4 Community and Social Analysis

Below is a summary comparing the impacts and mitigation in the 2016 Alignment with the Project Alignment.

Table 4-1. Comparison of Impacts and Mitigation – 2016 Alignment and Project Alignment

Resource	Did FEIS/ROD Identify an Impact and Mitigation?	Do the Proposed Modifications Change the Impacts to this Resource?	Do the Proposed Modifications Change the Mitigation?	Section Where Additional Information can be Found
Land Use Compatibility	No	No	No	4.1
Community Facilities and Character	Yes, construction period impacts to be mitigated through a Construction Mitigation Plan, Construction Communications Plan, Construction Phasing Plan, and restoration and enhancement of parks.	Yes, adverse effect on community character at certain locations along the corridor due to noise impacts and displacement of community facilities	Yes, mitigation measures would be developed in coordination with affected environmental justice communities between Supplemental Draft EIS and Supplemental Final EIS.	4.2
Displacement of Residents and Businesses	Yes, displacement of 10 businesses, 14 full acquisitions, 278 partial acquisitions, and 29 acres of temporary easements to be mitigated in accordance with the Uniform Act.	Increased number of acquisitions and displacements, including 36 full acquisitions (27 in the City of Minneapolis).	Yes, in addition to the mitigation measures listed in 2016 ROD, measures would be explored in coordination with the environmental justice community.	4.3

Resource	Did FEIS/ROD Identify an Impact and Mitigation?	Do the Proposed Modifications Change the Impacts to this Resource?	Do the Proposed Modifications Change the Mitigation?	Section Where Additional Information can be Found
Cultural Resources	Yes, adverse effect on 2 historic properties and 4 historic districts to be mitigated through measures identified in Section 106 MOA.	Section 106 consultation process currently underway. Updated assessment of effects due to the proposed modifications would be published in the Supplemental Final EIS.	Section 106 consultation process currently underway. Updated measures to resolve adverse effects would be discussed in the Supplement Final EIS.	4.4
Visual/ Aesthetics	Yes, impacts to high-quality visual features because of alignment along Freight Rail Right-Of-Way and at OMF to be mitigated through design guidelines and landscaping	Project reduces number of visual impacts. No change in impact at the OMF.	Yes, in addition to the mitigation measures listed in 2016 ROD, design would be developed with community input.	4.5
Economic Effects	Yes, loss of tax revenue caused by ROW acquisition, partially offset by increases in other tax revenues.	No	No	4.6
Safety and Security	Yes, increased development around transit stations could place greater demands on safety and security systems and increased congestion during construction mitigated through Safety and Security Management Plan (SSMP), design, Construction Mitigation Plan, coordination with emergency service providers	No	No	4.7

Chapter 4 presents the anticipated impacts of the Project on the social characteristics and conditions within the area surrounding the Project Alignment. Operating-phase (long-term) and construction-phase (short-term) impacts are identified for the No-Build and Build Alternatives. The No-Build and Build Alternatives evaluated in this chapter are illustrated and described in Chapter 2 of this Supplemental Draft EIS and anticipated impacts from Project alignment and design options evaluated are in Appendix A-4 and include expanded discussion on regulatory context, methodology, study area, and affected environment. Table 4-2 provides an overview of the resources evaluated and the study area considered when evaluating impacts.

Table 4-2 Summary of the Defined Study Areas: Community and Social Analysis

Section/Topic	Resource Evaluated	Study Area Definition	Basis for Study Area
4.1: Land Use Plan Compatibility	Describes the comprehensive plans for the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park and Hennepin County for land use and plan compatibility with the Project.	Jurisdictions in which the Project would be located	Project compatibility with overall Project city plans.
4.2: Community Amenities, Character, and Cohesion	Describes each community along the Project Alignment (Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park). The analysis of long- and short-term effects anticipated from the revised definition of the Project is based on the following three criteria: changes to community amenities access, changes to community character, and changes to community cohesion.	½-mile radius around LRT station locations; ¼ mile on either side of Project Alignment	A ½-mile radius is commonly used to represent the distance that transit users are willing to walk to access an LRT station; for an alignment, a ¼-mile radius captures direct impact.
4.3: Acquisitions and Relocations	Describes the partial and full property acquisitions and relocations affected by the LOD associated with the Project.	Within the Project's LOD	Areas reflecting direct impacts on properties.
4.4: Cultural Resources	Describes cultural resources and discusses potential impacts that could result from the implementation of the Project. This section also describes the process of consultation with Section 106 consulting parties and the development of a Section 106 Draft Memorandum of Agreement (MOA).	*Architecture/history Area of Potential Effects (APE):* Within the LOD and 500 feet on either side of an alignment; ¼-mile radius around LRT stations, OMF, new bridges/structures, and the modification of existing bridges/structures *Archaeological APE:* The proposed construction limits and a 500-foot radius from the construction limits of LRT stations, park-and-ride facilities, and OMF	APE as agreed upon by the Minnesota State Historic Preservation Office (SHPO).
4.5: Visual/Aesthetics	Assesses the existing visual and aesthetic conditions along the proposed build options and identifies potential impacts on the visual character of areas adjacent to the Project.	Properties immediately adjacent to and in visual proximity to the various Project components, including guideways, LRT stations, park-and-ride facilities, TPSSs, new bridges, and other Project infrastructure elements	Properties and features visible to and from the Project components.
4.6: Economic Effects	Summarizes an approach to capture potential economic effects associated with the Project.	Minneapolis-St. Paul-Bloomington Metropolitan Statistical Area (MSA)	Area reflecting direct, indirect, and induced economic impacts from the Project.
4.7: Safety and Security	Assesses potential safety and security impacts associated with the Project. This section also summarizes recent safety and security policies and recommendations for potential mitigation measures.	Areas within and adjacent to the Project's LOD	Areas of potential safety and security concerns associated with the Project.

4.1 Land Use Plan Compatibility

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

4.1.1 Regulatory Context and Methodology

To assess land use plan compatibility, the Council reviewed the local comprehensive and land use planning documents and land use maps for the Cities of Brooklyn Park, Crystal, and Robbinsdale to determine consistency with the Project. This included evaluating existing land use adjacent to LRT stations and the OMF, identification of LRT-related policies, and ongoing planning efforts that might be impacted by the Project. Table 4-3 provides a summary of the Comprehensive Plans available online.

Table 4-3 Community Comprehensive Plans

Project City or County	Online Comprehensive Plan File Path
Brooklyn Park	https://www.brooklynpark.org/wp-content/uploads/2022/04/2040-Comprehensive-Plan_WithAppendices.pdf
Crystal	https://www.crystalmn.gov/UserFiles/Servers/Server_10879634/File/Resident/Community%20Development/2040%20Comp%20Plan/2040Comp.pdf
Robbinsdale	https://www.robbinsdalemn.com/home/showpublisheddocument/13160/637613456355630000
Minneapolis	https://minneapolis2040.com/media/1488/pdf_minneapolis2040.pdf
Hennepin County	https://mc-379cbd4e-be3f-43d7-8383-5433-cdn-endpoint.azureedge.net/-/media/hennepinus/your-government/projects-initiatives/2040-comprehensive-plan/2040-comprehensive-plan-full.pdf?rev=3e039a83d8f447818fccae44a864d29f&hash=5A61C224A9A5C9FA320B7FFC2186EBDA

4.1.2 Study Area and Affected Environment

The study area for land use compatibility is defined as the jurisdictions in which the Project would be located. 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 adopted TOD zoning ordinances because of an FTA TOD Planning Grant.

4.1.2.1 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 LRT 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 LRT station areas is 20 units per acre. The City of Brooklyn Park's 2040 Comprehensive Plan indicates the future land uses and characteristics at five LRT stations.

4.1.2.2 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 are minimal since the 2016 Final EIS was published.

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 of Crystal
- 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 identifies 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 equity are 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.

4.1.2.3 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 route modification process that resulted in the Project Alignment. The City of Robbinsdale's 2040 Comprehensive Plan discusses the planning for the 2016 Alignment, but the plan acknowledged that the 2016 Alignment for the Project was not able to proceed to construction. The Project Alignment was not yet known at the time the 2040 Comprehensive Plan was completed.

The City of Robbinsdale's 2040 Comprehensive Plan recognizes that an LRT station will be located on the western edge of the downtown between 40th Ave N and 42nd Ave N under the 2016 Alignment. The LRT station would provide additional access to employment centers and commercial and retail destinations in Downtown Robbinsdale. The Project Alignment will include an additional LRT station in southeast part of the City of 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.

4.1.2.4 City of Minneapolis

The Project is compatible with the City of Minneapolis's local land use planning policies. The transportation chapter of *Minneapolis 2040*[1]—the City of Minneapolis's Comprehensive Plan—states that public transit is essential to providing transportation and accessibility that aid in combating climate change 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. *Minneapolis 2040* includes future land use and built form guidance that supports future planned transit service. The "Map of Planned Transitways and Transit Stations" in *Minneapolis 2040* includes the Project in the Increased Revenue Scenario.

4.1.3 Hennepin County Plans and Policies

The *Hennepin County 2040 Comprehensive Plan* continues to support the Project. *Mobility 2040*, detailed in Hennepin County's Comprehensive Plan, provides guidance for the County's transportation system. Transit is a significant portion of *Mobility 2040*, which highlights five goals guiding transit development in the County:

1. Improve safety, reliability, and comfort for all transportation users
2. Provide affordable transportation choices and convenient access to destinations
3. Improve the transportation system to enhance quality of life, health, livability, and competitiveness
4. Create a transportation system that protects and enhances the environment
5. Preserve and modernize our transportation system

The alignment for the Project is compatible with Hennepin County's *Mobility 2040* transit goals.

The following Hennepin County programs would provide support to the Project:

- ***Bottineau Community Works (BCW):*** BCW identifies and pursues community and economic opportunities within the Project area. It works with community stakeholders to maximize the economic development value of the Project. Project cities have been participating in BCW, which was established in 2015 to partner with cities in the northwest Twin Cities metropolitan area to identify and pursue community and economic development opportunities "beyond the rails."[2]
- ***Transit-Oriented Development Program:*** This program "aims to create walkable, mixed-use, human-centered communities around high-quality transit service." The program is being leveraged as part of the Project.[3]
- ***Affordable Commercial Incentive Fund:*** This program supports longer-term affordable commercial space in development projects to support small businesses and wealth-building opportunities.
- ***Hennepin County Regional Railroad Authority (HCRRA):*** "The HCRRA seeks to improve rail modes of transportation to enhance mobility as a key part of our transportation system."[4]

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 Alternatives.

4.1.4.1 Operating-Phase (Long-Term) Impacts

The Project is compatible with the regional land use planning policies, local comprehensive plans, and land use and other planning policies of the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. The No-Build Alternative would not fulfill the key goals of the local and regional plans described above. These plans indicate support for the enhancement, development, and implementation of transit improvements. In addition, these plans prioritize diversity of transportation modes and the efficiency of land use offered by transit.

4.1.4.2 Construction-Phase (Short-Term) Impacts

Construction-phase impacts are defined as temporary impacts that occur during construction only. Construction-phase impacts could include temporary noise, dust, vibration, 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. No construction-phase impacts would occur with the No-Build Alternative. Therefore, this would have no construction-related land use compatibility issues.

4.1.5 Avoidance, Minimization, and Mitigation Measures

As all Build alternatives would be compatible with land use planning policy documents, no avoidance, minimization, or mitigation measures would be needed.

4.2 Community Amenities, Character, and Cohesion

This section summarizes the potential impacts from the Project to community amenities, community character, and community 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 (Title 42 United States Code [USC] § 4321) and MEPA (Minn. Stat. ch. 116D) form the general basis of consideration of these social impacts.

Information about the community amenities identified in this section was provided by Hennepin County records of community destinations and resources and enriched by community outreach.[5] Information about community access was summarized from descriptions of transit, pedestrian, bicycle, and vehicular traffic conditions in Chapter 3, Transportation. The Council obtained information about 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 4-4.

Table 4-4 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 Draft EIS for the respective environmental categories.

Parks are subject to evaluation in the context of Section 4(f) of the Department of Transportation Act of 1966 and Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965. Section 4(f) and Section 6(f) resources are specifically addressed in Chapter 8, Summary of Supplemental Draft Section 4(f) and 6(f) Evaluation.

4.2.2 Study Area and Affected Environment

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 for the Build Alternative.

4.2.2.1 City of Brooklyn Park

The City of Brooklyn Park is characterized by residential neighborhoods in a low- to medium-density suburban environment. Low-density, auto-oriented land uses have heavily influenced the existing development patterns in the Cities of Crystal and Brooklyn Park. 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 officially designated neighborhoods within its boundaries.

Since 2016, the population of the City of Brooklyn Park has remained consistent with the projections published in the 2016 Final EIS/ROD. Employment has lagged slightly behind projections published in 2016 (34,500 jobs were projected by 2020 and an estimated 29,761 jobs were estimated in 2020). The percentage of BIPOC residents has grown from 51 to 61 percent. Other demographic factors in the City of Brooklyn Park have not changed significantly since publishing the 2016 Final EIS/ROD. Since 2016, new commercial industrial and warehouse development has occurred in the northwest portion of the City of Brooklyn Park.

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 the Target 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.

