methodology outlined in Section 4.6.1.2. Instead of using the direct multiplier (which would be multiplied by the cost estimate), the approach involved calculation of total direct labor income, which was then divided by the average earnings in Minn MSA (based on earnings data for Minn MSA from BEA). This modified approach was used because the direct employment multiplier for the RIMS II transit and ground transportation services industry is very high resulting in employment level that is unrealistically high and average salary that is unreasonably low. This result is likely due to inclusion in the sector of the shared transportation services (such as Uber or Lyft), which are characterized by a high incidence of part-time employment. Part-time employment with very low hours leads to a high employment output ratio (number of employees per $1 million of output) and a low average salary.

[7] Ko, Kate, "Case Study of Property Value Transfer Attributed to Transit: Spatial and Temporal Hedonic Price Impact of Light Rail in Minnesota's Twin Cities," Journal of Public Transportation, 2021, Vol. 23 No. 1, pp. 15-30.

[8] Refer to "Development of Tools for Assessing Wider Economic Benefits of Transportation," SHRP 2 Strategic Highway Research Program Capacity, Transportation Research Board, July 2013.

[9] For example, Chatman and Nolan (2013) find significant links between transit service and employment density or agglomeration in US metropolitan areas, and from agglomeration to average wages and GDP per capita. See: Chatman, Daniel and Robert Nolan (2013), "Transit Service, Physical Agglomeration and Productivity in US Metropolitan Areas," Urban Studies 2013, pages 1–21.

[10] Metropolitan Council. 2022a. Agency Safety Plan, Revision 3. July. Accessed at https://metrocouncil.org/Council-Meetings/Committees/Metropolitan-Council/2022/7-27-22/0711_2022_195-Attachment_Safety-Plan.aspx.
[11] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[12] Metropolitan Council. 2016. Regional Transitway Guidelines. Available at https://metrocouncil.org/Transportation/System/Transit/Studies/Regional-Transitway-Guidelines/Regional-Transitway-Guidelines-Chapters.aspx.
[13] Metropolitan Council. 2012. Station and Support Facility Design Guidelines User Guide Supplement. Accessed at http://www.metrocouncil.org/Transportation/Publications-And-Resources/Transit/Station-and-Support-Facility-Design-Guidelines-Use.aspx.
[14] Metropolitan Council. 2015. Metro Light Rail Transit Design Criteria.
[15] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[16] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[17] Metropolitan Council. 2015. Metro Light Rail Transit Design Criteria.
[18] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[19] Metropolitan Council. 2015. Metro Light Rail Transit Design Criteria.
[20] Metropolitan Council. 2015. Metro Light Rail Transit Design Criteria.
[21] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.