4 Community and Social Analysis

Table 4-1 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 Amenities, Character, and Cohesion	Yes, construction period impacts to be mitigated through a Construction Mitigation Plan, Construction Communication Plan, Construction Phasing Plan, and restoration and enhancement of parks.	Yes, adverse effect on community character at certain locations along the Project corridor due to noise impacts and displacement of community facilities.	Yes, mitigation measures include collaborating with community members on culturally specific designs including cultural placekeeping for each City along the Project corridor through design input; additional connectivity investments; and other enhancements that would offset the impacts to community character. Continued outreach will identify specific public realm improvements during final design.	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, displacements, resulting in the following relocations: City of Brooklyn Park ■ 2 commercial City of Crystal ■ 3 commercial City of Robbinsdale ■ 2 commercial ■ 1 institutional City of Minneapolis ■ 14 residential	Loss of private residential property will be mitigated by payment of fair-market compensation and provision of relocation assistance in accordance with the Uniform Act.	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
		■ 11 commercial ■ 2 institutional ■ 1 undeveloped [a] There are 85 full acquisitions, 653 partial acquisitions, 215.3 acres of temporary easements and 215.3 acres of permanent easements to be mitigated in accordance with the Uniform Act.		
Cultural Resources	Yes, adverse effect on two historic properties and four historic districts to be mitigated through measures identified in Section 106 Memorandum of Agreement (MOA).	Yes, adverse effect on two historic properties (one building and one district) to be mitigated through measures identified in the Amended Section 106 MOA.	Yes, measures to resolve adverse effects will be documented in an amendment to the MOA.	4.4
Visual/ Aesthetics	Yes, impacts to high-quality visual features because of 2016 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 has been 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

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
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, design, Construction Mitigation Plan, coordination with emergency service providers.	No	No	4.7

[a] The 2020 generalized land use data from the Metropolitan Council indicates that the property is classified as undeveloped. However, the parcel contains a residential house, suggesting that this may be an error in the data.

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 Final 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 impacts that would result from the implementation of the Project. This section also describes the process of consultation with Section 106 consulting parties and the development of an amendment to the Section 106 MOA.	Architecture/history Area of Potential Effects (APE): ■ Within the LOD and within 200 feet of the centerline of the Project Alignment not blocked from view by vegetation, topography, intervening development, or infrastructure ■ 500-foot radius around the LRT stations ■ 750-foot radius around the OMF perimeter ■ 200-foot radius around new bridges/structures; or modification of existing bridges/structures with a profile less than 12 feet above the existing grade	APE as agreed upon by the Minnesota State Historic Preservation Office (SHPO).

Section/Topic	Resource Evaluated	Study Area Definition	Basis for Study Area
		■ 500-foot radius around new bridges/structures or modification of existing bridges/structures with a profile more than 12 feet above the existing grade ■ Within the LOD for modification to existing streets and highways within existing ROW, pedestrian (ADA) ramps and enhancements, sidewalks and trails, utilities, and borrow/fill or floodplain/stormwater/wetland mitigation areas ■ First tier of adjacent properties for new or relocated/realigned streets, highways, and access roads, or new or modified surface parking facilities Archaeological APE: Within the LOD.	
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, Robbinsdale, and Hennepin County 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.gov/185/Comprehensive-Plan-2040
Minneapolis	https://minneapolis2040.com/media/1488/pdf_minneapolis2040.pdf https://www.minneapolisparks.org/wp-content/uploads/2021/11/MPLS-Comprehensive-Plan-Digital-11022021-1.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, Robbinsdale, Minneapolis, and Hennepin County 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 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, accessibility, and reducing economic disparities. Additionally, *Minneapolis 2040* indicates that the City of Minneapolis will continue to play an active role in the development of transitway projects within and across borders, including this Project. *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.
- ***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 (42 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, Minnesota Department of Education for public school locations[5], and enriched by community outreach.[6] Information about community access was summarized from descriptions of

transit, pedestrian, bicycle, and vehicular traffic conditions in Chapter 3. The Council obtained information about community character from comprehensive plans for the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park and from the MPRB's Parks for All Comprehensive Plan. 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 Final 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 and Appendix A-8 of this Supplemental Final EIS.

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.

The study area has a high concentration of people who rely on transit. Transit dependent populations include those who are unable to drive due to economic, social, or physical limitations. In the Twin Cities region, zero-vehicle households make up more than a third of transit riders.[7]

Low-income residents are present throughout the study area and in all cities along it. Approximately one third of the study area population is low-income with 14 percent living below the poverty line (see Table 4-5).

Table 4-5 Study Area Socioeconomic Data Compared to Reference Geographies Conditions

Geography	Total Population[a]	% HH Below Poverty[b]	2022 % Low Income[b]	% Residents Aged 15-19[b]	% Residents Aged 65+[b]	% HH with No Vehicles[b]	% HH w/1+ Persons w/Disability[b]
Study Area	63,361	14.1%	33.6%	6.0%	11.8%	13.9%	23.7%
Reference Geographies							
City of Brooklyn Park	86,478	9.8%	25.1%	6.4%	12.0%	7.8%	20.1%
City of Crystal	23,330	6.8%	17.9%	5.6%	14.3%	5.3%	19.8%
City of Robbinsdale	14,646	13.2%	26.6%	3.0%	18.0%	12.5%	27.5%
City of Minneapolis	429,954	15.1%	33.3%	6.5%	10.7%	15.3%	19.8%
Hennepin County	1,281,565	8.4%	21.3%	5.9%	14.8%	8.9%	19.5%
Twin Cities metropolitan area	3,163,104	9.7%	19.9%	6.4%	14.7%	7.3%	20.6%
Minnesota	5,706,494	9.4%	22.4%	6.6%	16.5%	6.6%	22.3%

Sources: [a] 2020 Decennial Census; [b] U.S. Census ACS 5-Year Estimate (2018–2022); Esri Demographics (2022).
Note: Low-income is defined as individuals whose income is equal to or less than 200 percent of the federal poverty level for the year 2022.

Through public engagement, community members have voiced concerns about the threat of indirect displacement because of new development pressure with a new transit investment. Approximately 69 percent of the households in the study area are considered high housing cost–burdened, meaning that they spend 30 percent or more of their household income on housing as defined by the U.S. Census.[8] The study area saw a significant rise in both median home values and rent between 2018 and 2022. Home values increased by 51.6 percent, a higher percentage increase compared to the cities, region, and State, while rent rose by 30.6 percent.[9]

The sections below describe the community amenities and the characteristics of the communities in the study area by city.

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 comprises designated neighborhoods adjacent to the Project Alignment: Oak Grove, Tessman, Commerce, Candlewood, Shingle Creek, College Park, Hartkopf, Northland, Lakeland Park, and Sunny Lane. High cost-burdened households are present along the Project Alignment and concentrated around the Oak Grove Pkwy Station and the 63rd Ave N Station.

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 the 2016 Final EIS (34,500 jobs were projected by 2020 and an estimated 29,761 jobs were estimated in 2020 in this Supplemental Final EIS). 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.

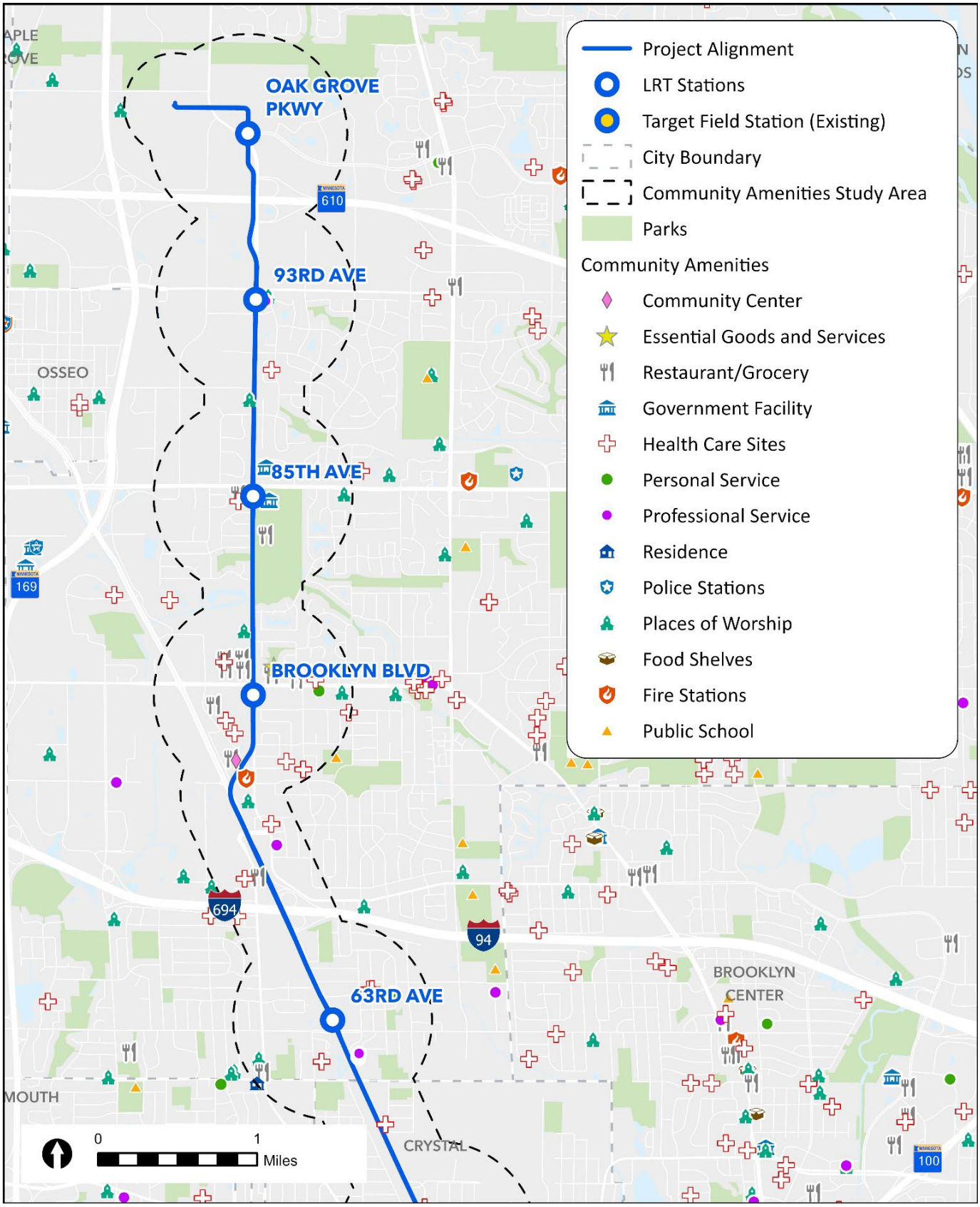
Community amenities located along the City of Brooklyn Park portion of the Project Alignment include assisted care, professional services, pharmacies, restaurants, and places of worship. North Hennepin Community College and the City of Brooklyn Park branch of the Hennepin County Library are located at 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 4-6.

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

Facility Type	Count
Police Station	0
Fire Station	1
School	1
Place of worship	7
Healthcare	15
Government service	2
Essential goods and services[a]	16
Personal and professional services	11
Community center	1
Parks	14

[a] Essential goods and services include locations that provide food access (restaurant/grocery/food shelf), 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 the 2016 Final EIS (4,640 jobs were projected by 2020 and an estimated 3,466 jobs were estimated in 2020 in this Supplemental Final EIS). 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.