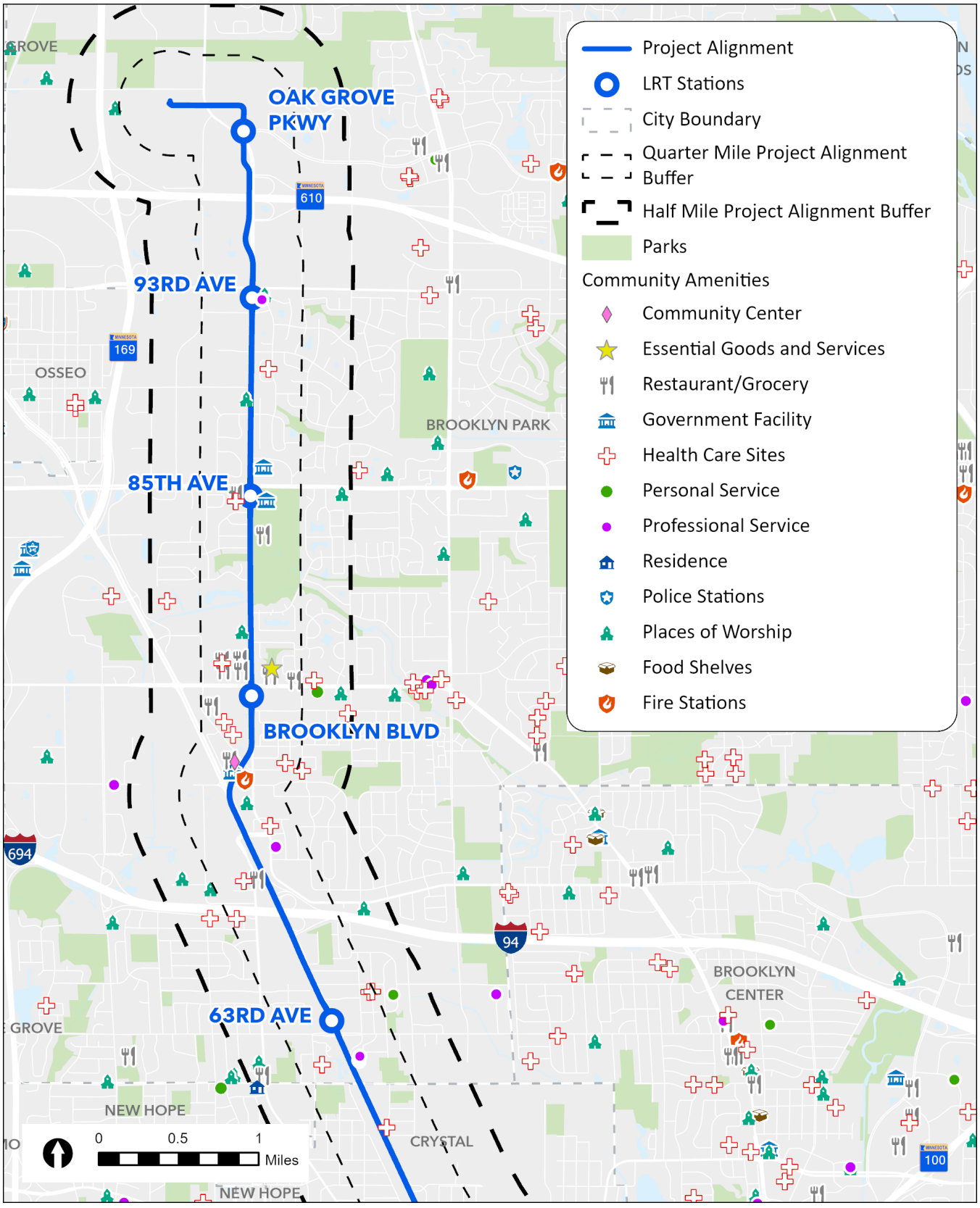
Community amenities located along the City of Brooklyn Park portion of the Project Alignment include assisted care, professional services, pharmacies, restaurants, and places of worship. North Hennepin Community College and the City of Brooklyn Park branch of the Hennepin County Library are located at the intersection of 85th Ave N and W Broadway Ave. The Rush Creek Regional Trail, part of the Three Rivers Park District, is directly north of the OMF. The list of identified community amenities has continued to be refined and updated through robust community engagement. Identified community amenities are mapped in Figure 4-1, and a count of amenities within the study area is presented in Table 4-5.

Table 4-5 Community Amenities in the Study Area: City of Brooklyn Park

Facility Type	Count
School	5
Place of worship	7
Healthcare	15
Government service	2
Essential goods and services[a]	14
Personal and professional services	7
Community center	2
Parks	14

[a] Essential goods and services include locations that provide food access, household supplies and goods, childcare, and gasoline.

Figure 4-1 Community Amenities and Parks in the City of Brooklyn Park



4.2.2.2 City of Crystal

The City of Crystal comprises designated neighborhoods adjacent to the Project Alignment: 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 the Crystal Town Center located at 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.

Since 2016, the population of the City of Crystal has remained consistent with the projections published in the 2016 Final EIS/ROD. Employment has lagged slightly behind projections published in 2016 (4,640 jobs were projected by 2020 and an estimated 3,466 jobs were estimated in 2020). Other demographic factors in the City of Crystal have not changed significantly since publishing the 2016 Final EIS/ROD.

Bass Lake Rd (east-west) and CR 81 (north-south) are major connections. Freight carriers, CPKC (east-west) and BNSF (north-south) corridors, 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.

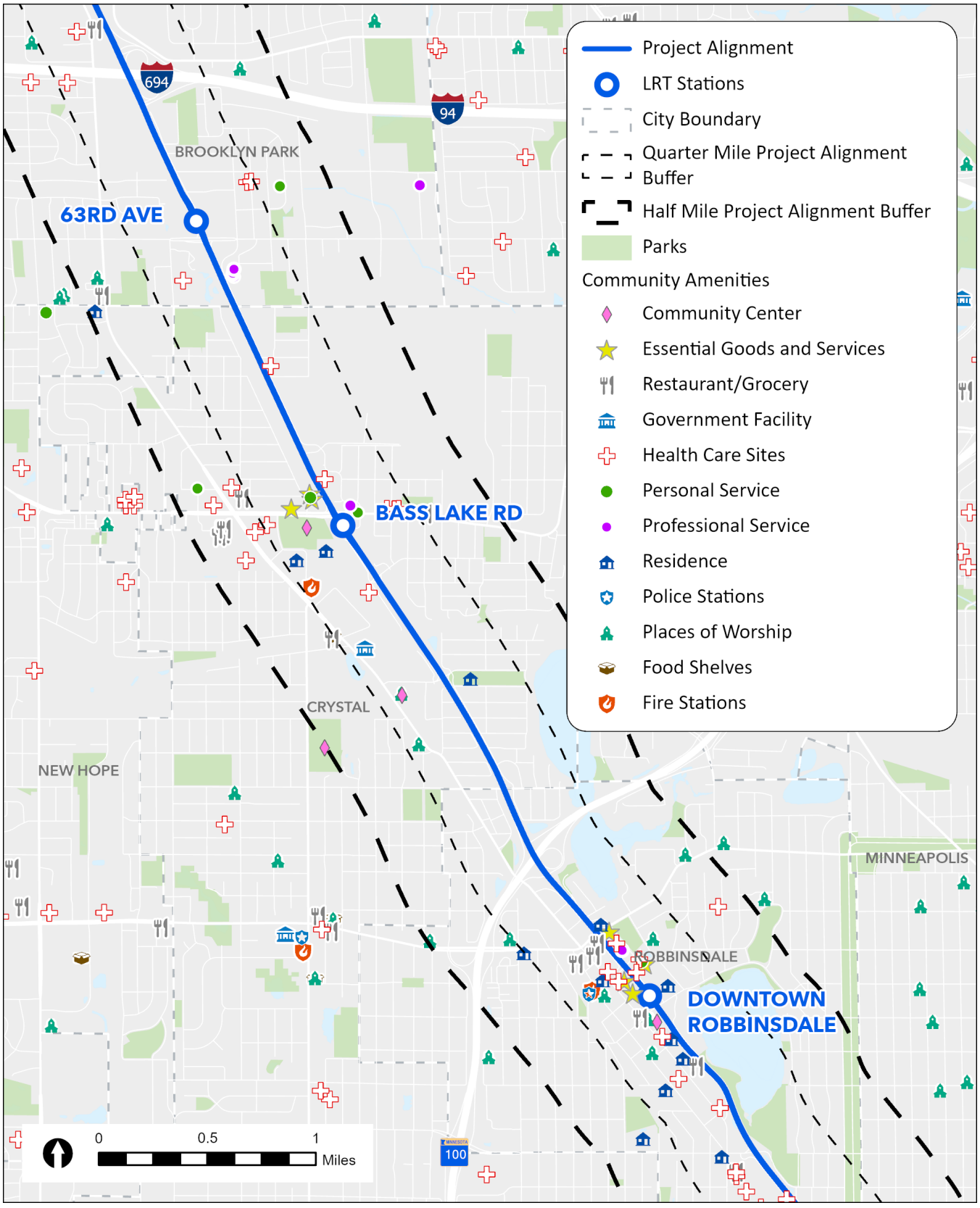
Community amenities in the City of Crystal include restaurants, medical facilities, pharmacies, professional services, places of worship, and assisted care. Becker Park is adjacent to the proposed Bass Lake Rd Station and completed new park improvements in 2020. The list of identified community amenities continues to be refined and updated through robust community engagement. Identified community amenities are mapped in Figure 4-2, and a count of amenities within the study area is presented in Table 4-6.

Table 4-6 Community Amenities in the Study Area: City of Crystal

Facility Type	Count
School	1
Place of worship	2
Healthcare	9
Government service	1
Essential goods and services[a]	8
Personal and professional services	3
Community center	1
Parks	7

[a] Essential goods and services include locations that provide food access, household supplies and goods, childcare, and gasoline.

Figure 4-2 Community Amenities and Parks in the City of Crystal



4.2.2.3 City of Robbinsdale

The City of Robbinsdale is primarily residential, with a corridor of commercial and industrial activity, 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 Downtown Robbinsdale, which is an important community asset and a destination for both residents and visitors to the area.

Since 2016, the population of the City of Robbinsdale has remained consistent with the projections published in the 2016 Final EIS/ROD. Employment has lagged slightly behind projections published in 2016 (7,300 jobs were projected by 2020 and an estimated 6,402 jobs were estimated in 2020). The percentage of BIPOC residents has grown from 23 percent to 35 percent. Other demographic factors in the City of Robbinsdale have not changed significantly since publishing the 2016 Final EIS/ROD.

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 railroad corridor. The grid street pattern is also interrupted by several lakes within city boundaries. Crystal Lake, Ryan Lake, and South Twin Lake present natural barriers that influence access and connectivity within the City of Robbinsdale.

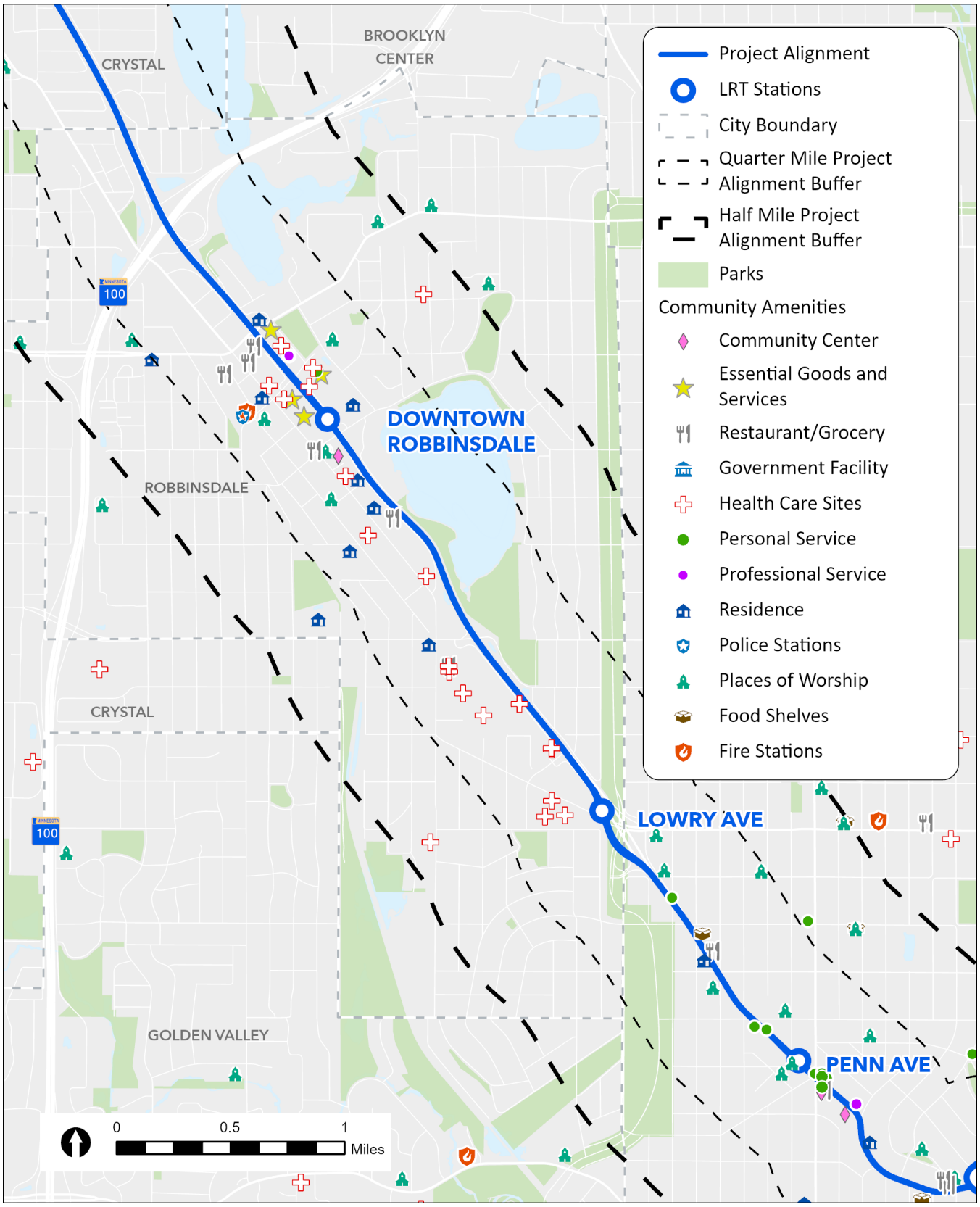
Community amenities located along the City of Robbinsdale portion of the Project Alignment include restaurants, medical facilities, pharmacies, groceries, food shelves, and places of worship. Victory Memorial Pkwy intersects with the Project Alignment near the Lowry Ave Station and passes near other park resources, including Lakeview Terrace Park and the Twin Lakes Boat Launch. The list of identified community amenities have continued to be refined and updated through robust community engagement. Identified community amenities are mapped in Figure 4-3, and a count of amenities within the study area is presented in Table 4-7.

Table 4-7 Community Amenities in the Study Area: City of Robbinsdale

Facility Type	Count
School	3
Place of worship	7
Healthcare	21
Government service	1
Essential goods and services	11
Personal and professional services[a]	2
Community center	1
Parks	11

[a] Essential goods and services include locations that provide food access, household supplies and goods, childcare, and gasoline.

Figure 4-3 Community Amenities and Parks in the City of Robbinsdale



4.2.2.4 City of Minneapolis

Within the City of Minneapolis, the Project passes through six City-designated neighborhoods: North Loop, Sumner-Glenwood, Near North, Hawthorne, Jordan, and Willard-Hay. North Loop is a mixed-use downtown neighborhood that has experienced the 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 Hwy (TH 55) (east-west) and I-94 (north-south) provide vehicle connections to the area act as barriers in communities because they limit access to connectivity between neighborhoods for pedestrians and bicyclists. 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 the Project area.

Since 2016, the population of the City of Minneapolis has slightly exceeded the projections published in the 2016 (424,700 residents were projected by 2020 and an estimated 429,956 residents were estimated in 2020). Employment has also slightly exceeded projections published in 2016 (324,000 jobs were projected by 2020 and an estimated 334,096 jobs were estimated exist in 2020). Other demographic factors in the City of Minneapolis have not changed significantly since publishing of the 2016 Final EIS/ROD. Several new residential redevelopments have occurred in the City of Minneapolis in the W Broadway corridor and in the North Loop neighborhood.

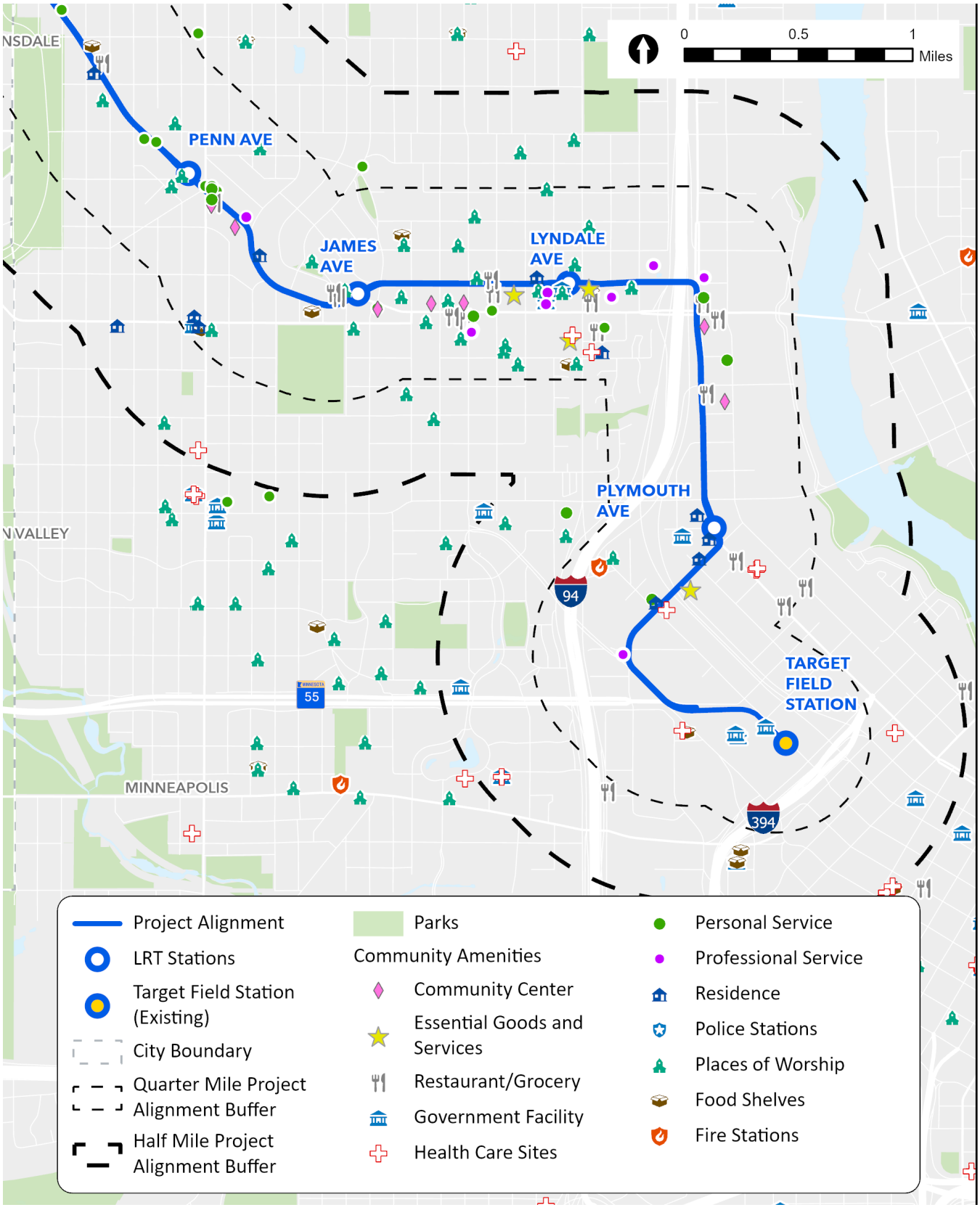
Community amenities located within the study area include restaurants, medical facilities, fire stations, food shelves, and places of worship. Park and trail facilities are also scattered throughout the study area, including basketball courts, picnic areas, and walking paths. Multiuse trails (Theodore Wirth Pkwy, Victory Memorial Pkwy, and Cedar Lake Trail) provide connections for bicyclists and pedestrians. The list of identified community amenities have continued to be refined and updated through robust community engagement. Identified community amenities are mapped in Figure 4-4, and a count of amenities within the study area is presented in Table 4-8.

Table 4-8 Community Amenities in the Study Area: City of Minneapolis

Facility Type	Count
School	23
Place of worship	39
Healthcare	12
Government service	6
Essential goods and services[a]	28
Personal and professional services	17
Community center	6
Parks	13

[a] Essential goods and services include locations that provide food access, household supplies and goods, childcare, and gasoline.

Figure 4-4 Community Amenities and Parks in the City of Minneapolis



4.2.3 Environmental Consequences

4.2.3.1 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 Alternatives. No impacts to community amenities, character, or cohesion within communities are anticipated under the No-Build Alternative. The analysis in this section identifies the significance of impact to community amenities, character, and cohesion because of the Project. For a discussion about community facilities, character, and cohesion specific to EJ for each Project City, see Chapter 7, subsection 7.4.2.2.

City of Brooklyn Park

Impacts to community character in the City of Brooklyn Park would be associated primarily with the reconstruction of 101st Ave N and Oak Grove Pkwy to accommodate the needs of the OMF site, which is designed in accordance with future land use plans. Under existing conditions, the future OMF site is primarily undeveloped. The creation of the OMF would result in adverse visual impacts for viewers with moderate to high levels of visual sensitivity because of the substantial change in land use. Visual quality would also be altered at the site of the proposed 73rd Ave N/ CR 81 bridge, resulting in a neutral impact. A total of three multifamily residential parcels and one single-family parcel in the City of Brooklyn Park would experience moderate noise impacts (see Chapter 5, subsection 5.6 for detailed noise impacts and a definition of moderate and severe), resulting primarily from the speed of the train and the grade-crossing bells at 89th Ave N and Maplebrook Pkwy N, as well as the expansion of CR 103.

Impacts to community cohesion would include the benefit of new bicycle and pedestrian facilities that would improve safety and reduce crossing times around LRT stations and adjacent to the Project Alignment. These include a pedestrian bridge constructed over the BNSF tracks near 63rd Ave N and construction of at-grade LRT roadway crossings at W Broadway Ave and 63rd Ave N. These impacts would result in improved cohesion and connectivity, despite minor vehicular access impacts.

Overall, impacts to community amenities are anticipated to be minimal. Parking impacts would be limited to off-street, private parking lots at larger commercial and institutional centers, including North Hennepin Community College and the Target North Campus. Impacts at North Hennepin Community College would require takings within the parking lot, which would require mitigation measures for the off-street parking loss. Thirteen properties identified as community amenities in Figure 4-1 above would be affected by roadway access impacts due to conversion of full-access intersections to right-in/right-out intersections along W Broadway Ave. No community amenities would be relocated, and full acquisition of only one community amenity would be required (a Hennepin County-owned commercial parcel adjacent to the proposed 73rd Ave N/CR 81 bridge where no business is operating).

City of Crystal

Impacts to community character in the City of Crystal would be related primarily to the new Bass Lake Rd Station and the associated new grade-separated interchange. The Project would result in moderate noise impacts to one multifamily residential parcel in the City of Crystal near the Bass Lake Rd Station and moderate impacts to four single-family residences at N 47th Ave and the CPKC railway. These impacts would occur at four single-family properties and at one multifamily residence. Noise impacts primarily result from proximity of the tracks, speed of the train, and bells at Bass Lake Rd Station. Visual quality impacts are characterized as neutral impacts for locations in the City of Crystal despite a moderately altered visual quality (see Section 4.5). The associated noise around the Bass Lake Rd Station and the associated new interchange would result in adverse impacts on community character in the City of Crystal (see Section 5.6). Additional coordination is needed to address these impacts and resulting mitigation measures will be identified in the Supplemental Final EIS.

Impacts to community cohesion would include the conversion of the intersection at Bass Lake Rd and CR 81 to a grade-separated interchange. This conversion would result in improvements to community connectivity along Bass Lake Rd by creating separated pedestrian and bicycle facilities that reduce crossing conflicts and improve comfort for cyclists on Bass Lake Rd. The interchange conversion would also reduce vehicle traffic delays along CR 81. Roadway impacts along CR 81 throughout the rest of the City of Crystal would improve east-west community connections at many intersections. Overall, community cohesion would be improved with better connectivity for all modes, particularly at the Bass Lake Rd Station.

Overall, minimal impacts to community amenities are anticipated. Parking impacts would be limited to off-street, private parking lots at commercial properties, including a U-Haul rental location. The Project would require no acquisitions and or relocations of community amenities identified in Figure 4-2 above. Two properties identified as community amenities would have minor impacts because of minimal acquisition needs such as a partial acquisition or small strip of land needed, including the Crystal Medical Building and the Bass Lake Center.

City of Robbinsdale

Impacts to community character in the City of Robbinsdale would be related primarily to the Lowry Ave LRT station, the addition of center-running light rail along CR 81, and the addition of an LRT station and park-and-ride facility in Downtown Robbinsdale.

Moderate noise impacts to two single-family properties are anticipated in Robbinsdale. These impacts would result primarily from proximity of the tracks and the speed of the train (see Section 5.6). Visual impacts in the vicinity of the Downtown Robbinsdale Station are characterized as neutral because the Project would not result in substantial alteration to visual character or visual quality (see Section 4.5). Overall, no impacts to community character are anticipated to be adverse given anticipated mitigation for noise impacts.

The Project includes relatively few impacts to community cohesion. The planned reconstruction of N 42nd Ave would improve connections across CR 81 for all traffic modes. Overall, these impacts in community cohesion would result in improved cohesion and connectivity, despite minor vehicular access impacts.

Overall, minimal impacts to community amenities are anticipated. Parking impacts would be limited entirely to private off-street spaces in the City of Robbinsdale's downtown area. The Project would require the acquisition of one building on the Elim Church property, a community amenity. Eight properties identified as community amenities in Figure 4-3 above would have minor permanent impacts, including the City of Robbinsdale Department of Motor Vehicles, HyVee Grocery, and Robbins Landing apartment building.

City of Minneapolis

Impacts to community character in the City of Minneapolis would result from the addition of the Project Alignment and reconfiguration of 10th Ave N to create a transit mall or one-way vehicular traffic, a new 21st Ave N bridge across I-94, and the closure of 21st Ave N to vehicular traffic with an addition of a bicycle facility between I-94 and James Ave. Preliminary noise impacts include moderate noise impacts to five multifamily and 11 single-family residential properties and severe impacts to five multifamily and 10 single-family residential properties (see Section 5.6). A total of 28 vibration impacts to residential land use are identified (see Section 5.7). Impacts to visual quality and character are characterized as a neutral impact because of the Lowry Ave Station at-grade between the elevated northbound and southbound CR 81 bridges near Victory Memorial Pkwy and Theodore Wirth Pkwy, roadway reconfigurations along W Broadway Ave and 21st Ave N (beginning north of the James Ave Station and continuing to the Lyndale Ave Station), and impacts made along 10th Ave N (see Section 4.5).

The Project would result in impacts to community character in multiple neighborhoods, including North Loop, Near North, Hawthorne, and Jordan. The addition of a transit mall and improved bicycle facilities along 10th Ave N in the

North Loop neighborhood is consistent with the City of Minneapolis's 2040 land use plan of high-density, transit-supportive land uses and would enhance community character with associated noise and vibration impacts mitigated (see Chapter 5) and indirect displacement minimized (see Chapter 7). The addition of a bridge across I-94 at 21st Ave N would provide transit, pedestrian, and bicycling mode options, and connectivity across I-94 would promote community cohesion and access to the Mississippi River and regional trails. The closure of 21st Ave N to vehicular traffic would significantly change the community character in the Near North, Hawthorne, and Jordan neighborhoods. This change is consistent with the City of Minneapolis's 2040 land use plan of high-density, transit-supportive land uses along the W Broadway Ave corridor and adjacent blocks. Despite the land use plan compatibility, the associated noise, vibration impacts, and indirect displacement pressures along W Broadway Ave from I-94 to Irving Ave N would have an adverse impact on community character. Additional coordination is needed to address this impact, and resulting mitigation measures will be shared in the Supplemental Final EIS.

The Project would have several impacts to community cohesion in the City of Minneapolis, improving overall cohesion. Landscaping and realignment of multiuse trails to serve the new Lowry Ave Station would create new common spaces with transit and multimodal connections for community use. New mid-block pedestrian and bicycle crossings of W Broadway Ave would improve east-west community connectivity near the Lowry Ave and Penn Ave Stations. A multimodal bridge across I-94 would improve connectivity across the highway that has long been a barrier between North Minneapolis and the rest of the City of Minneapolis. Light-rail service from Target Field Station in Downtown Minneapolis through North Minneapolis would create new community connections throughout North Minneapolis. Vehicular traffic eliminated along 21st Ave N between Irving Ave N and 4th St N would result in traffic moving to W Broadway Ave and access impacts along 21st Ave N. Overall, community cohesion would have a net benefit of improving access to people walking and bicycling east-west in parallel with W Broadway Ave.