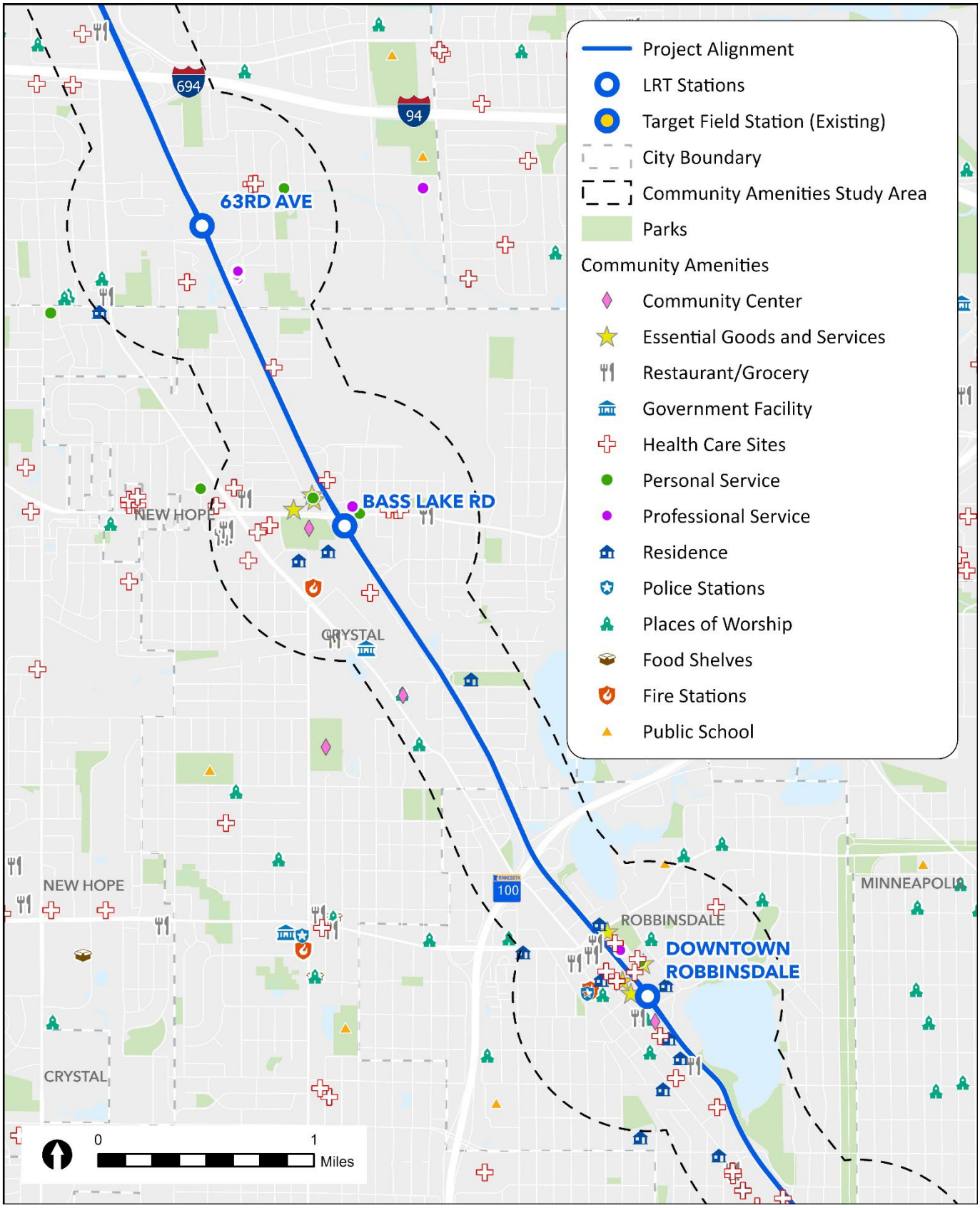
Community amenities in the City of Crystal include restaurants, medical facilities, pharmacies, professional services, places of worship, and assisted care. Becker Park is adjacent to the proposed Bass Lake Rd Station and completed new park improvements in 2020. The list of identified community amenities 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 4-7.

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

Facility Type	Count
Police Station	0
Fire Station	1
School	0
Place of worship	2
Healthcare	10
Government service	1
Essential goods and services[a]	10
Personal and professional services	2
Community center	2
Parks	7

[a] Essential goods and services include locations that provide food access (restaurant/grocery/food shelf), 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. High cost-burdened households are present along the Project Alignment and concentrated around the Downtown Robbinsdale Station. 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 the 2016 Final EIS (7,300 jobs were projected by 2020 and an estimated 6,402 jobs were estimated in 2020 in this Supplemental Final EIS). 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.

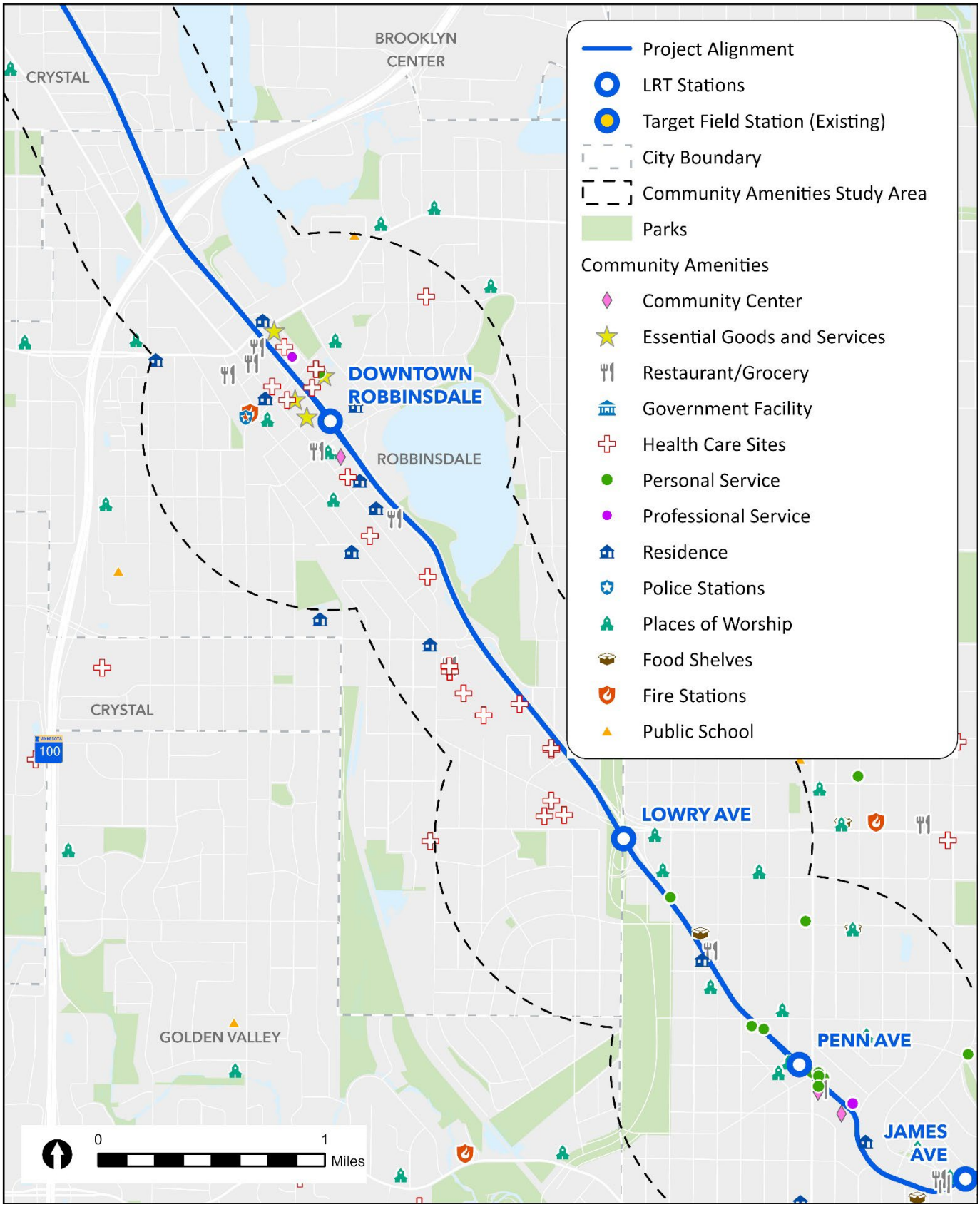
Community amenities located along the City of Robbinsdale portion of the Project Alignment include restaurants, medical facilities, pharmacies, groceries, food shelves, and places of worship. Victory Memorial Dr intersects with the Project Alignment near the Lowry Ave Station and passes near other park resources, including Lakeview Terrace Park and the Twin Lakes Boat Launch. Identified community amenities are mapped in Figure 4-3, 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 Robbinsdale

Facility Type	Count
Police Station	1
Fire Station	1
School	1
Place of worship	5
Healthcare	19
Government service	1
Essential goods and services	10
Personal and professional services[a]	2
Community center	1
Parks	11

[a] Essential goods and services include locations that provide food access (restaurant/grocery/food shelf), 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. High cost-burdened households are present along most of the Project Alignment and concentrated around the Penn Ave, James Ave, and Lyndale Ave Stations. 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 and act as barriers in communities because they limit access to connectivity between neighborhoods for pedestrians and bicyclists. Other key connections include Washington Ave N, Plymouth Ave N, 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 Final EIS (424,700 residents were projected by 2020 and an estimated 429,956 residents were estimated in 2020 in this Supplemental Final EIS). Employment has lagged behind projections published in the 2016 Final EIS (324,000 jobs were projected by 2020 and an estimated 294,467 jobs were estimated in 2020 in this Supplemental Final EIS). 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.

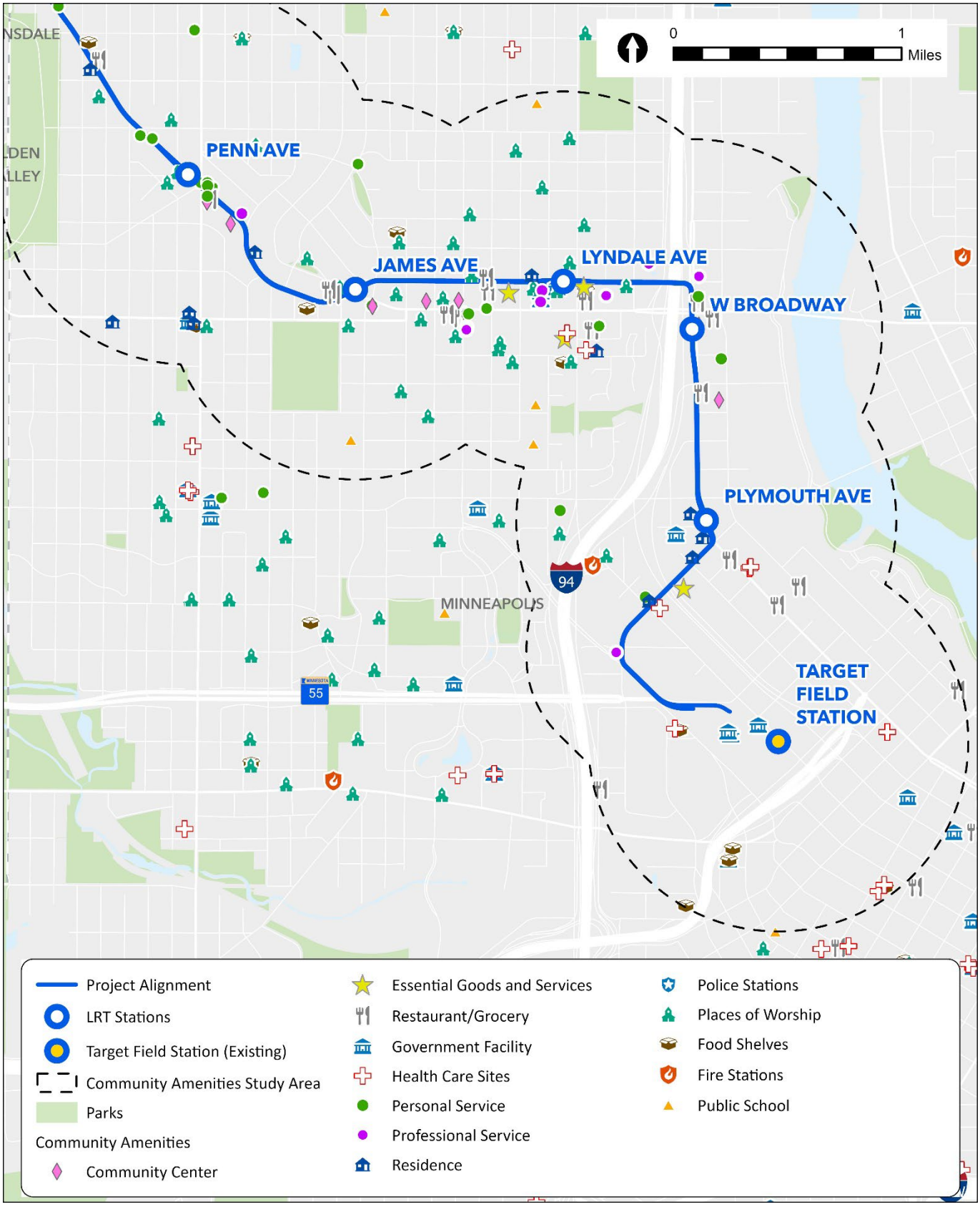
Community amenities located within the study area include restaurants, medical facilities, fire stations, food shelves, and places of worship. Park and trail facilities are also scattered throughout the study area, including basketball courts, picnic areas, and walking paths. Multiuse trails (Wirth/Victory Memorial Pkwy Regional Trail 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 4-9.