Overall, impacts to community amenities would be moderate. Loss of on-street parking would occur along W Broadway Ave and Washington Ave. Off-street parking losses would occur at the Minneapolis Public Schools administration building on W Broadway Ave. Twelve of the community amenities identified in Figure 4-4 above would have minor permanent impacts, including the Salvation Army, Harold Mezile North Community YMCA, and a small urban farm at 21st Ave N and Dupont Ave. The Project would also require the acquisition of six buildings that were identified as community amenities, resulting in the relocations of seven community amenities, including Morning Star Assembly of God, J&J Furniture store, Olympic Café, and the Five Points Building, which houses the KMOJ radio station.

4.2.3.2 Construction-Phase (Short-Term) Impacts

Construction-phase impacts are defined as temporary impacts that occur during construction only. No construction-phase impacts would occur with the No-Build Alternative. Although temporary in nature, the Build Alternative may have construction-phase impacts that 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.

4.2.4 Avoidance, Minimization, and Mitigation Measures

Although the Council does not anticipate that impacts associated with the Project would be severe enough to affect community character and cohesion on a broad scale, mitigation would be explored for specific locations where long-term operational impacts and short-term construction impacts are anticipated. The Project is also anticipated to

provide many benefits to connectivity and community character with increased access to reliable transit, new LRT stations, and new adjacent improvements to streets, including sidewalk, bikeway, and intersection improvements.

4.2.4.1 Operating-Phase (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 Draft EIS (Section 3.3, Pedestrian Conditions; Section 3.4, Bicycle Conditions; Section 3.5, Vehicle Parking; Section 4.3, Acquisitions and Relocations; Section 4.5, Visual/Aesthetics; Section 5.6, Noise; and Section 5.7, Vibration). As noted above, mitigation for community character impacts will require additional coordination and input from the affected communities and will be identified in the Supplemental Final EIS.

4.2.4.2 Construction-Phase (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 best management practices (BMPs) would include working with residents and 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 would be developed as the Project advances to construction.

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 construction and operation of the transitway. 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 91-46), Code of Federal Regulations (CFR) Title 49 Part 24 (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 4.3.3.1 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:*** 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, acquisition of an apartment building on a single tax parcel with six units would result in six residential relocations.
- ***Easement:*** Provides for temporary (during construction) or permanent use of a property for a particular purpose. Temporary and permanent easements will be addressed in the Supplemental Final EIS.

4.3.2 Study Area and Affected Environment

The study area for displacement of residents and businesses is defined as the area within the LOD, which provides a conservative estimate of right-of-way requirements. Development along the Project Alignment includes primarily residential, commercial, public, and industrial uses. Existing land uses are identified and described in Section 4.1, Land Use Plan Compatibility, and the specific regulations associated with parkland acquisition are described in Chapter 8, Summary of Supplemental Draft Section 4(f) and Section 6(f). Utilities and potential utility relocations are discussed in Section 5.1.

4.3.3 Environmental Consequences

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

4.3.3.1 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. The No-Build Alternative would not require acquisition of any properties for the Project. The Project would include long-term impacts to residential, commercial, industrial, institutional, park, agricultural, and undeveloped properties in the Project area.

Most permanent acquisitions for the Project are partial impacts that would only require portion of the parcel. As design advances, the Project will continue to refine property impacts along the Project Alignment (see Appendix A-4 for earlier phase property impact assumptions). As design advances, the Project would consider modifications or adjustments to avoid property acquisitions or lessen the severity of the impact. Additionally, the Council would work with property owners to retain partially impacted properties and parcels if they prefer versus proceeding with a full acquisition, particularly in cases where the Project would impact a building but not require acquisition of the full parcel.

Future design refinements 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.

Table 4-9 Land Use Categories for Acquisitions and Relocations

Land Use Category	Land Use Types
Residential	Single-family residential, multifamily residential, mixed-use residential
Commercial	Retail and other commercial, offices, mixed-use commercial
Industrial	Industrial facilities, utilities
Institutional	Public and institutional, including libraries, schools and colleges, churches, police/fire stations, other cultural centers
Park and recreational	Publicly owned park and recreational facilities
Agricultural	Agricultural lands in active production, urban farms
Undeveloped	Vacant, undeveloped land; empty lots

City of Brooklyn Park

Along the City of Brooklyn Park portion of the Project Alignment, the Project would acquire 67.4 acres across 158 parcels. Impacts in the City of Brooklyn Park include 98 partial residential impacts and the relocation of two commercial businesses adjacent to the proposed 73rd Ave N/CR 81 bridge. Full and partial acquisitions of undeveloped property would be required for the site of the future OMF. A summary of parcel acquisitions and relocations for the City of Brooklyn Park is shown in Table 4-10.

Table 4-10 Acquisitions and Relocations Required for the City of Brooklyn Park

Land Use Category	Parcel Impacts (acres)	Parcel Impacts (count)	Partial Parcel Impacts (count)	Full Parcel Acquisitions (count)	Building Acquisitions (count)	Relocations (count)
Residential	3.4	99	98	1	-	-
Commercial	8.8	23	21	2	2	2
Industrial	2.3	6	6	-	-	-
Institutional	2.3	5	5	-	-	-
Park and recreational	9.0	5	5	-	-	-
Agricultural	-	-	-	-	-	-
Undeveloped	41.6	20	18	2	-	-
Total	**67.4**	**158**	**153**	**5**	**2**	**2**

City of Crystal

In the City of Crystal, the Project would acquire a total of 4.2 acres across 15 parcels, including one partial acquisition of a residential property and the acquisition of three commercial properties adjacent to the Bass Lake Rd Station. A summary of parcel acquisitions and relocations for the City of Crystal is shown in Table 4-11. As design progresses, acquisitions and relocations associated with the Project would also be refined.

Table 4-11 Summary of Acquisitions and Relocations Required for the City of Crystal

Land Use Category	Parcel Impacts (acres)	Parcel Impacts (count)	Partial Parcel Impacts (count)	Full Parcel Acquisitions (count)	Building Acquisitions (count)	Relocations (count)
Residential	0.0	1	1	-	-	-
Commercial	3.0	7	4	3	3	6
Industrial	0.3	1	1	-	-	-
Institutional	-	-	-	-	-	-
Park and recreational	-	-	-	-	-	-
Agricultural	-	-	-	-	-	-
Undeveloped	0.8	6	4	2	-	-
Total	**4.2**	**15**	**10**	**5**	**3**	**6**

City of Robbinsdale

Parcel acquisitions in the City of Robbinsdale would total 3.1 acres across 31 properties, 24 of which would be partial impacts to residential or commercial properties that would not result in relocations. Most impacts south of downtown are limited to small strips along the existing right-of-way and minor impacts to residential yards and commercial parking lots.

South of Downtown Robbinsdale, impacts to three residential properties would require the reconstruction of residential garages but would not impact primary structures. A summary of parcel acquisitions and relocations in the City of Robbinsdale is shown in Table 4-12. City of Robbinsdale building acquisitions also include a conservative estimate based on the current understanding of the proposed 42nd St reconstruction. As design progresses, acquisitions and relocations associated with the Project would also be refined.

Table 4-12 Acquisitions and Relocations Required for the City of Robbinsdale

Land Use Category	Parcel Impacts (acres)	Parcel Impacts (count)	Partial Parcel Impacts (count)	Full Parcel Acquisitions (count)	Building Acquisitions (count)	Relocations (count)
Residential	0.1	16	13	-	3	-
Commercial	2.9	12	8	1	5	1
Industrial	-	-	-	-	-	-
Institutional	0.2	3	3	-	1	-
Park and recreational	-	-	-	-	-	-
Agricultural	-	-	-	-	-	-
Undeveloped	-	-	-	-	-	-
Total	**3.1**	**31**	**24**	**1**	**9**	**1**

City of Minneapolis

In the City of Minneapolis, a total of 142 parcels would be acquired, including 116 partial acquisitions and 26 full acquisitions. The Project would also require 18 residential building acquisitions, 13 commercial building acquisitions, and 1 institutional acquisition. Notable acquisitions include the Five Points Building, Morning Star Assembly of God Church, and Wells Fargo Bank. A summary of parcel acquisitions and relocations in the City of Minneapolis is shown in Table 4-13. As design progresses, acquisitions and relocations associated with the Project would also be refined.

Table 4-13 Acquisitions and Relocations Required for the City of Minneapolis

Land Use Category	Parcel Impacts (acres)	Parcel Impacts (count)	Partial Parcel Impacts (count)	Full Parcel Acquisitions (count)	Building Acquisitions (count)	Relocations (count) [a]
Residential	1.7	64	54	10	18	14
Commercial	3.2	40	28	12	13	11
Industrial	0.5	9	9	-	2	1
Institutional	0.9	9	8	1	1	1
Park and recreational	-	-	-	-	-	-
Agricultural	< 0.1	2	2	-	-	-
Undeveloped	0.7	18	15	3	-	-
Total	**7.0**	**142**	**116**	**26**	**34**	**27**

[a] Building acquisitions within the City of Minneapolis would include properties that are currently vacant. No relocations would be required for properties that are vacant under existing conditions.

4.3.3.2 Construction-Phase (Short-Term) Impacts

The following sections summarize construction-phase (short-term) impacts from the No-Build Alternative and Build Alternatives.

No-Build Alternative

The No-Build Alternative consists of the future programmed transportation system without the Project. Temporary impacts to properties in the Project area would not occur under the No-Build Alternative.

Build Alternative

Construction activities would result in short-term impacts primarily because of activities requiring temporary construction easements. In addition, construction would likely require temporary modification or closure of some existing property access. Refer to Sections 3.3, 3.4, 3.5, and 4.6 of this Supplemental Draft EIS for further discussion of construction impacts related to access closures and impacts to on-street parking.

4.3.4 Avoidance, Minimization, and Mitigation Measures

Loss of private residential property would be mitigated by payment of fair-market compensation and provision of relocation assistance in accordance with the Uniform Act. For residential displacements, the following would be provided:

- Relocation advisory services to displaced tenants and owner occupants
- Minimum 90 days written notice to vacate prior to requiring possession
- Reimbursement for moving expenses
- Payments for the added cost of renting or purchasing comparable replacement housing

For nonresidential displacements, the following would be provided, consistent with the Uniform Act:

- Relocation advisory services
- Minimum 90 days written notice to vacate prior to requiring possession
- Reimbursement for moving and re-establishment expenses

Although the law requires a minimum of 90 days written notice to vacate for residential and nonresidential displacements, the displaced owners would have been previously contacted by a right-of-way agent and an appraiser. Relocation advisory services would ensure that relocation activities are coordinated with the owners. Other reimbursable/incidental expenses related to relocation may also be provided to residents and businesses if determined to be actual, reasonable, and necessary. Properties affected by temporary easements would be restored to an acceptable pre-construction condition depending on the individual easement need and agreement.

4.4 Cultural Resources

This section describes the potential effects of the No-Build and Build Alternatives on cultural resources. NEPA requires federal agencies to consider the impacts of their actions on cultural resources, and the National Historic Preservation Act of 1966 (NHPA), as amended (54 USC § 300101 et seq.), requires agencies to consider the effects of their undertakings on historic properties.

For the purposes of this section, “cultural resource” is synonymous with “historic property.” Locations important to communities that are not historic are addressed in Section 4.2. Historic properties are buildings, structures, districts, objects, and sites that are listed in or eligible for listing in the National Register of Historic Places (NRHP). The Council on Environmental Quality’s (CEQ’s) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500–1508) encourage integration of the NEPA process with other planning and environmental reviews, such as 54 USC § 306108 of the NHPA (hereafter referred to as Section 106). CEQ regulations also clarify that, under NEPA, “impact” is synonymous with “effect” (40 CFR § 1508.8(g)). For consistency with the Section 106 regulations, “effect” is used for the Cultural Resources Section.

Because federal policy and guidance encourage "coordination" and "integration" between NEPA and Section 106, FTA applies the Section 106 process for the Project to fulfill the requirements for the consideration of effects on cultural properties under NEPA (see Section 4.4.1 and Appendix A-4 for additional details).

To date, FTA's Section 106 compliance process has included consultation with the Minnesota State Historic Preservation Office (SHPO), Native American tribes, local governments, and other interested parties. Identification of historic properties has also been initiated.

Appendix A-4 includes documentation of the Section 106 analysis and consultation process, including copies of the Project's consultation materials. (Also see Section 4.4.2.1.) A list of reports and studies on historic properties is provided in Appendix A-4. The reports included in Appendix A-4, combined with correspondence with SHPO in Appendix A-4, provide documentation of FTA's efforts to identify historic properties to date.

4.4.1 Regulatory Context and Methodology

This section describes the regulatory context and methodology for the historic properties assessment under Section 106 and the methodologies used to determine the architecture/history and archaeological Areas of Potential Effects (APEs), the methods used to identify historic properties and evaluate them for the NRHP, how effects on historic properties are assessed, and how adverse effects are resolved under Section 106.

The Council will apply for FTA funding for the Project and seek permits for construction from the United States Army Corps of Engineers (USACE); therefore, the Project is a federal undertaking and must comply with Section 106 and other applicable federal mandates. Section 106 requires federal agencies to consider the effects of their actions on historic properties before undertaking a project.

FTA's Section 106 compliance is achieved through consultation with SHPO, Native American tribes, local governments, and other interested parties. Section 106 directs that the responsible federal agency shall take the following actions:

- Initiate the Section 106 process by determining whether the action is an undertaking, notifying SHPO and Native American tribes, and developing a plan to involve the public (36 CFR § 800.3)
- Identify historic properties that are listed, or eligible for listing, in the NRHP by determining an APE, conducting a survey to identify historic properties, and evaluating historic properties under NRHP criteria (36 CFR § 800.4)
- Assess the effects of the undertaking on historic properties by applying the criteria of adverse effect and consulting with SHPO, Native American tribes, and the public [36 CFR §§ 800.5 and 800.11(e)]
- Resolve any adverse effect(s) by continuing consultation with Section 106 consulting parties to explore measures that avoid, minimize, or mitigate the adverse effect(s) and develop a Section 106 Memorandum of Agreement (MOA) to document agreed-upon measures (36 CFR § 800.6)

Permits and/or approvals may be required from State agencies that may include MnDOT, Minnesota Department of Natural Resources (DNR), Minnesota Pollution Control Agency (MPCA), and Minnesota Department of Health (MDH). Therefore, the Project must also comply with Minnesota laws, including MEPA, the Minnesota Field Archaeology Act (Minn. Stat. 138.31–138.42), the Minnesota Historic Sites Act (Minn. Stat. 138.661–138.669), and the Minnesota Private Cemeteries Act (Minn. Stat. 307.08), as applicable.