Table 4-9 Community Amenities in the Study Area: City of Minneapolis

Police Station	0
Fire Station	1
Police Station	0
School	5
Place of worship	39
Healthcare	9
Government service	9
Essential goods and services[a]	34
Personal and professional services	25
Community center	7
Parks	124

[a] Essential goods and services include locations that provide food access (restaurant/grocery/food shelf), 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, and 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. Corridor-wide effects of the Project are described below.

Corridor-wide Effects

The Project would greatly improve mobility and access in the highly traveled northwest area of the Twin Cities Metropolitan Area, including communities with high numbers of households that rely on transit to get where they need to go every day. The Project would provide a one-seat ride to the Minneapolis-St. Paul International Airport; the Mall of America; and serve the communities of Golden Valley, New Hope, Brooklyn Center, Maple Grove, Osseo, Champlin, and Dayton while passing through and directly serving the Cities of Minneapolis, Robbinsdale, Crystal, and Brooklyn Park. While integrating with other existing and planned transitways, the Project and its 13 LRT stations would connect people and affordable housing to jobs, education, healthcare, culture, and recreation.

Communities in the Project area endure health burdens related to legacy projects such as highway expansion and the historic locating of polluting industries. The Project would reduce reliance on SOVs and associated air emissions (see Chapter 5, Section 5.10).

There is the potential for an increase in property values in the areas surrounding the proposed LRT stations because LRT can increase the convenience and desirability of nearby residential, commercial, and office properties. LRT can also contribute to existing market forces that can increase the potential for TOD. Development is regulated by cities and predominantly driven by regional and local economic conditions and allowable land uses as defined in zoning codes and local comprehensive plans. However, LRT lines can advance the timing and increase the intensity of development in areas near proposed stations within the limits of the land use regulations.

The effect on property values within proximity of high-capacity transit stations has been studied for different geographic areas and types of transit systems. While complex factors influence property values, including local real estate market conditions and neighborhood and building stock conditions, a positive correlation between transit and property value rise has been shown. A study prepared by the Center for Transit Oriented Development for FTA found that increases in property values near transit were most dramatic for office and retail spaces, ranging from a few percent to more than 150 percent. For residential properties, single-family dwellings had a property value increase range of 2 percent to 32 percent, condominiums from 2 to 18 percent, and apartments from 0 percent to 45 percent.[10]

Since community cohesion could potentially be affected by accelerated TOD and property value increase that result in future displacement of residents, Hennepin County and partners developed a Coordinated Action Plan for Anti-Displacement for the Project area, published in August 2024. The plan recognizes that no one agency or entity can deliver a program that counteracts displacement. Building on the recommendations of the Anti-Displacement Working Group (ADWG) published in May 2023,[11] the plan intends to guide the efforts to prevent displacement and maximize the benefits of the Project for current Project corridor residents and businesses. The plan addresses preservation and development of affordable housing, legal and financial services for residential tenants and businesses, workforce development programs, community investment, and other strategies.

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 five single-family residential parcels in the City of Brooklyn Park would experience moderate noise impacts (see Chapter 5, Section 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. The Project would acquire land from the North Hennepin Community College parking lot adjacent to W Broadway, which would require mitigation measures for the off-street parking loss. Thirteen properties identified as community amenities in Figure 4-2 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.

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 not result in noise impacts in the City of Crystal. 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 has been conducted to address these impacts and resulting mitigation measures are identified in this 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 or relocations of community amenities identified in Figure 4-2. Two properties identified as community amenities, the Crystal Medical Building and the Crystal Vision Clinic, would have minor impacts because of minimal acquisition needs, such as a partial acquisition of a small strip of land.

City of Robbinsdale

Impacts to community character in the City of Robbinsdale would be related primarily to the Lowry Ave 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.

The Project would not result in noise impacts in the City of Robbinsdale. 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, which is identified as a community amenity. Properties identified as community amenities in Figure 4-3 would have minor permanent impacts, including the City of Robbinsdale Department of Motor Vehicles, Hy-Vee 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 N 21st Ave bridge across I-94, and the closure of N 21st Ave to vehicular traffic with a bicycle facility located between I-94 and James Ave. Noise impacts include moderate noise impacts to 9 multifamily and 11 single-family residential properties and severe impacts to four multifamily and eight single-family residential properties (see Section 5.6). A total of 30 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 the Wirth/Victory Memorial Pkwy Regional Trail, roadway reconfigurations along W Broadway Ave and N 21st Ave (beginning north of the James Ave Station and continuing to the Lyndale Ave Station), and impacts made along 10th Ave N. The addition of a gate at this crossing is a safety feature that was requested by the community (see Section 4.5) but it will impact community cohesion due to the gate increasing average crossing times at this intersection.

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). Improved pedestrian crossings at Thomas Ave N, Ilion Ave N, Knox Ave N, and Royalston Ave N would also enhance community character. The addition of a bridge across I-94 at N 21st Ave 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 N 21st Ave 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, disconnection due to changes in access or alterations to roadways/trails/sidewalk, and indirect displacement pressures along W Broadway Ave from I-94 to Irving Ave N would have an adverse impact on community character. Mitigation measures are presented in Section 4.2.4.

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. LRT service from Target Field Station in Downtown Minneapolis through North Minneapolis would create new community connections throughout North

Minneapolis. Vehicular traffic eliminated along N 21st Ave between Irving Ave N and 4th St N would result in traffic moving to W Broadway Ave and access impacts along N 21st Ave. 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. Community amenities identified in Figure 4-4 would have minor permanent impacts to accommodate design elements such as sidewalk geometry or reconstruction of existing facilities such as parking lots, including the Salvation Army, Harold Mezile North Community YMCA, and a small urban farm at N 21st Ave and Dupont Ave. The Project would also require the acquisition of seven buildings that were identified as community amenities, resulting in the relocations of J&J Furniture store, Morning Star Assembly of God, the Five Points Building (which houses the KMOJ radio station and The Zen Bin), Olympic Café, Mini Pac Grill, Faith Tabernacle Gospel Fellowship International, and the Auto Radiator Repair Building.

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, businesses, 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, and disruptions to businesses.

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 implemented 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, community character impacts, visual quality, and noise, are discussed in other sections of this Supplemental Final 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). To offset the adverse effects not addressed in those sections, the Council would implement the following:

- Establishment of a Community Investment Fund that would be dispersed through one or multiple community-based organizations on a case-by-case basis to offset adverse impacts related to direct and indirect displacement and community cohesion. Topics under consideration for investment include affordable housing, rental assistance programs, and home repair and weatherization.
- Construction of replacement parking around Penn Ave/W Broadway Ave to serve the surrounding parking-constrained commercial corridor.
- Administration of a Workforce Development Program including stipulation of local hiring preference in construction contracts. Conduct workforce development opportunities, such as trainings, mentorships, apprenticeships, scholarships, career fairs, information sessions, and speaker series.

- Establishment of Cultural Placekeeping Design Groups to incorporate existing cultural identities at stations, public infrastructure, and streetscapes.
- Concentrate public realm improvements such as lighting, seating, public art, and pedestrian and bicycle amenities in areas of community character impacts.

4.2.4.2 Construction-Phase (Short-Term) Mitigation Measures

Potential mitigation options for short-term construction impacts would 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. Best management practices (BMPs) would include working with residents and business owners 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. These mitigation measures would be outlined in a Construction Mitigation Plan and Construction Communication Plan that would be prepared prior to construction.

The Council would mitigate potential hardships faced by businesses during the construction period through the Implementation of a Business Assistance Program to reduce the burden on small businesses prior to and during construction. The program would offer:

- Business canvassing to identify needed support services;
- Provision of signage and customer wayfinding;
- Business support fund, with a maximum of $30,000 for each affected business up to a program maximum of $5 million. Funds could be used to support rent or mortgage payments to offset construction impacts;
- Provisions in the Construction Mitigation Plan and Construction Communication Plan, including:
    - Outreach coordinators to communicate between the Project office, contractors, and businesses
    - Contractor employee parking plan
    - Retaining business access throughout construction
    - Utility shutoff minimum notification requirements
    - Phasing construction where possible to reduce business impacts
- Creation of a Met Council marketing program, including:
    - Ads on buses and LRVs
    - Coordination with local businesses to create an “open for business” marketing campaign
    - Neighborhood-scale and location specific marketing to attract people within walking distance of businesses
    - Local coupon book

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), 42 USC § 4601, 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.

LODs for the Project are shown in Appendix A-E.

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, and the specific regulations associated with parkland acquisition are described in Chapter 8. Utilities and potential utility relocations are discussed in Section 5.1.

4.3.3 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 a portion of the parcel. As design advances, the Project will continue to refine property impacts along the Project Alignment considering modifications or adjustments to avoid property acquisitions or lessen the severity of the impact (see Appendix A-4 for earlier phase property impact assumptions). Additionally, the Council would work with property owners to retain ownership of partially impacted parcels, particularly in cases where the Project would impact a building but not require acquisition of the full parcel. In other cases, the Project would change access to a property, which may be handled as a partial acquisition, or temporary easement during construction to reconstruct a sidewalk or driveway.

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 4-10.

Table 4-10 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, railroads
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

[12] Land use categories are from the Generalized Land Use 2020 data set developed by the Metropolitan Council and can be found on Minnesota Geospatial Commons.

City of Brooklyn Park

Along the City of Brooklyn Park portion of the Project Alignment, the Project would acquire 158.5 acres across 240 parcels. Impacts in the City of Brooklyn Park include 222 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 4-11.

Table 4-11 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)	Public Parcel Impacts (count)
Residential	8.5	134	133	1	-	-	6
Commercial	19.1	38	36	2	2	2	3
Industrial	21.6	14	14	-	-	-	-
Institutional	15.7	10	8	2	-	-	5
Park and recreational	20.1	9	9	-	-	-	7
Agricultural	-	-	-	-	-	-	0
Undeveloped	73.5	35	22	13	-	-	16
Total	**158.5**	**240**	**222**	**18**	**2**	**2**	**37**

[a] An industrial parcel does not have an assigned land use classification from the Metropolitan Council Generalized Land Use from April 2020 and accessible on the Minnesota Geospatial Commons https://gisdata.mn.gov/dataset/us-mn-state-metc-plan-generl-lnduse2020. The property has been included in the industrial land use category based on other publicly available records.

City of Crystal

In the City of Crystal, the Project would acquire a total of 16.7 acres across 44 parcels. Impacts in the City of Crystal include 30 partial impacts, eight full parcel impacts, three of which are relocations of commercial properties adjacent to Bass Lake Rd. A summary of parcel acquisitions and relocations for the City of Crystal is shown in Table 4-12. As design progresses, acquisitions and relocations associated with the Project would also be refined.

Table 4-12 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)	Public Parcel Impacts (count)
Residential	1.6	16	14	2	-	-	2
Commercial	4.2	12	9	3	3	3	3
Industrial	5.8	4	3	1	-	-	1
Institutional	-	1	1		-	-	-
Park and recreational	-	2	2	-	-	-	`
Agricultural	-	-	-	-	-	-	-
Undeveloped	5.0	9	1	8	-	-	8
Total	**16.7**	**44**	**30**	**14**	**3**	**3**	**14**

Some public parcel impacts that were not included in the Supplemental Draft EIS have been added to ensure accurate representation of all affected parcels based on design advancement including publicly owned tax forfeited and vacant properties.

City of Robbinsdale

Parcel acquisitions in the City of Robbinsdale would total 14.6 acres across 106 properties, 94 of which would be partial impacts to residential, commercial, park and recreation, and undeveloped 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.

There are two primary building impacts to properties that would require relocations and one impact to a secondary structure. A summary of parcel acquisitions and relocations in the City of Robbinsdale 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 Robbinsdale

Land Use Category	Parcel Impacts (acres)	Parcel Impacts (count)	Partial Parcel Impacts (count)	Full Parcel Acquisitions (count)	Building Acquisitions (count)	Relocations (count)	Public Parcel Impacts (count)
Residential	2.1	56	54	2	-	-	2
Commercial	8.2	42	39	3	2	2	5
Industrial	-	-	-	-			2
Institutional	1.9	7	7	-	1	-	-
Park and recreational	2.1	3	3	-	-	-	3
Agricultural	-	-	-	-	-	-	-
Undeveloped	.2	3	3	-	-	-	-
Total	**14.6**	**106**	**94**	**5**	**3**	**2**	**12**

Some public parcel impacts that were not included in the Supplemental Draft EIS have been added to ensure accurate representation of all affected parcels based on design advancement including publicly owned tax forfeited and vacant properties.

City of Minneapolis

In the City of Minneapolis, a total of 355 parcels would be acquired, including 307 partial acquisitions and 48 full acquisitions. The Project would also require 14 residential building acquisitions, 11 commercial building acquisitions, two institutional building acquisitions, and one undeveloped. The undeveloped relocation and building acquisition

shown in Table 4-13 indicates that the property is classified as undeveloped from the 2020 generalized land use data developed by the Metropolitan Council. However, the parcel contains a residential house, suggesting that this may be an error in the data. Notable acquisitions include the Five Points Building, Morning Star Assembly of God Church, and Wells Fargo Bank and a market rate multi-family apartment building on the corner of 10th Ave N and 5th St N. A summary of parcel acquisitions and relocations in the City of Minneapolis is shown in Table 4-14. As design progresses, acquisitions and relocations associated with the Project would also be refined.

Table 4-14 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]	Public Parcel Impacts (count)
Residential	5.09	145	127	18	14	14	1
Commercial	6.5	93	78	15	11	11	4
Industrial	5.5	34	32	2	-	-	2
Institutional	5.8	30	28	2	2	2	5
Park and recreational	0.1	4	3	1	-	-	3
Agricultural	0.1	2	1	1	-	-	1
Undeveloped	2.6	47	38	9	1	1	21
Total	**25.5**	**355**	**307**	**48**	**28**	**28**	**37**

[a] Some public parcel impacts that were not included in the Supplemental Draft EIS have now been added to ensure accurate representation of all affected parcels based on design advancement including publicly owned tax forfeited and vacant properties.

Temporary and Permanent Easements

Temporary and permanent easements are addressed in this Supplemental Final EIS in Table 4-9.

Table 4-15 Right-of-Way and Easement Impacts

	Land Use	Minneapolis	Robbinsdale	Crystal	Brooklyn Park	Total
Total acreage – permanent right-of-way and easements	Residential	5.0	2.1	1.6	8.5	17.2
	Commercial	6.5	8.2	4.2	19.1	38.0
	Industrial	5.5	-	5.8	21.6	32.9
	Institutional	5.8	-	-	15.7	21.5
	Park and recreational	0.1	1.9	-	20.1	22.1
	Agricultural	0.1	2.1	-	-	2.1
	Undeveloped	2.6	0.2	5.0	73.5	81.3
	Total	25.5	14.6	16.7	158.5	215.3
Total acreage – temporary easements	Residential	3.0	2.1	1.6	5.3	12.0
	Commercial	4.9	8.1	2.6	10.8	26.4
	Industrial	4.1	-	5.5	21.1	30.7
	Institutional	4.7	1.9	-	13.3	19.9
	Park and recreational	0.1	2.1	-	11.1	13.3
	Agricultural	0.1	-	-	-	0.1
	Undeveloped	1.6	0.2	4.2	38.1	44.1
	Total	**18.4**	**14.6**	**13.8**	**99.3**	**146.1**

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 Final 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 will be mitigated by payment of fair-market compensation and provision of relocation assistance in accordance with the Uniform Act.

4.3.4.1 Operating-Phase (Long-Term) Mitigation Measures

For residential displacements, the following will be provided:

- Relocation advisory services to displaced tenants and owner occupants, including translation/interpretation as needed
- 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, including translation/interpretation as needed
- 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, with services available at two centrally located storefronts in the corridor and an online portal. Other reimbursable/incidental expenses related to relocation may also be provided to residents and businesses if determined to be actual, reasonable, and necessary. Relocation options within the neighborhood will be prioritized based on individual relocatee preference, and relocatees would be provided multiple options to choose from. Tenants would be provided the opportunity to receive relocation payments as a lump sum or reimbursement, subject to relocation requirements. The Project would delay evacuation or physical destruction of acquired properties until necessary for construction where feasible.

4.3.4.2 Construction-Phase (Short-Term) Mitigation Measures

Properties affected by temporary easements would be restored to an acceptable pre-construction condition depending on the individual easement need and agreement.

The Council would implement a Workforce Development Program that stipulates local hiring preference in construction contracts. Additional opportunities could include trainings, mentorships, apprenticeships, scholarships, career fairs, information sessions, and speaker series.

The Council would implement a Business Assistance Program, as described in Section 4.2.4.1, to reduce the burden on small businesses prior to and during construction. The program would offer business canvassing to identify needed support services and provision of signage and customer wayfinding. A business support fund would be created with a maximum of $30,000 for each affected business up to a program maximum of $5 million. These funds could be used to support rent or mortgage payments to offset the impacts from construction.

The Council would include provisions in the Construction Mitigation Plan and Construction Communication Plan, as described in 4.2.4.2, that identifies outreach coordinators to communicate between the Project office, contractors, and businesses on the contractor employee parking plan, information on retaining business access throughout construction, information on utility shutoff minimum notification requirements, and phasing construction where possible to reduce business impacts.

The Council would establish an Online Portal to connect property owners and tenants to relocation resources, supplementing the requirements of the Uniform Act, as amended, and connect to regional anti-displacement initiatives and resources, such as Project updates, a construction hotline, advertisements for affected businesses, and Project outreach coordinators.

The Council would establish two Storefronts for the Project during construction to connect property owners and tenants to resources provided by the Project and its partners, including relocation assistance services, Hennepin County programs, business program office hours, community workshops and meetings, community-led 'sidewalk events', Project information and updates, an active phone number, project liaisons, contractors and information about the Project and Project mitigation.

The Council would create a marketing program, as described in Section 4.2.4.2, that could include advertisements on busses and LRVs, coordination with local businesses to create an "open for business" marketing campaign, neighborhood-scale and location specific marketing to attract people within walking distance of businesses, a local coupon book, sidewalk events held on a regular basis at each Project storefront with Project updates and activities, and information to connect businesses to technical assistance, such as through Elevate Hennepin.

4.4 Cultural Resources

This section describes the 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). For consistency with Section 106 (54 USC § 306108), the term "effect," instead of "impact," 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 SHPO, Native American tribes, local governments, and other interested parties. Identification of historic properties and the assessment of Project effects has also been completed.

Appendix A-4 includes documentation of the Section 106 analysis and consultation process, including copies of the Project's consultation materials. A list of reports and studies on historic properties and assessment of effects 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 and assess effects to date. Additional Section 106 information is provided in Section 4.4.2.1.

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 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 authorized by 54 USC § 306108 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
- 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
- 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
- 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 MOA to document agreed-upon measures

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 August 23, 2016, and amended on September 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. Further consultation with SHPO and consulting parties to resolve adverse effects to historic properties will be completed pursuant to Stipulation XIV of the existing MOA and will be documented in an amendment to the MOA.

4.4.2 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 APEs were further refined in 2023 based on the potential effects of the modified route and to align with APEs for similar FTA transit projects throughout the region and nationally. The rationale for the updated architecture/history and archaeological APEs is provided in the *Project Section 106 Compliance Plan* (Appendix A-4). The refined APEs have been applied to the Build Alternative. As the Project design advances, FTA may revise the APE as appropriate in consultation with SHPO.

As of publication of this Supplemental Final EIS, the Section 106 process tasks that have been 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
- Preparation of supplemental surveys to identify historic properties (listed or eligible architecture/history and archaeological resources within the revised APE) in accordance with Stipulation I of the MOA
- Preparation of an assessment of effects analysis for all historic properties, in accordance with Stipulation I.C of the MOA

Twenty-one NRHP-listed or NRHP-eligible properties, including eight historic districts and one multiple-property complex, have been identified in the Project's APEs (architecture/history and archaeological). There were 17 NRHP-listed or NRHP-eligible properties within the Project's APE for the 2016 Final EIS/ROD. All 21 properties within the current Project APE 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, Phase II architecture/history surveys, archaeological literature review and assessments, and a Phase I archaeological survey. These studies were completed in accordance with Stipulation I of the existing MOA. Figure 4-5 and Figure 4-6 identify these properties, and a list of properties is provided in Table 4-16. Furthermore, the supplemental studies have identified nine parcels with the potential to contain unknown archaeological resources within the archaeological APE. A Phase I archaeological survey has been completed for one of the nine parcels. This survey recovered post-contact (modern and historical) archaeological materials; however, this site has been recommended as not eligible because this archaeological data and research did not suggest significance for listing in the NRHP. Four parcels were identified during preparation of supplemental assessments in December 2024–January 2025; therefore, fieldwork has not yet occurred due to winter conditions. Multiple attempts were made to contact property owners of the remaining four parcels to obtain right-of-entry approval to conduct the survey; however, no responses were provided by these property owners, so right-of-entry was unable to be acquired, and the survey could not be conducted. Survey of these eight parcels would be completed prior to construction and, if historic properties are identified that would be adversely affected, the effects would be resolved through Stipulation XIV of the existing MOA. 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.

Table 4-16 Historic Properties within the APE

Property Name	Inventory Number	Location	NRHP Status
Osseo Branch, St. Paul Minneapolis & Manitoba Railway (StPM&M) Historic District	HE-RRD-00002 (including HE-BPC-00084, HE-CRC-00238, HE-RBC-00304, and HE-MPC-16389)	Cities of Brooklyn Park, Crystal, Robbinsdale, Golden Valley, and Minneapolis	Eligible
Minneapolis & Pacific Railway Historic District (Soo Line)	HE-CRC-00199	City of Crystal	Eligible
Graeser Park	HE-RBC-00025	City of Robbinsdale	Eligible
West Broadway Ave Residential Historic District	HE-RBC-00158	City of Robbinsdale	Eligible
Hennepin County Library, Robbinsdale Branch	HE-RBC-00024	4915 42nd Ave N, Robbinsdale	Listed
Guaranty State Bank of Robbinsdale	HE-RBC-01513	3700 W Broadway Ave, Robbinsdale	Eligible
Grand Rounds Historic District (Theodore Wirth Pkwy segment and Victory Memorial Dr segment)	XX-PRK-00001	Cities of Robbinsdale, Golden Valley, and Minneapolis	Eligible
Pilgrim Heights Community Church	HE-MPC-08277	3120 Washburn Ave N, Minneapolis	Eligible
All Pets Animal Clinic	HE-MPC-22664	2727 W Broadway Ave, Minneapolis	Eligible
Forest Heights Addition Historic District	HE-MPC-22600	City of Minneapolis	Eligible
North Community YMCA	HE-MPC-08033	1711 W Broadway Ave, Minneapolis	Eligible
Durnam Hall	HE-MPC-08028	927–931 W Broadway Ave, Minneapolis	Eligible
Reno Land and Improvement Company Addition Historic District	HE-MPC-22244	City of Minneapolis	Eligible
Sundseth Undertaking/Sundseth-Anderson Funeral Home	HE-MPC-22130	2024 Lyndale Ave N, Minneapolis	Eligible
Franklin Co-Operative Creamery Association North Side Complex	HE-MPC-22706	2017 2nd St N/2108 Washington Ave N, Minneapolis	Eligible
Control-Data Institute and Control Data – Northside Manufacturing Plant	HE-MPC-00477/HE-MPC-16694 and HE-MPC-16699	1001 Washington Ave N/ 227 12th Ave N, Minneapolis	Eligible
Northwestern National Bank – North American Office	HE-MPC-16722	615 7th Street N, Minneapolis	Eligible
Minneapolis Warehouse Historic District	HE-MPC-00441	City of Minneapolis	Listed

Property Name	Inventory Number	Location	NRHP Status
StPM&M/Great Northern Railway (GN) Historic District (Minneapolis)	XX-RRD-00010	City of Minneapolis	Eligible
Saint Anthony Falls Historic District	HE-MPC-08361	City of Minneapolis	Listed
Cameron Transfer & Storage Building	HE-MPC-16391	756 4th Street N, Minneapolis	Listed

4.4.2.1 Section 106 Coordination and Consultation

The Section 106 consultation process outreach activities and events have been coordinated with the NEPA process and other outreach activities for the Project. Steps completed as part of the Section 106 process were completed in consultation with SHPO and other consulting parties. See Chapter 9, Section 9.9.2 of this Supplemental Final EIS and copies of Section 106 correspondence included in Appendix A-4 of this Supplemental Final EIS for further detail regarding Section 106 consultation completed for the Project.