The measures that FTA agreed to implement to avoid, minimize, and mitigate adverse effects on historic properties identified during previous Section 106 consultation and included in the 2016 Final EIS are documented in the *Memorandum of Agreement between the Federal Transit Administration and the Minnesota Historic Preservation Office Regarding the METRO Blue Line Extension Light Rail Transit Project, Hennepin County, Minnesota*, which was executed on Aug. 23, 2016, and amended on Sept. 20, 2022. The MOA included stipulations outlining the process for

changing the APE because of substantive changes to the design, completing additional historic property identification and evaluation, and assessing effects on newly identified historic properties or new effects on previously identified historic properties.

4.4.2 Study Area and Affected Environment

The Project has two APEs, one for architecture/history properties (Figure 4-5 and Figure 4-6) and one for archaeological resources (Figure 4-7 and Figure 4-8), which are the geographic areas within which an undertaking could directly or indirectly cause alterations in the character or use of historic properties. The APE for the Project was originally defined in 2011 and refined in 2018 by FTA based on the 2016 Alignment. The refined APE has been applied to the Build Alternative. The rationale for the updated architecture/history and archaeological APEs is provided in the *Project Section 106 Compliance Plan* (Appendix A-4). As design of the Project advances, FTA may revise the APE as appropriate in consultation with SHPO.

As of publication of this Supplemental Draft EIS, the Section 106 process tasks completed include the following:

- Revising the APE to reflect the potential effects of the Project Alignment and to align with APEs for similar FTA transit projects throughout the region and nationally, in accordance with Stipulation III.A of the MOA
- Initiating supplemental surveys to identify potential historic properties (potentially eligible architecture/history and archaeological resources within the revised APE), in accordance with Stipulation I of the MOA

Eleven NRHP-listed or NRHP-eligible properties, including six historic districts and one multiple-property complex, have been identified in the Project's APEs (architecture/history and archaeological). Nine of these properties were identified as historic properties prior to the 2016 Final EIS/ROD, and two have been determined NRHP-eligible since the 2016 Final EIS/ROD. There were 17 NRHP-listed or NRHP-eligible properties within the Project's APE for the 2016 Final EIS/ROD. All 11 properties are architecture/history properties; no NRHP-listed or -eligible archaeological resources have been identified in the Project's archaeological APE to date. Additional studies completed to date to identify historic properties within the updated APEs include a Phase I architecture/history survey and an archaeological literature review and assessment. These studies were completed in accordance with Stipulation I of the existing MOA. As a result of the studies, FTA has identified nine additional potentially eligible properties since the 2016 Final EIS/ROD, including two historic districts and one multiple-property complex within the APEs, all of which are architecture/history properties. The Project will evaluate these properties to determine whether they are eligible for listing in the NRHP. Determinations of eligibility for these properties will be included in the Supplemental Final EIS. Figure 4-5 and Figure 4-6 identify these properties, and a list of properties is provided in Appendix A-4. Furthermore, the supplemental studies have identified two areas with the potential to contain unknown archaeological resources within the archaeological APE. Further survey of these locations will be completed to determine whether archaeological sites that are eligible for listing in the NRHP are located within the APE. The results of these surveys will be included in the Supplemental Final EIS. Because of the sensitive nature of archaeological site information, the locations of these areas of archaeological potential are not shown on Figure 4-7 and Figure 4-8.

4.4.2.1 Section 106 Coordination and Consultation

The Section 106 process includes identifying the APE for architecture/history properties and archaeological resources, identifying and evaluating historic properties within the APE, assessing the effects of the Project on identified historic properties, and consulting to determine methods to avoid, minimize, or mitigate adverse effects to historic properties. The steps in the Section 106 process are ongoing and will continue through completion in consultation with the SHPO and other consulting parties.

If a finding of Adverse Effect is made for the Project, FTA will consult with SHPO, the Council, and consulting parties pursuant to Stipulation XIV of the MOA to determine the appropriate means to resolve the adverse effects and develop mitigation plans as required. The MOA will be amended to document the historic properties within the APE for the Project Alignment, the resolution of adverse effects on those properties, and other necessary updates. A detailed description of Section 106 coordination is provided in Chapter 9 (see Section 9.2.2 and Appendix A-4).

4.4.2.2 Section 106 Tribal Coordination

Section 106 tribal coordination builds on efforts from the Section 106 review for the 2016 Final EIS. In 2012, FTA sent letters to potentially affected Native American tribes, requesting that they identify any concerns about the Project's potential effects and inviting them to participate in public scoping meetings and/or schedule a separate meeting to discuss any specific tribal issues and concerns. Native American tribes received copies of the 2016 Final EIS and provided comments. In August 2023, FTA sent letters to potentially affected Native American tribes (see Chapter 9, Table 9-5), requesting that they identify any concerns about the Project Alignment's potential effects and inviting them to participate in Section 106 consultation process. A description of Section 106 tribal coordination is presented in Chapter 9 (see Section 9.2.2.1).

Figure 4-5 Architecture/History APE and Properties Identified (North)

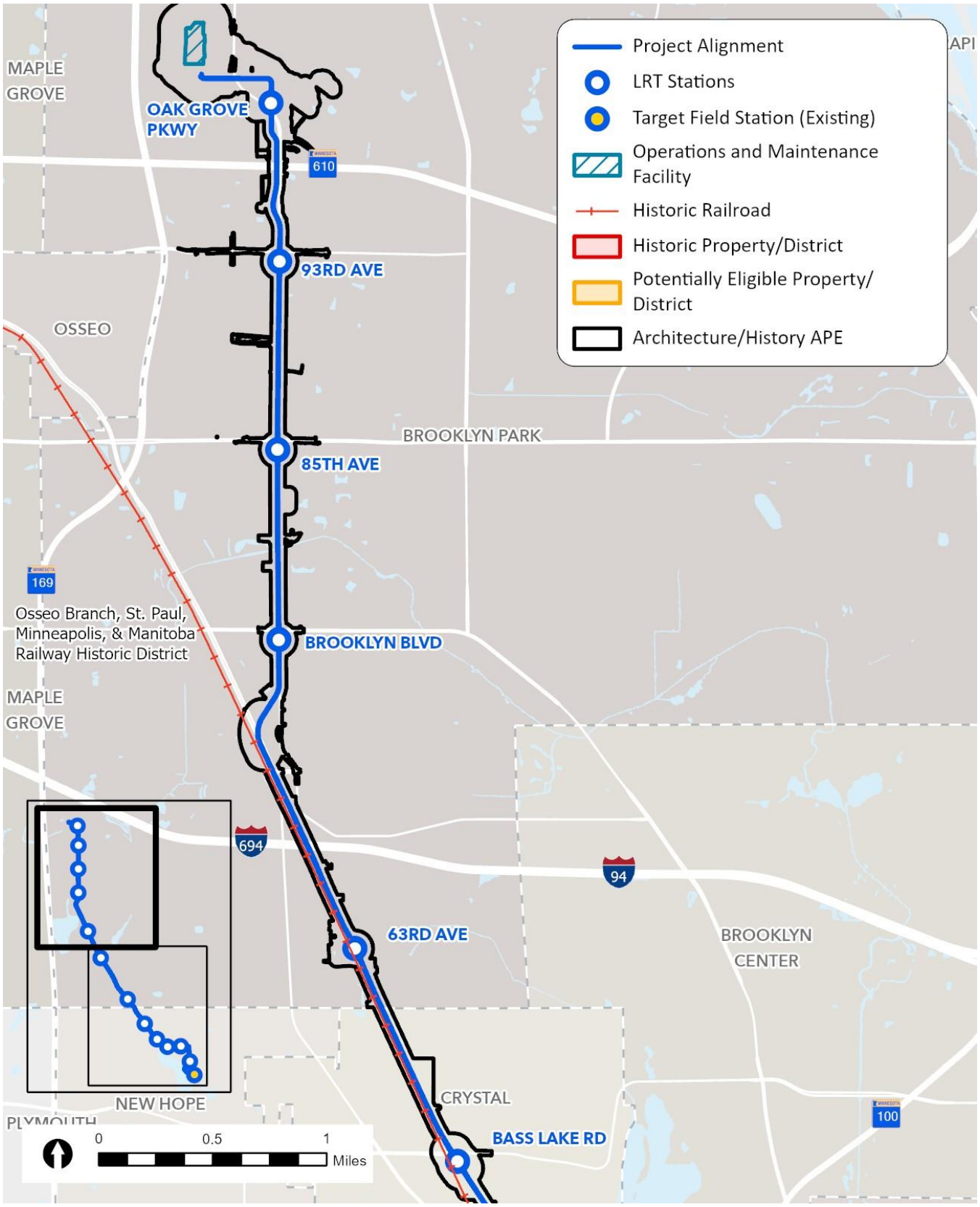


Figure 4-6 Architecture/History APE and Properties Identified (South)

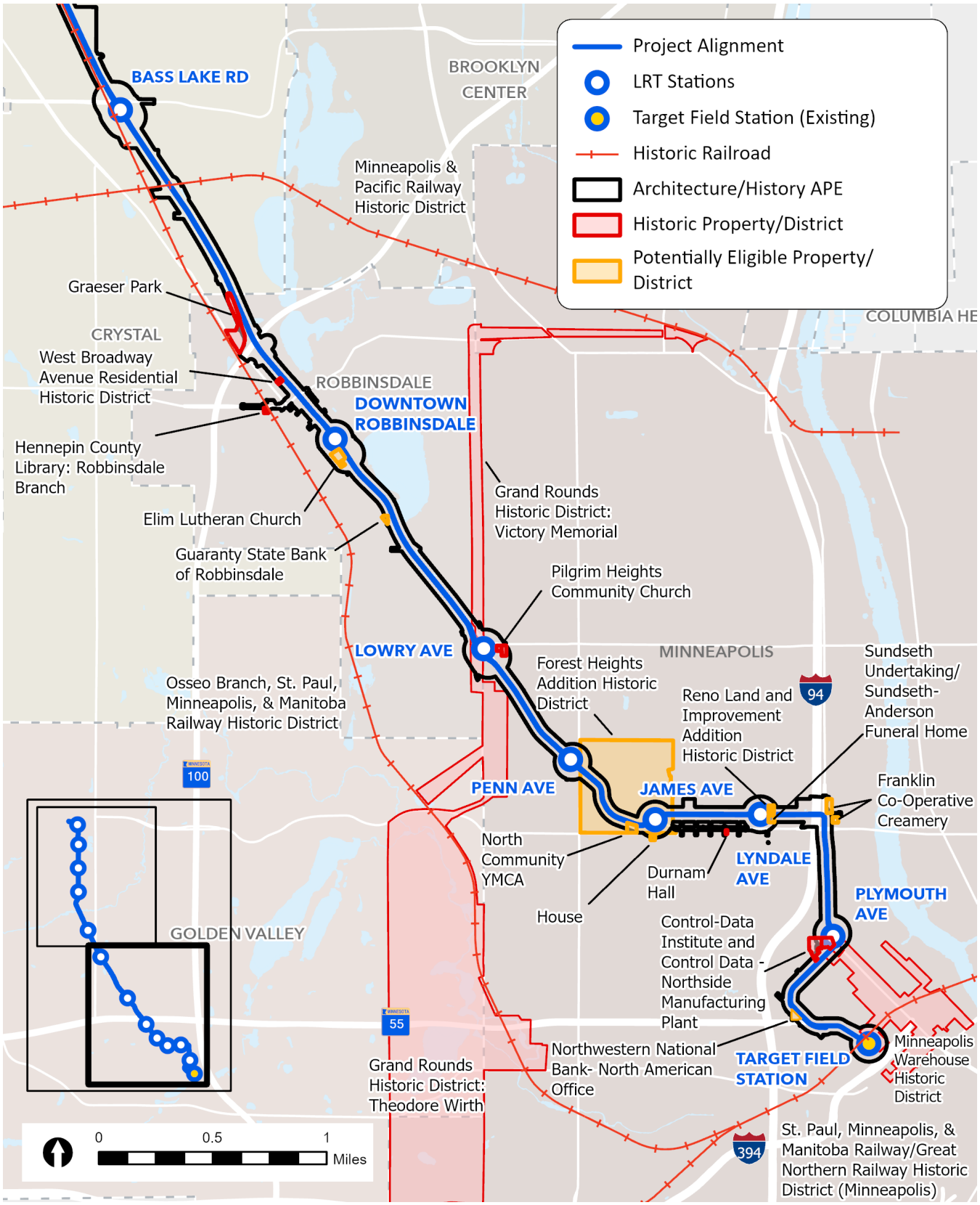
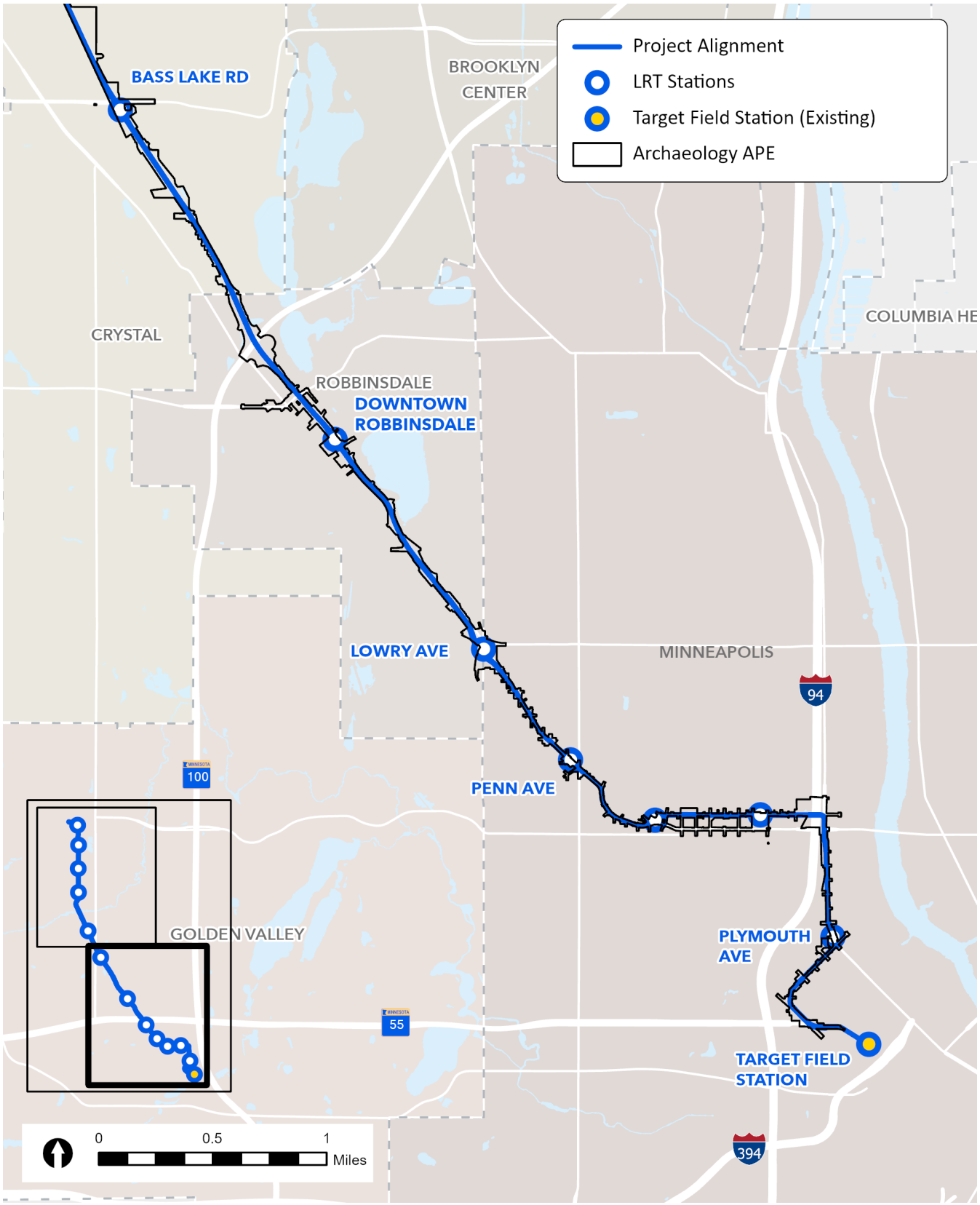


Figure 4-7 Archaeological APE (North)

Figure 4-8 Archaeological APE (South)



4.4.3 Environmental Consequences

To inform the understanding of the No-Build Alternative compared to the Build Alternative, FTA completed a preliminary assessment of the effects that the Project could have on historic properties or potential historic properties. At this phase of design, the engineering plans referenced for this Supplemental Draft EIS (see Appendix A-E) are concept-level drawings prepared in September 2023 and January 2024 to reflect the at-grade Lowry Station design and refined property impacts in the City of Minneapolis. Consultation on design efforts during subsequent design phases would seek to avoid or minimize potential impacts on historic properties. Mitigation for adverse effects that are not avoided in the design process will be considered. After the historic property identification surveys are complete, effects from the Project on historic properties within the updated APE will be assessed pursuant to Stipulation I.C of the MOA. FTA intends to make an effect finding for the Project and each of the historic properties listed or eligible for listing in the NRHP as part of the Supplemental Final EIS/Amended ROD after its consideration of public and consulting party comments on this Supplemental Draft EIS and through the Section 106 consultation process to inform the Supplemental Final EIS. FTA is seeking input from consulting parties and the public on the effects to historic properties prior to making its final finding of effect.

4.4.3.1 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.

4.4.3.2 Build Alternative

The Section 106 process is underway. To inform evaluation of the Build Alternative, a preliminary assessment of the effects that the Project could have on historic properties or potential historic properties (properties identified as potentially eligible for listing in the NRHP) was completed (see Appendix A-4). An Assessment of Effects Report containing detailed discussion of the Project's effects on each historic property will be included in the Supplemental Final EIS. In accordance with 36 CFR § 800.5, FTA, in consultation with SHPO and other consulting parties will review the Project elements and apply the criteria for an adverse effect under Section 106 to determine whether the Project would cause any adverse effects on historic properties within the Project's APEs. The Assessment of Effects will consider anticipated long- or short-term direct and indirect effects on the identified historic properties from construction and operation of the Project. See Section 4.4.1 for a description of the criteria and process used to reach a determination of effect.

4.4.4 Avoidance, Minimization, and Mitigation Measures

If a finding of Adverse Effect is made for the Project, FTA will consult 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. The Advisory Council on Historic Preservation (ACHP) may also join in this consultation. The MOA will be amended to document the historic properties within the APE for the Project Alignment, and the measures for avoidance, minimization, and mitigation will be stipulated in an amendment to the existing Section 106 Agreement and signed by FTA, SHPO, ACHP (if participating), and other consulting parties. FTA anticipates executing an amendment to the Section 106 MOA prior to the Supplemental Final EIS/Amended ROD. The Project will be implemented in accordance with the stipulations in the amended Section 106 Agreement. More information will be included in the Supplemental Final EIS.

4.5 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 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.

This section focuses on the impacts of the Build Alternative as compared to the No-Build Alternative. Anticipated impacts from Project alignment and design options evaluated are also included in Appendix A-4 and include expanded discussion on regulatory context, methodology, study area, and affected environment.

4.5.1 Regulatory Context and Methodology

This section contains the definitions and assessment methodology used to determine the visual/aesthetic impacts of the Project. 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*,[6] 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* included in Appendix A-4

Table 4-14 describes the visual and aesthetic terminology definitions applied in the process of identifying and analyzing the visual/aesthetic features. Additional details about visual character and quality, viewer groups, levels of visual impact, and key viewpoints (KVPs) are presented in the *Visual Quality Technical Report* in Appendix A-4. The following sections outline the considerations related to the assessment of the Project impacts to visual quality and aesthetics.

Table 4-14 Visual/Aesthetics Terminology and Definitions

Term	Definition
Affected population	The viewers who occupy land adjacent to the Project, in either the long or short term. These people live, work, shop, recreate, dine, and/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 is a homeowner with property along the transitway. An example of a short-term viewer is a runner using a trail in a park adjacent to the transitway.
Build 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.
General visual context	The appearance of the nearby surroundings from the vantage point of a person from ground level (i.e., as one may perceive it from a car, train, bus, bicycle, or on foot). The Project is located in developed urban and suburban areas with a wide range of development patterns.
Key viewpoints (KVP)	Specific locations within a landscape unit from which the Project could 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 could change the views within the landscape unit.
Landscape units	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 generally are 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 and a list of higher-quality visual features within each landscape unit are described in detail in the *Visual Quality Technical Report* presented in Appendix A-4.

Term	Definition
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.
Project visual features	The physical components, including new bridges, that compose the Project environment. These are constructed features that could be placed in the environment as part of the Project.
Viewer groups	The population affected by a project is referred to as viewers. Viewer response comprises 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 viewer's concern for scenic quality and the viewer's 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, type of viewer activity, duration of the view, speed at which the viewer moves, and position of the viewer: • Low viewer sensitivity results when few viewers experience a defined view or when they may be less focused on the view, such as a commuter on the freeway. Low viewer sensitivity is also related to expectations resulting from what viewers are used to seeing along the Project Alignment. • High viewer sensitivity results when many viewers 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, recreational site, or commuter route. For example, recreational and residential viewers tend to have extended viewing periods and may be more concerned about changes in views.
Viewshed	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.
Visual character	The description of physical attributes of the Project area. It is descriptive and nonevaluative, which means 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 features	The components of the natural, built, or project environments that are capable of being seen.
Visual quality	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

4.5.1.1 Character and Quality

The visual impacts of a project are determined by assessing the visual resource changes that could occur because of a 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 a project is implemented. 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 a project environment, viewers evaluate the coherence of 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.

4.5.1.2 Levels of Visual Impact

According to FHWA guidelines, impacts are defined as changes to the environment, measured by the compatibility of the impact, or as 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.

4.5.1.3 Key Viewpoints

The visual impact assessment included evaluating photographic documentation of several key views of the Project Alignment. 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 and are presented in *Visual Quality Technical Report Appendix A: Key View Location Maps and Photographs* in Appendix A-4.

KVPs were selected to provide representative public views from Project components that could be the most visible to the various types of sensitive receptors that may 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.

4.5.1.4 Assessing Visual Change

The visual impacts of the Project were determined by evaluating the changes to existing visual resources that could 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 conceptual engineering plans, visualizations, and features. Visual impact assessment was also based on photographic documentation of several KVPs of the Project.

4.5.2 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 and properties that include residential, commercial, and park properties. 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, a summary of the general visual context, and a list of identified higher-quality and unique visual features, as well as existing conditions of the Project setting, landscape units, and viewshed that are specific to this analysis, are provided the *Visual Quality Technical Report* in Appendix A-4.

4.5.2.1 Project Setting

The character of the area surrounding the Project transitions from a less dense suburban setting at the terminus in the City of Brooklyn Park 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 of the City of Minneapolis. The Project area includes a variety of land use patterns that have been influenced by the transportation-oriented history of the Project area. Low-density land uses have heavily influenced existing development patterns in the Cities of Brooklyn Park and Crystal, which primarily reflect highway-oriented regulations and traditional 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 Minneapolis. Figure 4-9 shows the landscape units and KVPs evaluated in this assessment.

Figure 4-9 Landscape Units and Key Viewpoints in the Visual/Aesthetics Study Area

4.5.3 Environmental Consequences

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

4.5.3.1 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 provides additional information, including impacts to "higher-quality visual features," existing condition photographs, and a sketch of the Build Alternative for each KVP.

No-Build Alternative

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

Build Alternative

According to the FHWA guidelines, 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 could 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 could have adverse impacts to visual quality, significance of impact and potential mitigation measures are identified.

Of the 23 KVPs analyzed, only two would have adverse visual impacts. The majority of views have no, low, or moderate visual change in quality and character despite moderate to high levels of visual sensitivity for the viewer; therefore, the visual impact would be neutral. Table 4-15 through Table 4-17 present the changes to existing visual quality and character for each landscape unit and a summary table of impact at higher-quality visual features and primary Project visual features in each landscape unit. Supporting discussion to these tables and photo simulations for existing and proposed KVPs are presented in the *Visual Quality Technical Report* in Appendix A-4.

Table 4-15 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 to the southwest toward the proposed OMF from Rush Creek Regional Trail)	Moderately high	Character and quality substantially altered	Adverse
KVP 2 (view to the east toward the proposed OMF, from 101st Ave N)	Moderate	Character and quality substantially altered	Adverse
KVP 3 (view to the 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 to the east toward the proposed 73rd Ave/CR 81 bridge from the southwest corner of CR 81 and 73rd Ave N)	Moderate	Character unaltered and quality altered	Neutral
KVP 5 (view to the 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 to the south from Lakeland Ave N toward the proposed 63rd Ave N Station and park-and-ride garage)	Low	Character and quality unaltered	Neutral

Source: Short Elliott Hendrickson, Inc. (SEH) 2023.

Table 4-16 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 to the east from the southwest corner of Bass Lake Rd and CR 81 toward the proposed Bass Lake Rd Station)	High	Character unaltered, quality moderately altered	Neutral
KVP 8 (view to the 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 moderately altered	Neutral
KVP 9 (view to the southeast along CR 81 from Twin Oak Dr toward the proposed Downtown Robbinsdale Station)	Low	Character and quality not substantially altered	Neutral
KVP 10A (view to the north along CR 81 at the northeast corner of 40th Ave N)	Moderate	Character and quality not substantially altered	Neutral
KVP 10B (view to the north along CR 81 at the northeast corner of 40th Ave N)	Moderate	Character and quality not substantially altered	Neutral
KVP 11 (view to the north from Parker Station Flats toward Crystal Lake)	Low	Character and quality not substantially altered	Neutral
KVP 12 (view to the south from Lakeview Terrace Park at CR 81)	Low	Character and quality not substantially altered	Neutral

Source: SEH 2023.

Table 4-17 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 Impact
KVP 13 (view to the south from Victory Memorial Dr toward the Project)	High	Character and quality unaltered	Neutral
KVP 14 (view looking north from Theodore Wirth Pkwy toward the Project)	High	Character and quality unaltered	Neutral
KVP 15 (view looking northwest from the northeast corner of Queen Ave N and W Broadway Ave)	Moderate	Character and quality unaltered	Neutral
KVP 16 (view to the southeast from the corner of Penn Ave N and W Broadway Ave)	Moderate	Character unaltered, quality moderately altered	Neutral
KVP 17 (view looking west from the corner of Logan Ave N and W Broadway Ave toward Capris Theater)	Moderately high	Character unaltered, quality moderately altered	Neutral
KVP 18 (view looking eastward on W Broadway Ave near Morgan Ave N)	High	Character and quality moderately altered	Neutral
KVP 19 (view looking southwest from the northeast corner of 21st Ave N and Irving Ave N)	High	Character and quality moderately altered	Neutral
KVP 20 and KVP 21 (view looking east from Bell Building apartments and sidewalk at 21st Ave N with and without LRT station)	Moderately high	Character and quality not substantially altered	Neutral
KVP 22 (view looking north from the southwest corner of 10th Ave N and Washington Ave N)	Moderate	Character and quality unaltered	Neutral

Designation and Description of View	Level of Visual Sensitivity	Degree of Visual Change in Quality or Character	Level of Impact
KVP 23 (view looking northeast along 10th Ave N and 3rd St N toward Washington Ave)	Moderate	Character unaltered, quality moderately altered	Neutral

Source: SEH 2023.

4.5.3.2 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 could be particularly noticeable to sensitive viewer groups include:

- 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 could be disruptive and highly visible to travelers along CR 81.
- Users of Theodore Wirth Pkwy, Victory Memorial Dr, and Victory Memorial Park could perceive construction activity as undesirable and not consistent with their anticipated recreational experience. Construction of the new at-grade Lowry Ave Station and modifications to the north and southbound CR 81 bridges over Theodore Wirth Pkwy would be visible to Grand Rounds users.
- The proposed bridge over I-94 would be highly visible to travelers along I-94. The visual effect would be similar to views of a bridge construction instead of a typical roadway construction.

Short-term impacts that could 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 Project area.

Temporary construction activities may 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 could be located adjacent to the Project area, where the presence of construction equipment and earthmoving activities are not anticipated to be visually intrusive and could 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, could be perceived as visually disruptive.