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 (Section 9.2.2.1).

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

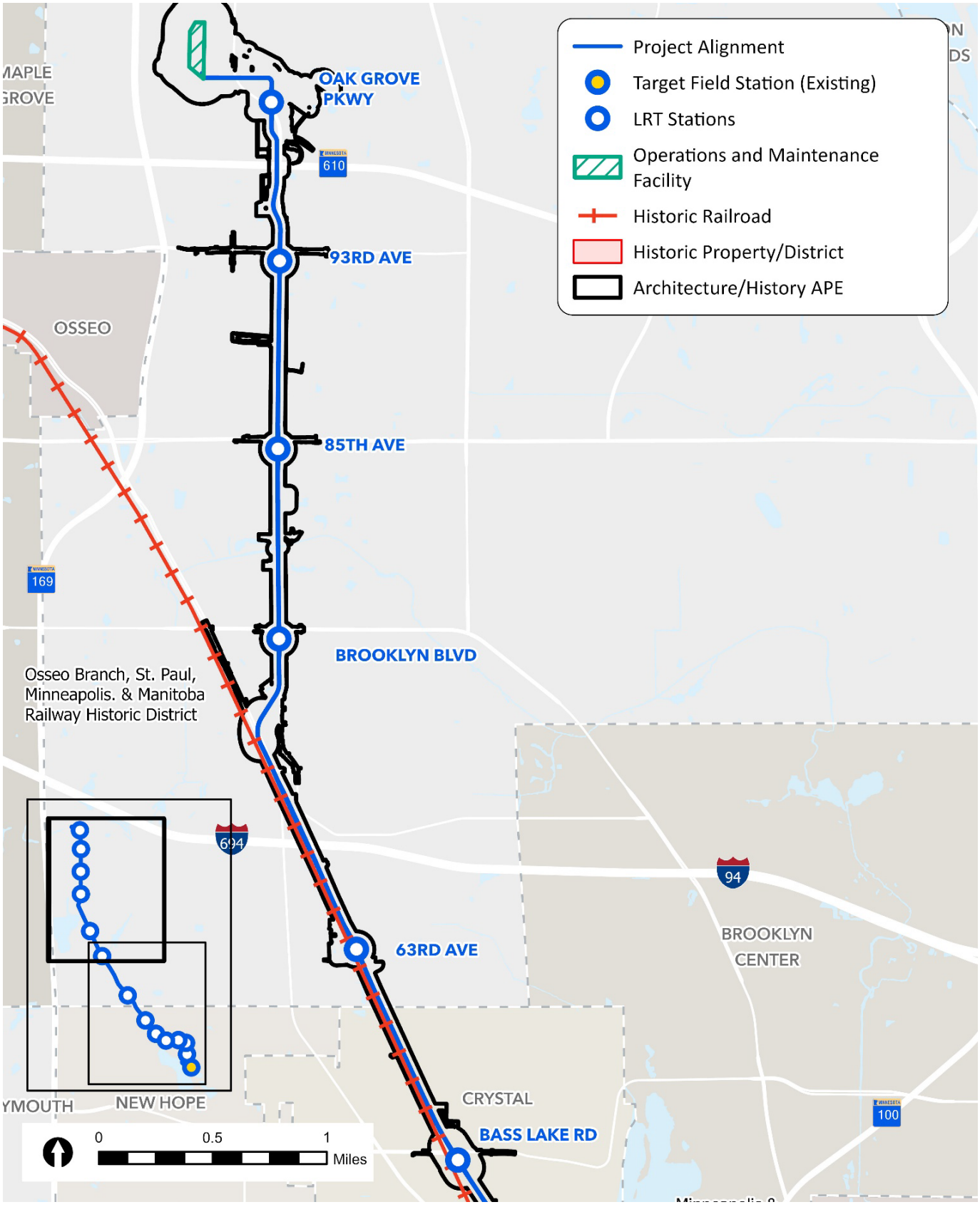


Figure 4-6 Architecture/History APE and Properties Identified (South)

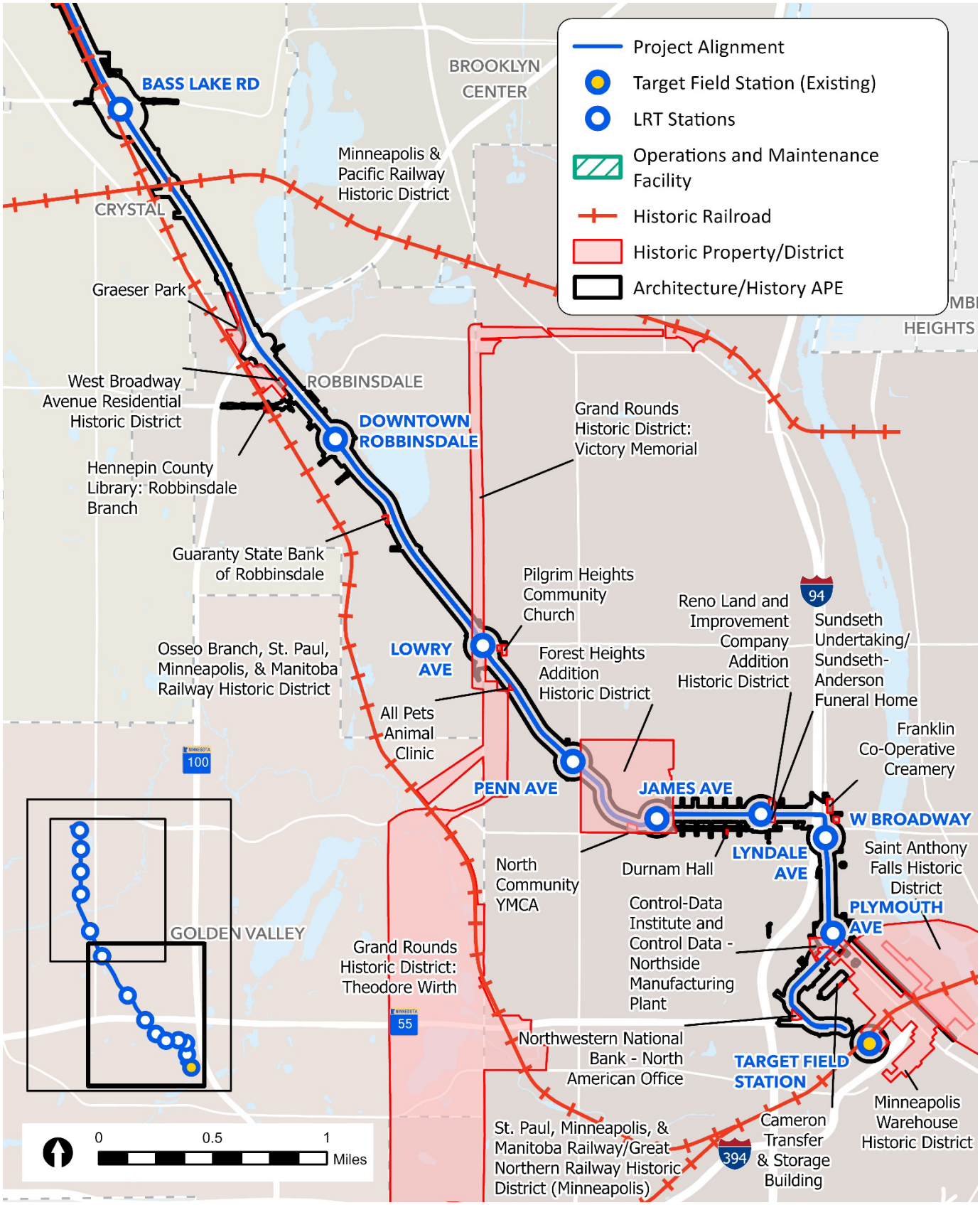
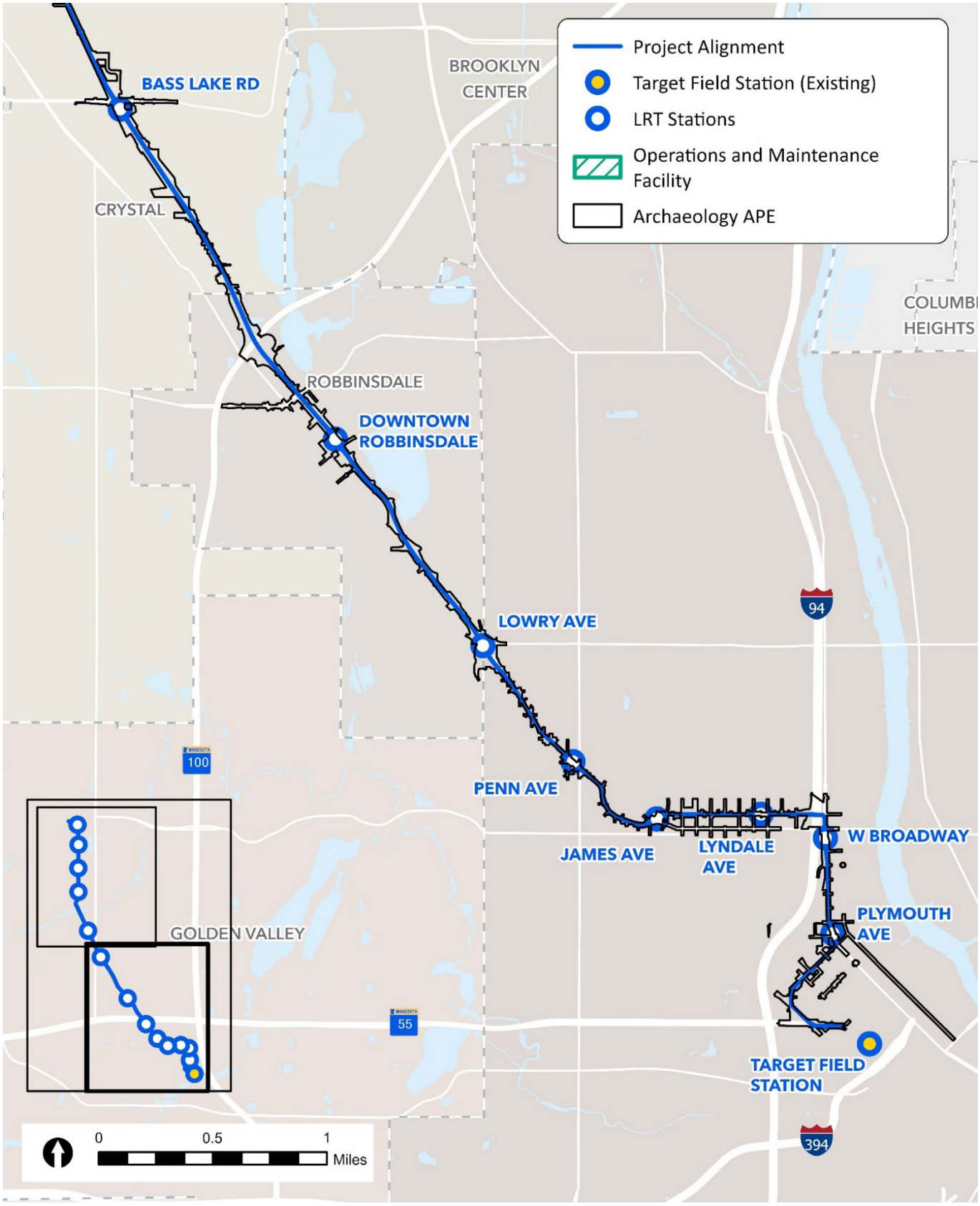


Figure 4-7 Archaeological APE (North)

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 an assessment of the effects that the Project would have on historic properties. At this phase of design, the engineering plans referenced for this Supplemental Final EIS (see Appendix A-E) are 30 percent design drawings prepared in December 2024 to reflect the at-grade Lowry Ave 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. Effects from the Project on historic properties within the updated APE have been assessed pursuant to Stipulation I.C of the MOA. FTA has made an effect finding for the Project and each historic property listed or eligible for listing in the NRHP within the APE as part of this Supplemental Final EIS/Amended ROD. FTA made the final finding of effects 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.

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

To inform evaluation of the Build Alternative, an assessment of effects containing detailed discussion of the Project's effects on each historic property is included in this Supplemental Final EIS. In accordance with Section 106, FTA, in consultation with SHPO and other consulting parties, reviewed the Project elements and applied 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 Reports considered 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. Effects considered from the Project and the rationale for adverse effects and no adverse effects are summarized in Table 4-17 and Table 4-18. These effects are further detailed in the Assessment of Effects Reports in Appendix A-4.

Table 4-17 Historic Properties within the APE Adversely Affected by the Project

Property Name	Inventory Number	Location	NRHP Status	Rationale for Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
Forest Heights Addition Historic District	HE-MPC-22600	City of Minneapolis	Eligible Significant under Criteria A, B, and C in the areas of Community Planning and Development and Landscape Architecture	Effects Considered: ■ Direct physical effects from the acquisition of nine properties within the District, four of which are contributing to the significance of the District. ■ Direct visual effects from one proposed station located in the District and one station located one block from the District; and addition of the LRT alignment and OCS in the District; and roadway and sidewalk alterations. ■ Temporary noise and vibration during construction and operation. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for Adverse Effect Finding: ■ Acquisition and permanent use of portions of the historic district, including the demolition of four contributing properties. The integrity of the District's setting, design, materials, and workmanship will be affected, thereby limiting the District's ability to convey its historic significance under Criteria A, B, and C. Mitigation Measures: ■ To be determined in consultation with SHPO and consulting parties and documented in an amendment to the existing Section 106 MOA.
Northwestern National Bank – North American Office	HE-MPC-16722	615 7th Street N, Minneapolis	Eligible Significant under Criterion A in the area of Social History	Effects Considered: ■ Acquisition of historic property and loss of all buildings on site. Rationale for Adverse Effect Finding: ■ Acquisition and loss of historic property. Complete loss of integrity of setting, feeling, association, location, design, materials, and workmanship. Mitigation Measures: ■ To be determined in consultation with SHPO and consulting parties and documented in an amendment to the existing Section 106 MOA.

Table 4-18 Historic Properties within the APE Not Adversely Affected by the Project

Property Name	Inventory Number	Location	NRHP Status	Rationale for No Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
Osseo Branch, StPM&M Historic District	HE-RRD-00002 (including HE-BPC-00084, HE-CRC-00238, HE-RBC-00304, and HE-MPC-16389)	Cities of Brooklyn Park, Crystal, Robbinsdale, Golden Valley, and Minneapolis	Eligible Significant under Criterion A in the area of Transportation	Effects Considered: ■ Direct visual effects from proposed stations, LRT alignment, OCS, and roadway and sidewalk alterations along an approximately two-mile segment of this District. Rationale for No Adverse Effect Finding: ■ Views of Project infrastructure would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Minneapolis & Pacific Railway Historic District (Soo Line)	HE-CRC-00199	City of Crystal	Eligible Significant under Criterion A in the area of Transportation	Effects Considered: ■ Direct physical effects from crossing of the LRT alignment in one location of the District. ■ Direct visual effects from LRT alignment and OCS. Rationale for No Adverse Effect Finding: ■ Physical effects and views of Project infrastructure would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Graeser Park	HE-RBC-00025	City of Robbinsdale	Eligible Significant under Criterion C in the area of Landscape Architecture	Effects Considered ■ Direct physical effects from sidewalk improvements at the northern end of the Park, and construction of two BMPs within the historic property boundary. ■ Direct visual effects from the two BMPs, LRT alignment, OCS, and roadway and sidewalk alterations. Rationale for No Adverse Effect Finding: ■ Direct physical effects and views of Project infrastructure would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
West Broadway Ave Residential Historic District	HE-RBC-00158	City of Robbinsdale	Eligible Significant under Criterion A in the area of Community Planning and Development	Effects Considered: ■ Direct physical effects from partial property acquisition for minor realignment of Lakeland Ave N. ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, and parking impacts would be

Property Name	Inventory Number	Location	NRHP Status	Rationale for No Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
				negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Hennepin County Library, Robbinsdale Branch	HE-RBC-00024	4915 42nd Ave N, Robbinsdale	Listed Significant under Criterion A in the area of Education	Effects Considered: ■ Direct physical effects from sidewalk repaving up to building front on the north end of the property. ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, and parking impacts would be negligible and would not alter characteristics qualifying the property for listing in the NRHP.
Guaranty State Bank of Robbinsdale	HE-RBC-01513	3700 W Broadway Ave, Robbinsdale	Eligible Significant under Criterion C in the area of Architecture	Effects Considered: ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Views of Project infrastructure and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Grand Rounds Historic District (Theodore Wirth Pkwy segment and Victory Memorial Dr segment)	XX-PRK-00001	Cities of Robbinsdale, Golden Valley, and Minneapolis	Eligible Significant under Criteria A and C in the areas of Community Planning and Development, Entertainment /Recreation, and Landscape Architecture	Effects Considered: ■ Direct physical effects from construction of station, LRT alignment, OSC, new roadway and LRT bridges, and roadway and sidewalk realignments within a non-contributing segment of the District. ■ Direct visual effects from proposed Lowry Ave Station, LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts and impacts to trail and traffic patterns during construction and permanent impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects will be located within a non-contributing segment of the District; and views of Project infrastructure; and parking, trail, and traffic pattern impacts would be negligible and would not alter characteristics qualifying the District for NRHP eligibility.

Property Name	Inventory Number	Location	NRHP Status	Rationale for No Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
Pilgrim Heights Community Church	HE-MPC-08277	3120 Washburn Ave N, Minneapolis	Eligible Significant under Criterion C in the area of Architecture	Effects Considered: ■ Direct visual effects from proposed Lowry Ave station, bridge extensions, LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Views of Project infrastructure and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
All Pets Animal Clinic	HE-MPC-22664	2727 W Broadway Ave, Minneapolis	Eligible Significance under Criterion C in the area of Architecture	Effects Considered: ■ Direct physical effects from partial parking lot acquisition for roadway and sidewalk realignment. ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
North Community YMCA	HE-MPC-08033	1711 W Broadway Ave, Minneapolis	Eligible Significant under Criterion A in the area of Community Planning and Development	Effects Considered: ■ Direct physical effects from partial parking lot acquisition for sidewalk reconfiguration, and partial loss of green space on property. ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Durnam Hall	HE-MPC-08028	927–931 W Broadway Ave, Minneapolis	Eligible Significant under Criterion A in the area of Social History	Effects Considered: ■ Direct physical effects from sidewalk paving within historic property boundary, up to the building face on the north side. ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations.

Property Name	Inventory Number	Location	NRHP Status	Rationale for No Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
				■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Reno Land and Improvement Company Addition Historic District	HE-MPC-22244	City of Minneapolis	Eligible Significant under Criterion C as the work of a master builder	Effects Considered: ■ Direct physical effects from partial property acquisition for LRT alignment and sidewalk reconfiguration. ■ Direct visual effects from proposed James Ave Station, LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary noise and vibration during construction and operation. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, temporary noise and vibration, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Sundseth Undertaking/ Sundseth-Anderson Funeral Home	HE-MPC-22130	2024 Lyndale Ave N, Minneapolis	Eligible Significant under Criterion C in the area of Architecture	Effects Considered: ■ Direct physical effects from sidewalk paving within historic property boundary. ■ Direct visual effects from proposed James Ave Station, LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary noise and vibration during construction and operation. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, temporary noise and vibration, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.

Property Name	Inventory Number	Location	NRHP Status	Rationale for No Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
Franklin Co-Operative Creamery Association North Side Complex	HE-MPC-22706	2017 2nd St N/2108 Washington Ave N, Minneapolis	Eligible Significant under Criterion A in the areas of Industry and Social History	Effects Considered: ■ Direct physical effects from repaving of the sidewalk and driveway apron within the property boundary. ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Control-Data Institute and Control Data – Northside Manufacturing Plant	HE-MPC-00477/HE-MPC-16694 and HE-MPC-16699	1001 Washington Ave N/ 227 12th Ave N, Minneapolis	Eligible Significant under Criterion A in the area of Social History	Effects Considered: ■ Direct physical effects from partial property acquisition and construction of new roadway alignment. ■ Direct visual effects from proposed Plymouth Ave Station, LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary noise and vibration during construction and operation. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects, views of Project infrastructure, temporary noise and vibration, and parking impacts would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Minneapolis Warehouse Historic District	HE-MPC-00441	City of Minneapolis	Listed Significant under Criteria A and C in the areas of Architecture and Commerce	Effects Considered: ■ Direct physical effects from proposed road and sidewalk reconstruction, ADA accessibility improvements at intersections, and restriping along 2nd Street North. ■ Direct visual effects from proposed Plymouth Ave Station, LRT alignment, OCS, and roadway and sidewalk alterations. ■ Temporary noise and vibration during construction and operation. ■ Temporary parking impacts during construction and permanent parking impacts during operation. Rationale for No Adverse Effect Finding: ■ Direct physical effects will be within the roadway right-of-way and existing paved

Property Name	Inventory Number	Location	NRHP Status	Rationale for No Adverse Effect Finding and Avoidance/Minimization/Mitigation Measures
				sidewalks, which are not character-defining features of the District. Views of Project infrastructure, temporary noise and vibration, and parking impacts would be negligible and would not alter characteristics qualifying the property for listing in the NRHP.
StPM&M/GN Railway Historic District (Minneapolis)	XX-RRD-00010	City of Minneapolis	Eligible Significant under Criterion A in the area of Transportation	Effects Considered: ■ Direct visual effects from LRT alignment, OCS, and roadway and sidewalk alterations. Rationale for No Adverse Effect Finding: ■ Views of Project infrastructure would be negligible and would not alter characteristics qualifying the property for NRHP eligibility.
Saint Anthony Falls Historic District	HE-MPC-08361	City of Minneapolis	Listed Significant under Criteria A, C, and D in the areas of Historic – Non-Aboriginal, Commerce, Transportation, Exploration/ Settlement, Engineering, Industry, Architecture, and Social History	Effects Considered: ■ Direct physical effects from roadway restriping along 2nd Ave between 10th Ave N and Hennepin Ave within the District boundaries. Rationale for No Adverse Effect Finding: ■ Direct physical effects will be within the roadway right-of-way and existing paved sidewalks, which are not character-defining features of the District. Views of Project infrastructure, temporary noise and vibration, and parking impacts from the Project are located at such a distance from the Historic Property that all effects would be negligible and would not alter characteristics qualifying the property for listing in the NRHP.
Cameron Transfer and Storage Building	HE-MPC-16391	756 4th Street N, Minneapolis	Listed Significant under Criterion C in the area of Engineering	Effects Considered: ■ Direct visual effects from roadway extension of 8th Ave N adjacent to the property. ■ Temporary noise and vibration during construction and operation. Rationale for No Adverse Effect Finding: ■ Visual effects and temporary noise and vibration from roadway and sidewalk improvements would be negligible and would not alter characteristics qualifying the property for listing in the NRHP.