Construction impacts may be temporary, and construction staging areas could 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 could be replaced to the extent feasible. Where applicable, mitigation measures would be considered to further reduce the impacts of construction of the Project on sensitive viewer groups in the Project area.

4.5.4 Avoidance, Minimization, and Mitigation Measures

The following sections identify potential mitigation measures that could reduce the impacts of the Project on sensitive viewer groups in the Project area.

4.5.4.1 Operating-Phase (Long-Term) Mitigation Measures

Potential long-term mitigation measures to reduce operation-phase impacts are identified in Table 4-18.

Table 4-18 Potential Long-Term Mitigation Measures

Measure	Description
Minimize operational night lighting	To minimize impacts to sensitive receptors resulting from nighttime operational lighting to the extent feasible and consistent with safety and security, all permanent exterior lighting could be designed and installed so that (1) the lighting does not cause excessive reflected glare and (2) illumination of the Project and its immediate vicinity is minimized.
Visual screening of Project facilities	To the extent feasible, Project facilities could be sited to avoid locations in proximity to residences, parks, or other sensitive visual receptors. Where avoidance is not feasible, or where greater visual or privacy effects are anticipated to result from the introduction of new physical features of the Project, such as where the elevation of the Project Alignment could be higher than adjacent residences, potential efforts could include screening or softening the view using landscaping or walls where adequate space permits. Potential landscape treatments could be selected for consistency with applicable local policies, consideration for agency maintenance budgets and staffing, and compatibility with the character of the parks and surrounding neighborhoods.
Context-sensitive, aesthetic facility design enhancement	Applying contextually sensitive aesthetic design enhancements to the development of Project facilities such as LRT station canopies, railing systems, retaining walls, noise walls, and bridges, as well as to the reconstruction (where required) of Project area streetscapes, could help mitigate visual impacts by allowing facilities to enhance and complement the existing built environment, especially in areas of high use. The 2008 West Broadway Alive Small Area Plan includes references to enhancing the avenue's appearance by integrating culturally relevant public art, wayfinding, plantings, and decorative pedestrian lighting into new public streetscapes and redevelopment projects. The Council may update design guidelines for key structures focusing on bridges and retaining walls. The guidelines are included within the *Visual Quality Guidelines for Key Structures*. [a] The guidelines were developed by the Council, reflecting various coordinating efforts with affected local jurisdictions. The Council has used the guidelines in the advancement of the Project's design and development. The guidelines could help to ensure a consistent aesthetic element for key structures throughout the Project Alignment, while allowing for some flexibility in wall treatments.

[a] Source: SEH 2023.

4.5.4.2 Construction-Phase (Short-Term) Mitigation Measure Options

Potential short-term mitigation options to reduce construction-phase impacts could include:

- Locate staging areas in places where their visibility could be minimal and provide temporary construction screens or barriers to limit views into them from nearby residential areas, community amenities, recreational areas and trails, or other public open spaces from which they could be seen by visually sensitive viewers
- Use construction methods that minimize the need to remove vegetation to accommodate construction activities
- Shield light sources used in nighttime construction to reduce lighting impacts for residential areas
- Restore areas disturbed during construction

4.6 Economic Effects

This section focuses on the effects that the Project may have on the level of economic activity within the region. Economic impacts refer to the broader effects that a project would have on the local and regional economy. 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 of indirect effects because of spending at supplier firms and induced effects from increases in household spending by workers. All these effects may be realized to varying degrees throughout the region and be expressed in terms of increased economic output, earnings, and employment.

4.6.1 Regulatory Context and Methodology

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

4.6.1.1 Regulatory Context

The Major Capital Investment Projects Final Rule (published in the *Federal Register* on Jan. 9, 2013, 78 FR 2031) 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.

4.6.1.2 Methodology

The methodology for the economic impact analysis starts with developing an understanding of the current economic conditions within the study area. Initially, metropolitan area trends can provide a general understanding of economic conditions, but data specific to sub-regions within and adjacent to the Project Alignment may be desirable for a more complete understanding of potential economic impacts. These data may be gathered during the Supplemental Final EIS phase, if warranted.

The foundation of the economic impact analysis will be the anticipated direct capital investments, employment, or other similar factors for the Project. It is also necessary to estimate 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 investments/costs such as engineering for final design and the purchase of properties along the Project Alignment.

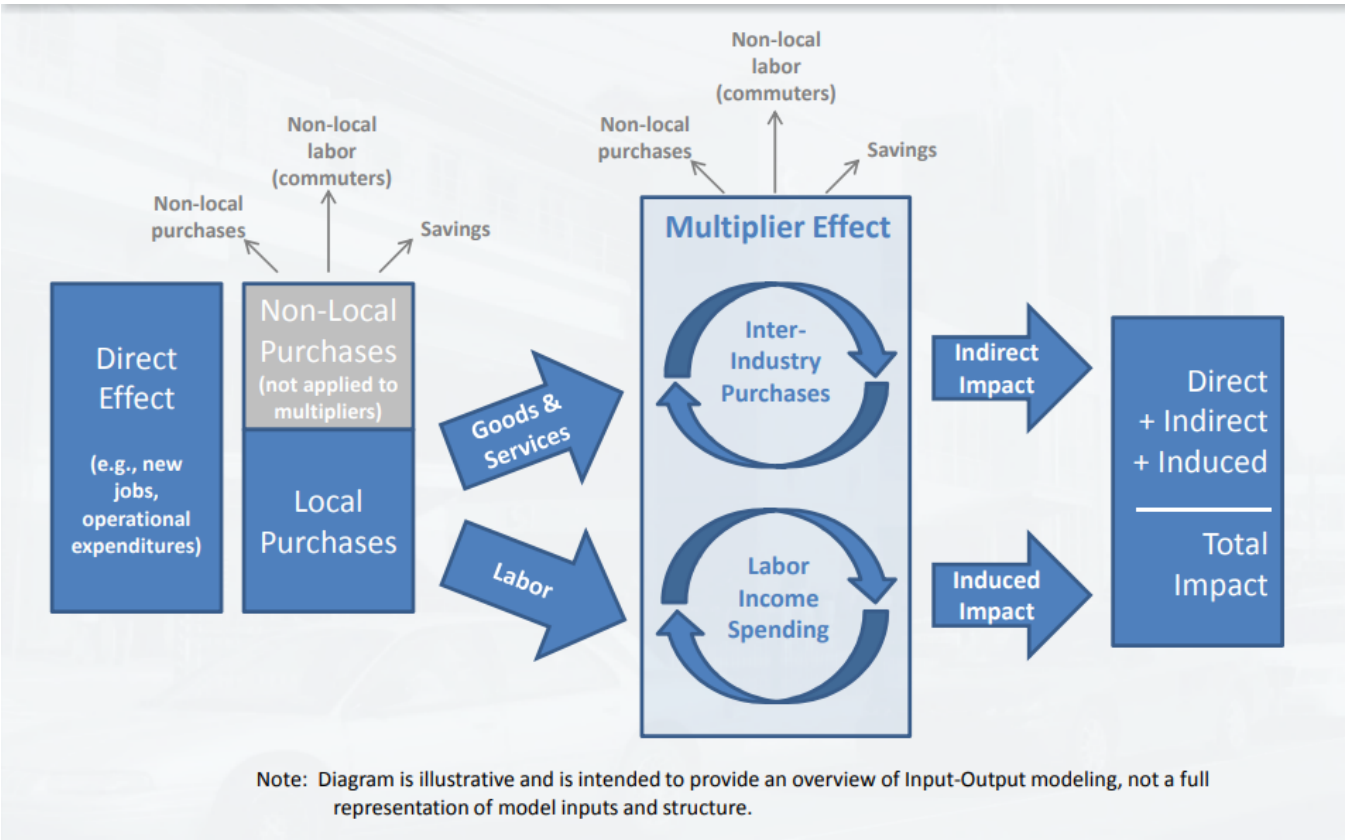
In the long term, there are two categories for estimating economic impacts. First, there are the potential impacts related to the O&M of the transportation facility over time. This would include expenditures for both labor and materials to operate and maintain the facility as well as revenues from its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

The second category of long-term economic impacts comes from the increase in economic activity associated with operation of the transportation facility. These broader economic effects may include increased activity because of the following:

- Increase in the number of visitors (customers) to businesses near LRT stations/stops
- Increase in access to employment (employees) for residents (businesses)
- Increase in desirability of properties, resulting in increases in property values

Using the estimated direct effects as inputs into an “input/output” model, subsequent spending will result in estimates for indirect and induced effects throughout the regional economy. As shown in Figure 4-10, the direct effects, measured in terms of expenditures or jobs, flow through the economy, generating additional spending. 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.

Figure 4-10 Input/Output 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 site).
- ***Indirect effects*** are changes in economic activity resulting from changes in sales from suppliers to directly affected businesses (e.g., manufacturing of construction equipment).
- ***Induced effects*** are changes in economic activity resulting from spending by workers of directly and indirectly affected businesses (e.g., groceries purchased by construction workers).

The economic effects associated with construction, operation, and maintenance expenditures for the Project may be measured using regional multipliers from the U.S. Department of Commerce, Bureau of Economic Analysis, or using an IMPLAN (IMpact for PLANning) model. In any case, multipliers are used to measure the total change or impact (direct plus indirect and induced effects) with estimates presented in terms of output or production, employment, and labor income or earnings.

4.6.2 Study Area and Affected Environment

The study area for assessing the economic development effects related to this Project is the Minneapolis-St. Paul-Bloomington Metropolitan Statistical Area (MSA). MSAs, which are designated by the U.S. 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."[7]

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

4.6.3 Environmental Consequences

This section identifies estimates of the potential economic impacts associated with the No-Build and Build Alternatives and different Project phases.

4.6.3.1 Operating-Phase (Long-Term) Impacts

The Project would create jobs and additional earnings because of O&M expenditures. An estimate of O&M costs is not yet available for the Project; as design progresses, O&M expenditure estimates will be developed. Qualitatively, it is assumed that O&M funding would be procured primarily from local funds and Project-generated funds. Although these expenditures would originate from local sources, they represent spending that would not take place except for the implementation of this service. The expansion of transit service associated with the Project would expand economic activity in the counties of the Minneapolis-St. Paul-Bloomington MSA, thus generating recurring long-term net economic impacts. Other potential sources of federal funding for maintenance exist because grants could be applied for to fund preventive maintenance in later years. If future federal funds are received and applied to maintenance activities, they could generate additional net economic effects on the local and state economies through increased employment and earnings.

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 anticipated positive effects of local O&M spending for the Project will be developed for the Supplemental Final EIS. Increased earnings generated by implementation would result in positive economic impacts to the local economy, both through direct hiring to fill transit jobs and indirectly as these transit workers spend their earnings, creating additional consumer demand and jobs to meet that demand.

Conversely, economic effects from the investment in the construction and operation of a dedicated guideway transit system may include induced development, especially near LRT station areas (see also Chapter 6, Indirect Impacts and Cumulative Effects). The opportunities for new development and redevelopment along the Project Alignment, if allowed to unfold in response to traditional market forces, could cause property values and associated taxes to quickly increase. This may result in current and local prospective property owners being priced out of the market, potentially displacing them from their homes and businesses.

4.6.3.2 Design-/Construction-Phase (Short-Term) Impacts

Design- and construction-phase impacts are defined as temporary impacts that occur during Project development and construction only. Short-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 Project has the potential to cause both positive and negative economic impacts during the design and construction phases.

Short-Term Positive Economic Impacts

Design and construction of the Project represents substantial capital investment in the local economy and would generate a positive economic impact. This spending would increase the employment, earnings, and output for the duration of the construction process. Capital cost estimates and construction values for an analysis will be developed after 30 percent design is achieved. Chapter 10 provides a detailed financial analysis for the Project.

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 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 will be estimated for each year of construction based on the level of capital expenditure and the type of construction activity occurring during each year.

Total capital expenditures are divided into the five major categories described in Table 4-19.

Table 4-19 Capital Expenditure Categories

Category	Definition
General construction	Guideway elements, LRT stations, storage and inspection facilities, sitework, systems, and Project contingencies
Vehicles	Vehicle manufacturing and assembly
Right-of-way	All rights-of-way, land, and existing improvements
Professional services	Real estate services, engineering and design, legal fees, and other agency costs
Finance charges	The hedge costs, capitalized interest that accrues during the construction period, delay reserves, unavailability insurance, and costs of issuance; these costs are paid over the life of the bonds

The regional economic impact of capital expenditures varies substantially by activity and depends on the amount of goods and services procured locally. Unless specific expenditures can be identified as being used to purchase goods and services from outside the economic region, expenditures on construction-related goods and services are assumed to be purchased locally.

Insufficient information is available to quantify the positive effect of construction and professional services on the regional economy. As design advances, cost estimates for these categories will be developed, and the economic input/output model(s) can be applied to understand the magnitude of short-term positive impacts.

Short-Term Negative Economic Impacts

In addition to the positive regional economic impacts of the short-term investment in design and construction of the Project, certain negative economic impacts may occur during construction. The disruption in access to businesses because of construction activities may reduce the number of customers visiting businesses along the Project Alignment. Furthermore, the perception of business accessibility may keep customers away from Project-area businesses. Specifically, access to business may not be directly affected in certain cases or during certain periods of construction, but customers may believe that the Project area is "closed for business" because of construction activity.

For the cities, this effect would be observed in the commercial and retail areas along the Project Alignment.

4.6.4 Tax Revenue Effects

Construction would require the acquisition of some private land and/or improvements for easements, right-of-way, parking, and LRT station facilities. These acquisitions would remove properties from the existing local tax base. The annual tax revenue associated with the loss of properties because of right-of-way purchase, displacement, and relocation will be developed for the Supplemental Final EIS, and the amount of right-of-way to be acquired is subject to change as the Project proceeds into final design.

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.

4.6.5 Broader Economic Impacts

Beyond the economic impacts directly associated with the construction or O&M of the facility, broader economic impacts also occur because of increased economic activity along the entire Project Alignment. These types of impacts tend to provide the greatest long-term economic and socioeconomic impacts. These may include:

- Fiscal impacts for the State, county, and city governments because of increased overall economic activity
- Residential impacts because of increased access for workers to employment opportunities and housing opportunities (accessibility, affordability, and quality)
- Impacts to local businesses because of increased access to workers and customers

4.6.6 Avoidance, Minimization, and Mitigation Measures

The following sections identify potential mitigation measures that could reduce the negative economic impacts of the Project.

4.6.6.1 Operating-Phase (Long-Term) Mitigation Measures

Hennepin County, with the support of the Council, initiated a process to directly address the displacement concerns associated with property value increases and the economic effects of development speculation along the Project Alignment. This anti-displacement effort involves close coordination with key Project stakeholders and members of the public to understand the concerns related to displacement caused by the Project and identify strategies to avoid or mitigate the potential for displacement. These strategies include potential policy changes, redirection of area resources, and shifting the narrative around affected neighborhoods. A copy of the *Blue Line Extension Anti-Displacement Recommendations* report is provided at yourbluelineext.org. Project commitments related to anti-displacement will be considered in the Supplemental Final EIS.

4.6.6.2 Design/Construction Phase (Short-Term) Mitigation Measures

A series of tools are available to offset the potential impacts to businesses during construction; several of these tools have been implemented on other LRT projects in the region and would be considered in the Supplemental Final EIS. These tools include:

- ***Construction contract measures*** include requirements for maintaining business access during construction and potentially incentivizing construction contractors based on business owner feedback.
- ***Project communications measures*** include providing community outreach coordinators to act as liaisons between the business community and contractors, and development of a specific construction communication plan that could include "open for business" signage or similar tools to communicate the status of Project area businesses to customers and the public.

- ***Parking assistance measures*** could include temporary and/or permanent improvements to off-street parking resources adjacent to or near Project area businesses and potentially other temporary and/or permanent parking improvements in the Project area.
- ***Business assistance programs*** could include no-interest, forgivable loans to businesses that experience and document construction-related loss of sales because of construction; investment funds to facilitate disadvantaged business growth opportunities to reinforce the importance of locally and BIPOC-owned businesses to the Project area; and marketing and consulting support for local businesses during construction. Financial assistance programs may be provided outside the Project (not administered by the Council).

4.7 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.

4.7.1 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 Metro Transit's Safety & Security Action Plan (SSAP) for the Project.

4.7.1.1 Policy and Planning Background

In 2018, FTA published 49 CFR Part 673, the Agency Safety Plan (ASP) rule. This rule requires that all modes not overseen by another regulatory agency (e.g., Federal Railroad Administration) must be governed by an ASP. Metro Transit applies a mode-specific ASP to comply with 49 CFR Part 673. 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[8] 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,[9] 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 with publication of quarterly SSAP updates, sharing incident and crime statistics, requesting feedback via online surveys, and through public visioning sessions facilitated by Metro Transit Customer Relations. Over the course of 2023, Metro Transit data show a decrease in crimes and customer service complaints and an increase in customer satisfaction related to safety.

Highlights from the SSAP actions and Metro Transit's efforts to make transit safer and more welcoming as of fall 2023 include:

- Enhanced efforts have been made to hire and retain police officers and community service officers (CSOs). Metro Transit is budgeted for 171 full-time police officers, 80 part-time police officers, and 70 CSOs. The Metro Transit Police Department has re-established its recruitment team, has created a more efficient hiring process, and is working with community colleges to bring more students into CSO positions. Quarterly reports for the SSAP are publicly available on Metro Transit's website.[10]
- Metro Transit is building a team of non-police personnel to monitor fare compliance and assist riders. Until recently, only police officers could inspect fares and issue misdemeanor citations for fare nonpayment. Now, that responsibility is being shifted to personnel who will not only check fares but also help people navigate the system and be trained to handle issues that can be resolved without police intervention. This shift will allow police officers to focus on the most serious issues while allowing Metro Transit to increase its official presence, something it knows riders appreciate.
- Metro Transit has expanded community partnerships with 10 community-based organizations engaged to begin regularly working on Metro Transit LRVs and LRT stations as part of the Transit Service Intervention project. These organizations will work to address issues such as unsheltered homelessness and substance use disorders that can be present on transit.
- Supplemental security is present at transit facilities with the most calls for service resulting in reported crimes declining at locations with security presence.
- There is a greater use of real-time cameras, including on buses and at facilities by the Real Time Information Center. This center is staffed by a team of nonsworn police personnel who remotely monitor cameras on trains and LRT/BRT stations. Cameras are monitored from 6 to 2 a.m., 7 days per week.
- Expanded employee training on mental health, de-escalation, and personal safety is provided to operators and staff, including communication building with officers and frontline staff to foster understanding.
- A revised Code of Conduct will be brought to the Council for endorsement to promote clearer and more prominent communication about respectful behavior on transit. The updated Code of Conduct will help set the expectation that riders behave respectfully while riding and describe accountability.

Other applicable codes, standards, and guidance are identified in Table 4-20.

Table 4-20 Applicable Safety and Security Codes, Standards, and Guidance

Applicable Code, Standard, or Guidance
National Fire Protection Association (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 International Organization for Standardization (ISO) standards
American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM) Standards
49 CFR Parts 214, 219, 220, 222, 225, 228, 233, 234, 235, and 236 and 49 CFR § 229.125
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,[11] Station and Support Facility Design Guidelines User Guide Supplement, [12] and Metro LRT Design Criteria, [13] which provide technical guidance for the design of transitway facilities
Metro Transit's SSAP for the Project, which includes safety and security guidance, planning, and measurable actions for the operating system

Applicable Code, Standard, or Guidance
FTA's ASP (49 CFR Part 673)

4.7.1.2 Definition of Terms

Safety and security are defined within the context of this Supplemental Draft EIS as follows:[14]

- ***Safety:*** freedom from harm resulting from unintentional acts or circumstances
- ***Security:*** 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."

4.7.2 Study Area and Affected Environment

The study area for the safety and security evaluation includes planned facilities within the LOD for the Project, as illustrated in the conceptual engineering drawings (see Appendix A–E). This section describes the 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.

4.7.2.1 Emergency Service Providers

Public safety and security in the study area is provided by the police departments, fire departments, and emergency response units of the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. Additionally, community organizations in the study area provide personal safety trainings, violence prevention, and restorative justice work that relates to community safety and security. Emergency medical services are located in each Project city, including North Memorial Hospital located directly adjacent to the proposed Lowry Ave Station. Continued access by emergency service providers would be a priority of the Project during construction and operation of the Project.

Through the municipal police and fire departments, each community in the study area has developed an Emergency Operations Plan for all types of emergencies. Metro Transit Police currently provide roving security for the bus transit facilities in the Metro Transit service area (that is, the area with existing Metro Transit bus service). Transit police routinely patrol bus routes, bus stops, and transit centers. Transit police officers currently travel along the existing METRO Blue and Green Lines to provide security at LRT stations and on LRVs and would provide similar services for the Project.

4.7.2.2 Freight Railroads

There are currently two active freight railways in the study area: BNSF and CPKC (for more information about existing freight rail operations, see Section 3.6). In the City of Robbinsdale, N 42nd Ave crosses the BNSF railway three blocks west of the Project Alignment, and the study area includes the crossing for evaluation of a potential quiet zone. Table 4-21 lists the existing railroad crossings in the study area.

Table 4-21 Railroad Crossings (Existing Conditions)

Location	Crossing Type	Railway	Crossing Control	Type of Crossing	Project City
73rd Ave N/CR 81/West Broadway	Freight rail	BNSF	Four quadrant gates, median	At-grade	Brooklyn Park
63rd Ave N park-and-ride location	Freight rail	BNSF		Elevated pedestrian crossing	Brooklyn Park
63rd Ave N/CR 81	Freight rail	BNSF	Four quadrant gates, median	At-grade	Brooklyn Park
CR 81/South of 63rd Ave N	Freight rail	CPKC		On structure over railway	Crystal
Bass Lake Rd/CR 81	Freight rail	BNSF	Four quadrant gates, median	At-grade	Crystal
CR 81/42nd Ave N	Freight rail	BNSF	Four quadrant gates, median	At-grade	Robbinsdale

In March 2016, FTA issued a final rule to establish an enhanced rail transit State Safety Oversight (SSO) program for fixed guideway public transportation systems not regulated by FRA (49 CFR Part 674). This final rule replaces existing regulations and significantly strengthens State Safety Oversight Agency (SSOA) authority to prevent and mitigate accidents and incidents on rail transit systems to help ensure the safety of riders and workers. Under this final rule, each SSOA is required to have the enforcement authority, legal independence, and financial and human resources for overseeing the rail transit agencies within their jurisdiction. In addition, SSOAs must train and certify personnel responsible for performing safety oversight activities and will continue to conduct triennial audits of the safety programs established by each rail transit system. States have 3 years from the effective date of the final rule to implement an approved SSO program. All Metro Transit LRT lines fall under the jurisdiction of the Minnesota SSOA, which is part of the Minnesota Department of Public Safety and is governed by 49 CFR Part 659.

4.7.3 Environmental Consequences

This section identifies the operating-phase (long-term) and construction-phase (short-term) impacts to safety and security from the Project. 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.

4.7.3.1 Operating-Phase (Long-Term) Impacts

No-Build Alternative

The No-Build Alternative would have no long-term direct, long-term indirect, or short-term effects on safety and security.

Build Alternative

Potential long-term impacts of the Project could include the following:

- ***Impacts to freight railroads:*** As described in Section 3.6, long-term impacts to freight rail resources would be minimal. The Project would include a pedestrian bridge over the BNSF tracks near 63rd Ave N; a bridge crossing over the CPKC tracks with CR 81; and construction of at-grade crossings at W Broadway Ave, 63rd Ave N, and Bass Lake Rd. These crossings would require modifications of the existing street signal system, which in turn would require coordination with BNSF's railroad signal pre-emption. The bridge crossing with

CR 81 would require coordination, design reviews, permits, and agreements with CPKC railway but would not result in any long-term impacts because there is an existing bridge in this location.

- ***Impacts to emergency vehicle response times:*** In locations where there would be at-grade light-rail crossings of roads, emergency response times could increase because of delay to emergency vehicles while LRVs are in the crossing. These delays could increase fire, emergency medical services, and police response times on routes using the crossings. Potential measures that could pre-empt or alleviate these impacts are identified in Section 4.7.4.
- ***Impacts to pedestrian safety:*** As discussed in Section 3.2, the Project would provide several long-term improvements to pedestrian safety, comfort, and accessibility. LRT station platforms would be pedestrian accessible from existing sidewalks, and the Project would propose to modify or add new sidewalks, plazas, and crossings of roadways.
- ***Impacts to bicycle safety:*** As discussed in Section 3.3, the Project would provide several long-term improvements to cyclist safety, comfort, and accessibility. Segments would either retain the same level of BLTS or be improved. Segments along N 21st Ave, N 10th St, and N 7th St in the City of Minneapolis show the largest improvements in BLTS results.
- ***Personal safety and security:*** Many factors influence public perception of personal safety and security in transit that directly influences the experience of all who would interact with the Project. The Council views safety and security concerns, including crime, untreated mental illness, chemical addiction, and unsheltered homelessness, as direct reflections of larger social issues currently facing the region. A safe and secure transit system requires region-wide commitments to addressing the root causes of these challenges and should involve the application of an anti-racist, equity-focused lens to conversations around safety, security, and policing. Significant improvements are needed to provide effective interventions to protect the health and safety of riders and employees and to provide social service and health care services for those who need support and treatment.

4.7.3.2 Construction-Phase (Short-Term) Impacts

Construction activities would result in temporary increased congestion along adjacent roads because of temporary lane and road closures, shifts in roadway alignments, and detours. This temporary increase in roadway congestion could affect access and response times for emergency service providers. However, provisions would be made to maintain required access during established periods or to keep one lane of traffic open on main arterials. Increased delay for emergency response vehicles during construction would be minimized through coordination with the affected emergency service providers.

Both federal Occupational Safety and Health Administration (OSHA) and Minnesota OSHA standards for safety of construction site personnel would be maintained to minimize and/or avoid injuries to construction workers. As appropriate, access to construction sites might be limited by fencing and security gates where practicable to prevent inadvertent access by those without access clearance. Specific construction safety and security management activities would be identified in the Project's safety plan, which would be incorporated into construction contract specifications.

4.7.4 Avoidance, Minimization, and Mitigation Measures

This section describes potential mitigation options to reduce long- and short-term safety and security impacts from the Project. The following measures would be implemented, and more detail will be provided in the Supplemental Final EIS:

- Avoidance of safety issues at LRT stations related to the Project would be achieved with guidance from the Project's SSAP[15] and through implementation of the Metro LRT Design Criteria.[16] The purpose of the SSAP is to consider safety and security when designing, constructing, and operating the Project.
- The Council's Operations Emergency Management Plan (OEMP) for light rail was developed to help identify, respond to, and resolve emergency situations in an efficient, controlled, and coordinated manner.

- The Council maintains an emergency-preparedness exercise plan, which would be carried out by the Fire Life Safety and Security Committee (FLSSC).
- LRT 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.

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[1] Legal action regarding the *Minneapolis 2040 Plan* has resulted in a ruling requiring the City of Minneapolis to revert to its previous comprehensive plan. The City of Minneapolis appealed this ruling and following an appeals court ruling on Monday May 13, 2024 the City of Minneapolis can resume work under its 2040 Comprehensive Plan.
[2] Hennepin County: Bottineau Community Works. Accessed March 12, 2023.
[3] Hennepin County: Transit Oriented Development. Accessed March 12, 2023.
[4] HCRRA https://www.hennepin.us/your-government/leadership/rra.
[5] 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 amenities that include important community and cultural as priorities for protection against potential project impacts.
[6] 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.
[7] U.S. Census Bureau. 2021. About [the Office of Management and Budget]. https://www.census.gov/programs-surveys/metro-micro/about.html.
[8] 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.
[9] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[10] Metro Transit. 2024. Safety & Security Action Plan Quarter 4 2023 Progress Report. Accessed at https://www.metrotransit.org/public-safety.
[11] Metropolitan Council. 2016. Regional Transitway Guidelines. Available at https://metrocouncil.org/Transportation/System/Transit/Studies/Regional-Transitway-Guidelines/Regional-Transitway-Guidelines-Chapters.aspx
[12] 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
[13] Metro Light Rail Transit Design Criteria. 2015.
[14] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[15] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[16] Metropolitan Council. 2016. Regional Transitway Guidelines. Available at https://metrocouncil.org/Transportation/System/Transit/Studies/Regional-Transitway-Guidelines/Regional-Transitway-Guidelines-Chapters.aspx