4.4.4 Avoidance, Minimization, and Mitigation Measures

Of the 21 historic properties within the APE, there will be No Adverse Effect to 19 properties. There will be an Adverse Effect on two historic properties. Therefore, a finding of Adverse Effect has been made for the Project, and FTA is consulting with SHPO, the Council, Section 106 consulting parties, other interested parties, and the public pursuant to Stipulation XIV of the MOA to determine the appropriate means to resolve the adverse effects and develop mitigation plans as required. 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. Consultation to determine the appropriate measures to avoid, minimize, or mitigate adverse effects would be completed pursuant to Stipulation XIV of the MOA and would be documented in an amendment to the MOA, pursuant to Stipulation XIV.

4.5 Visual/Aesthetics

The information in this section is based on the *Visual Quality Technical Report* in Appendix A-4 of this Supplemental Final EIS. 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*,[13] 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* in Appendix A-4.

Table 4-19 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 4-19 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.
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.

Term	Definition
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 KVPs 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 the *Visual Quality Technical Report* 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.

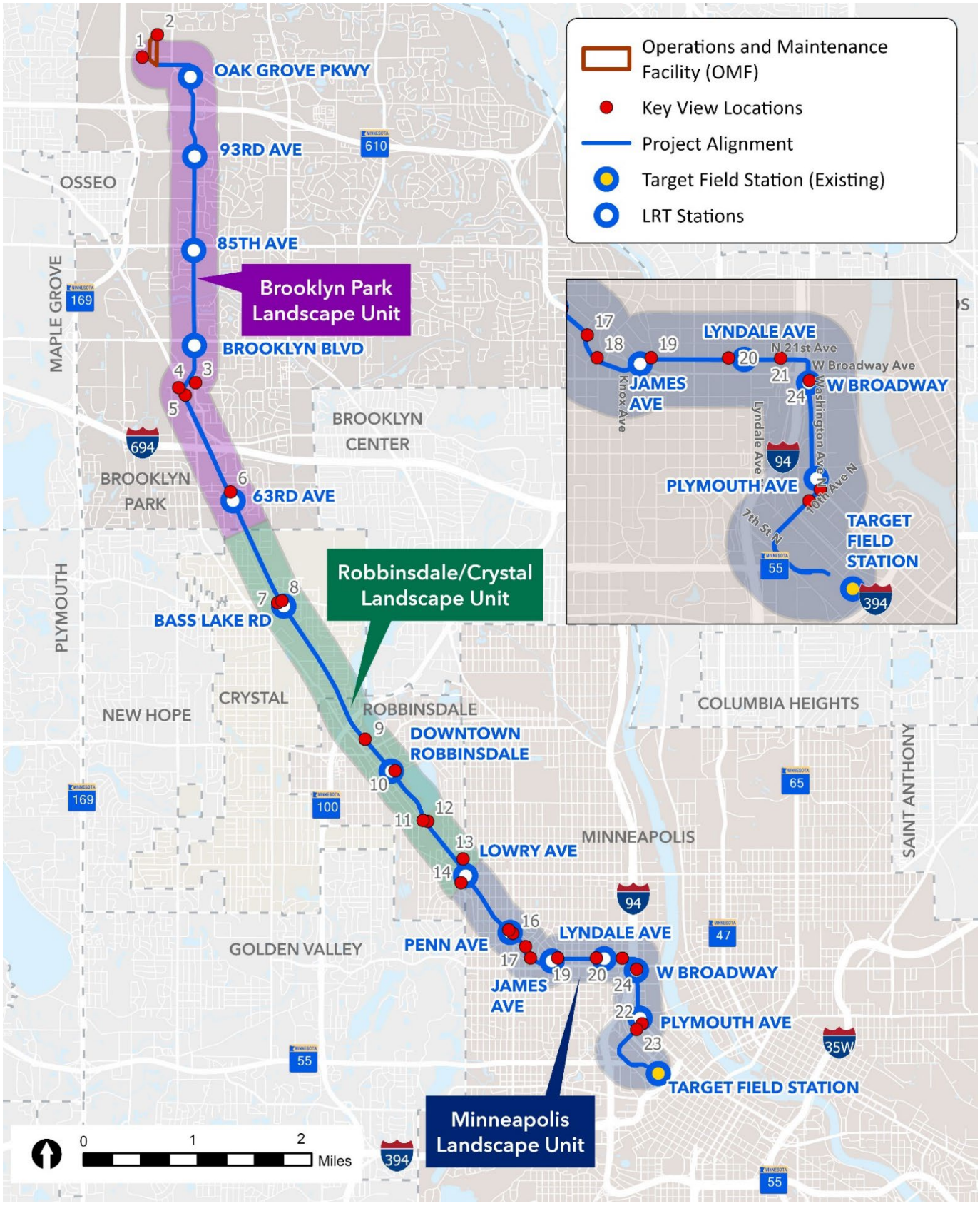
4.5.2 Study Area and Affected Environment

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 the urban downtown area 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 land use and suburban development forms. In the Cities of Robbinsdale and Minneapolis, electric streetcar service provided by Twin City Rapid Transit helped shape early development with concentrations of commercial and moderate-density residential development around Downtown Robbinsdale and in the W Broadway Ave corridor in the City of 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 24 KVPs analyzed, four 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; consequently, the prevailing visual impact would be neutral. Table 4-20 through Table 4-22 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 4-20 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 4-21 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 highly altered	Adverse
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 highly altered	Adverse
KVP 9 (view to the southeast along CR 81 from Twin Oak Dr)	Low	Character and quality not substantially altered	Neutral
KVP 10 (view to the north along CR 81 at the northeast corner of 40th Ave N of the proposed Downtown Robbinsdale Station with the proposed park-and-ride structure in the background)	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 not substantially altered; quality moderately altered	Neutral

Source: SEH 2023.

Table 4-22 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 Capri 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 N 21st Ave 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 N 21st Ave with and without LRT station)	Moderately high	Character and quality not substantially altered	Neutral

Designation and Description of View	Level of Visual Sensitivity	Degree of Visual Change in Quality or Character	Level of Impact
KVP 22 (view looking north from the southwest corner of 10th Ave N and Washington Ave N)	Moderate	Character and quality unaltered	Neutral
KVP 23 (view looking northeast along 10th Ave N and 3rd St N toward Washington Ave)	Moderate	Character unaltered, quality moderately altered	Neutral
KVP 24 (view from the corner of W Broadway Ave and Washington Ave N looking south toward the Project)	Moderate	Character and quality unaltered	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 Wirth/Victory Memorial Pkwy Regional Trail 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 and Lowry Ave access ramps 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 4-23.

Table 4-23 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) light pollution from 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 (coordinated with Project communities) 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 facilities and 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

Economic impacts refer to the effects that a project would have on the local and regional economy and its residents; these broader economic impacts extend beyond those related to a project's construction and operations and capture the changes in productivity and economic activity facilitated by the project's existence. Implementation of this Project is expected to result in direct, indirect, and induced effects related to the short-term construction activity and construction-related expenditure, long-term operations and maintenance (O&M) activities and expenditure, long-term economic development opportunities, and improved transportation connectivity. All these effects are 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 January 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. This data was gathered during this Supplemental Final EIS and is summarized in Section 4.6.3.1.

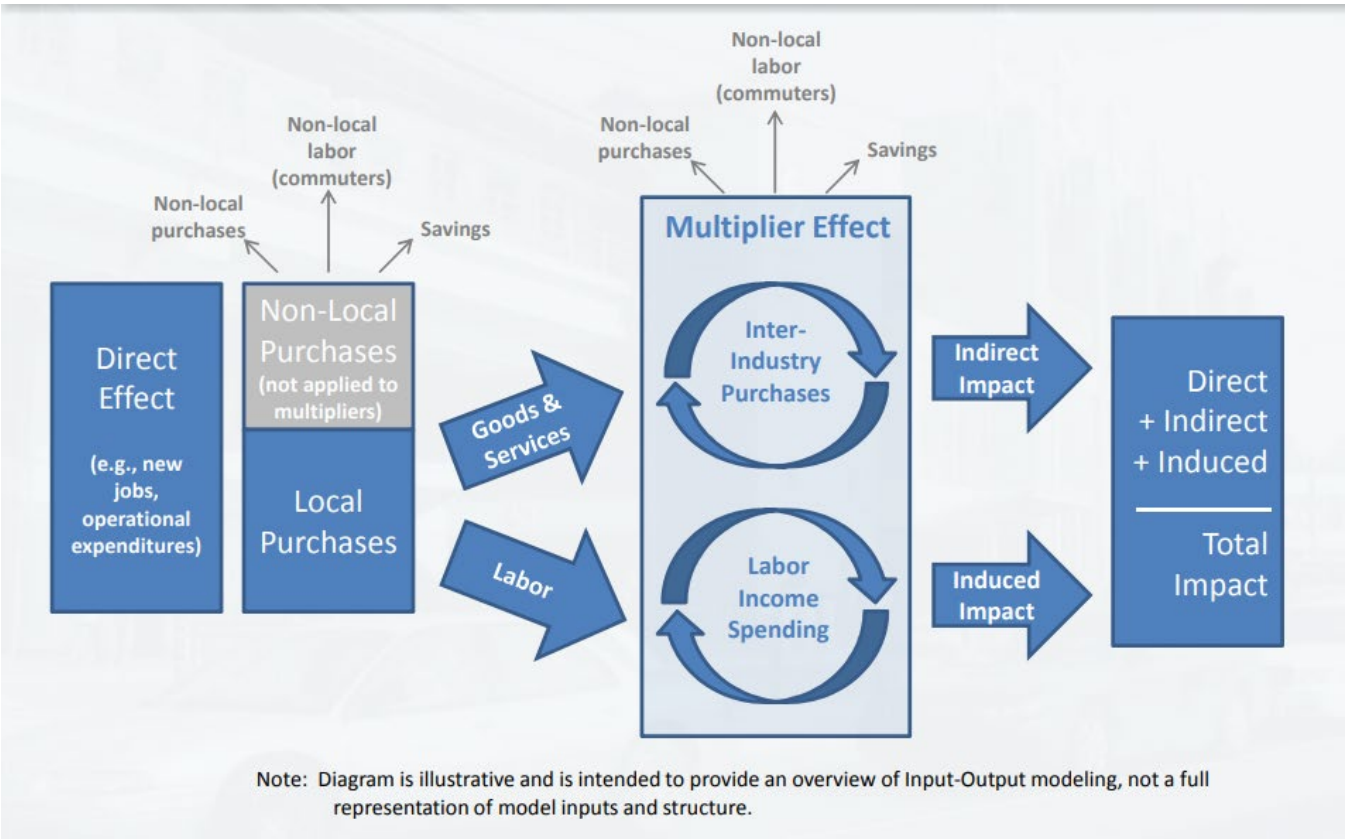
The foundation of the economic impact analysis will be the anticipated direct capital investments, employment, or other similar factors for the Project. It is also necessary to differentiate among the impacts of the various phases of the Project. In the short term, the primary driver of economic impacts is construction. For this analysis, the construction phase includes the actual construction of the transportation facilities as well as other related activities such as engineering for final design, the purchase of properties along the Project Alignment to secure the right-of-way, and the purchase of LRT vehicles and equipment.

In the long term, there are two categories for estimating economic impacts:

- Impacts related to the O&M of the transportation facility over time, which: Includes expenditures for both labor and materials and revenues from its users (ridership).
- Potential increase in economic activity associated with the operation of the transportation facility, including broader economic effects from improved transportation connectivity resulting in improved access to employment centers (for residents) and labor markets (for businesses) and leading to increased employment, productivity, and business output.

Using the estimated Project expenditures as inputs in an "input-output" model, subsequent spending and resulting indirect and induced effects throughout the regional economy can be estimated. As shown in Figure 4-10, the direct effects, measured in terms of expenditures or jobs, flow through the economy, generating additional spending, income, and jobs. This additional spending results in what is called the multiplier effect. The multiplier effect refers to the fact that any direct spending or job creation leads to multiple iterations of additional spending, resulting in total effects that are greater than the original (direct) expenditure.

Figure 4-10 Input-Output Model Illustration



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

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

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

The economic effects associated with construction, operation, and maintenance expenditures for the Project were estimated using multipliers from a regional input-output model from the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), referred to as the RIMS II multipliers.

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

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

4.6.2 Study Area and Affected Environment

The study area for assessing the economic impacts related to this Project is the Minneapolis-St. Paul-Bloomington MSA. MSAs, which are designated by the 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."[14]

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

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

No-Build Alternative

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

Build Alternative

The economic impacts of the Build Alternative refer primarily to Project operations and its requirements, especially the requirements for labor and supplies from the supply chain perspective. Other potential economic impacts include property values in the vicinity of stations and stops, parcel acquisition for right-of-way, and relocations of the occupants of those parcels. These impacts are described in detail in Appendix A-4, Section 4.6. In summary, the Project will create jobs and additional earnings because of O&M expenditures related to the new transit services; there will be an increased attractiveness of business and residential properties near the LRT stations and opportunities for their redevelopment, which may cause property values to increase; and potentially improve community quality of life by facilitating access to destinations along the Project Alignment, such as health centers, government services, and other essential goods and services.

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 to the local economy during the design and construction phases.

Short-Term Positive Economic Impacts

Design and construction of the Project represent a substantial capital investment in the local economy. This spending would generate demand for goods and services in the local economy and the need to fill jobs, primarily in the construction industry but also in engineering, contract management, and support positions. The Project would represent a significant opportunity for local construction contractors and professional services businesses and

support a large number of jobs, leading to an increase in the employment, earnings, and output for the duration of the construction process and benefiting residents of the MSA.

To help ensure communities within the Project corridor take advantage of the opportunities, Hennepin County has invested in a new employment strategist role to support employment and training programs for interested community members within the Project corridor. Additionally, Hennepin County is considering how targeted recruitment and hiring practices will support hiring Project corridor residents for needed roles.[15]

Estimated Project construction costs are presented in Table 4-24. These costs represent a 30 percent cost estimate. As the table shows, total Project costs are estimated at about $3.27 billion.

Table 4-24 Project Costs (In Millions of 2024 Dollars)

Cost Category	Amount
Guideway, Track Elements Construction	$347.4
Stations, Stops, Terminals Construction	$173.4
Support Facilities: Yards, Shops, Admin Buildings Construction	$182.8
Sitework and Special Conditions Preparation and Construction	$605.9
Systems (Control, Signaling, and Related Equipment)	$459.4
Right-of-Way/Land Acquisition, Relocation Costs	$231.2
LRT Vehicles	$226.0
Professional Services (Design, Engineering, Project Management, and Related Services)	$519.0
Unallocated Contingency	$474.0
Finance Charges	$50.0
Grand Total Project Costs	**$3,269.0**

Source: Blue Line Project Office.

To estimate the economic impacts of the construction expenditures using the input-output methodology described in Section 4.6.1.2, each cost category was assigned to a closely matching industry sector and RIMS II multipliers.

In addition, the methodology requires the specification of the amount of local expenditures in the analyzed economy, in this case, the MSA. This is because procurement of goods and services outside the local economy is not expected to generate significant local economic impacts.

For this analysis, expenditure distribution assumptions were made based on the general understanding of the local economy and the complexity of the Project.

Specifically, it was assumed that most construction work would be awarded or carried out by local contractors at 90 percent. The remaining 10 percent share captures the idea that some work elements may require specialized resources not available in the MSA, such as professional services to complete the assessments and designs within a relatively short period of time. To account for this possibility, only 33 percent of expenditure in the professional services category was assumed to be carried out by MSA contractors. Similarly, 33 percent of expenditures in the systems and finance charge categories were assumed to take place in the MSA.[5]

The distribution assumptions and resulting expenditures in the MSA and allocations to RIMS II industrial sectors are presented in Table 4-25. In this table, the unallocated contingency was distributed to all cost elements based on their share of grand total Project costs. Also, the table shows the MSA spending on right-of-way at $0. Right-of-way expenditures are typically not included in the estimation of economic impacts because this type of expenditure does

not generate rounds of spending similar to those illustrated in Figure 4-10. Local expenditures on LRT vehicles were also assumed at $0 because they are expected to be purchased outside the MSA.

Table 4-25 Distribution of Project Expenditures and Allocation to RIMS II Industrial Sectors

Cost Category	Total Amount ($M)	Percent Spent in MSA	Amount Spent in MSA ($M)	RIMSII Industry Code	RIMS II Industry Name
Guideway and Track Elements Construction	$407.4	90%	$366.6	2332TH	Transportation structures and highways and streets
Stations, Stops, Terminals Construction	$203.3	90%		2332TH	Transportation structures and highways and streets
Support Facilities: Yards, Shops, Admin Buildings Construction	$214.3	90%	$192.9	2332OT	Other nonresidential structures
Sitework and Special Conditions Preparation and Construction	$710.6	90%	$639.5	2332TH	Transportation structures and highways and streets
Systems (Control, Signaling and Related Equipment)	$538.7	33%	$177.8	334515	Electricity and signal testing instruments manufacturing
Right-of-Way/Land Acquisition, Relocation Costs	$271.1	0%	$0.0	NA	Not included in impact simulations
LRT Vehicles	$265.1	0%	$0.0	NA	No impact in MSA
Professional Services	$608.6	33%	$200.8	541300	Architectural, engineering, and related services
Unallocated Contingency	$0.0	0%	$0.0	NA	Redistributed to cost categories above
Finance Charges	$50.0	33%	$16.5	522A00	Nondepository credit intermediation and related activities
Grand Total Project Cost	**$3,269.0**		**$1,594.1**		

The results of the analysis are shown in the following tables. Table 4-26 shows the cumulative impacts over the entire construction period, while Table 4-27 shows the average annual impacts (assuming Project construction and development phase duration of 4 years). As shown in the tables, Project construction is expected to support a total of 14,493 job-years across the MSA.[16] This is equivalent to 3,623 jobs every year during the construction years. Out of this figure, 6,040 job-years, or 1,510 jobs each year during the construction and development period, are expected to be directly related to the Project. This will include jobs at the construction site as well as jobs related to Project management, Project design, and other related functions.

Other measures of impact include a cumulative total of $954.3 million in labor income, $1,792.7 million value added, and $3,182.7 million in business revenues (output). On average during the construction years, this amounts to total labor income of $238.6 million (including $125.8 million direct labor income), $448.2 million value added (including $125.8 million direct value added), and $795.7 million in business output (including $398.5 million direct business output).

Table 4-26 Economic Impacts of Construction Expenditures in Minneapolis-St. Paul-Bloomington MSA, Cumulative over All Construction Years

Impact Type	Employment (Job-years)	Labor Income ($M)	Value Added ($M)	Output ($M)
Direct	6,040	$503.0	$926.9	$1,594.1
Indirect	2,870	$194.8	$351.4	$722.4
Induced	5,583	$256.5	$514.5	$866.2
Total	**14,493**	**$954.3**	**$1,792.7**	**$3,182.7**

Table 4-27 Economic Impacts of Construction Expenditures in Minneapolis-St. Paul-Bloomington MSA, Average Annual During Construction Years

Impact Type	Employment (Job-years)	Labor Income ($M)	Value Added ($M)	Output ($M)
Direct	1,510	$125.8	$231.7	$398.5
Indirect	718	$48.7	$87.8	$180.6
Induced	1,396	$64.1	$128.6	$216.6
Total	**3,623**	**$238.6**	**$448.2**	**$795.7**

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 the Project area because of construction activities (e.g., street closures, sidewalk/parking excavation and closures) may reduce the number of customers visiting businesses in the vicinity of the Project Alignment. Furthermore, just the perception of construction disruptions and impeded business accessibility may keep customers away from Project-area businesses. Specifically, access to a business may not be directly affected in certain cases, but customers may believe that the Project area is “closed for business” because of construction activity and stop coming to the area. Small businesses that depend on foot traffic and personal contact with a customer may be especially vulnerable to these effects, such as restaurants, personal care establishments, laundry services, or repair shops.

4.6.4 Tax Revenue Effects

The Project would require the acquisition (both partial and full) of real property to include permanent and temporary easements for construction and operation of the LRT. These acquisitions will remove properties from the existing local tax base if occupants are relocated outside their city. The analysis reported in Section 4.3.3 identified required relocations: 14 residences and 19 businesses with almost all of these relocations being in the City of Minneapolis. If the potential opportunities for redevelopment of underutilized parcels along the Project Alignment materialize, new residential and commercial properties would increase the tax base and tax revenues over time. Additionally, the increased values of properties in the vicinity of the LRT stations would typically lead to a reassessment of valuation by municipal tax authorities and increase tax revenues from the affected properties. These effects can be expected to offset any reduction in tax revenues due to right of way acquisition and relocations.

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

Wider economic impacts of transportation infrastructure projects refer to impacts of these projects on broader business productivity and economic activity. Transportation infrastructure projects benefit not just the travelers and direct users of a facility in the form of travel time savings but have benefits on the broader economy through

improved transportation connectivity that creates conditions supporting growth and efficiency improvements. [17] The key interactions leading to economic impacts are outlined below.

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

4.6.6 Avoidance, Minimization, and Mitigation Measures

The following sections identify potential mitigation measures that will 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 and information about available resources are provided at yourbluelineext.org. Project commitments related to anti-displacement are presented in this Supplemental Final EIS.

Mitigation measures related to relocating residents and businesses are described in Section 4.3.

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

Mitigation measures would offset the potential impacts to businesses during construction; several of these tools that have been implemented on other LRT projects in the region have been considered in this Supplemental Final EIS. These mitigation measures 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” signs, signage directing to alternative parking and access points, or similar tools to communicate the status of the Project to area businesses, customers, and the public as to what could be affected and when.
- ***Parking assistance measures*** could include temporary and/or permanent improvements to off-street parking adjacent to or near the Project area businesses, other temporary and/or permanent parking improvements in the Project area, and compensation for loss of off-street parking.
- ***Business assistance programs*** could include investment funds to provide marketing and consulting support for local businesses during construction.

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

The Public Transportation Agency Safety Plan rule (49 USC § 5329) requires that all modes not overseen by another regulatory agency (e.g., FRA) must be governed by an Agency Safety Plan (ASP). Metro Transit applies a mode-specific ASP to comply with this rule. Additionally, Metro Transit has a long-standing practice of maintaining a SSAP for all modes.

The LRT ASP[18] 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,[19] 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. Throughout 2024, Metro Transit data show a decrease in overall reported crime while ridership steadily increased.[20]

Highlights from the SSAP actions and Metro Transit's efforts to make transit safer and more welcoming as of summer 2024 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.
- Metro Transit is building a team of Transit Rider Investment Program (TRIP) agents, who are non-police personnel who monitor fare compliance and assist riders on LRT and BRT services. There are currently 60 TRIP agents at Metro Transit, while Metro Transit's 2025 budget includes increasing funding to support up to 100 total agents. 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 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, substance use disorders, and violence prevention 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.
- The Council adopted a Code of Conduct in December 2023 to promote clearer and more prominent communication about respectful behavior on transit. The Code of Conduct helps set the expectation that riders behave respectfully while riding and describe accountability.

The Council announced in December of 2024 that the operating budget for 2025 includes funding to grow TRIP, expand use of supplemental security officers, partner with community-based organizations, and hire more police officers.

Other applicable codes, standards, and guidance are identified in Table 4-28.

Table 4-28 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
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,[21] Station and Support Facility Design Guidelines User Guide Supplement,[22] and Metro LRT Design Criteria,[23] 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
FTA's ASP (49 USC § 5329)

4.7.1.2 Definition of Terms

Safety and security are defined within the context of this Supplemental Final EIS as follows:[24]

- ***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 (see Chapter 3, Section 3.6 for more information about existing freight rail operations). In the City of Robbinsdale, N 42nd Ave crosses the BNSF railway three blocks west of the Project Alignment. Table 4-29 lists the existing railroad crossings in the study area.

Table 4-29 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 USC § 5329). 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 three 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 USC § 5330.

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. See Chapter 3, Section 3.2 for PLTS analysis. 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 near the intersection of N 10th Ave and Washington Ave N 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.

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.

As part of the Project, construction activities would occur close to active freight railways. Short-term freight operation impacts and mitigation are addressed in Chapter 3, Section 3.6. All contractors would prepare a Project safety and health program along with a site-specific safety plan to ensure that contractor and subcontractor personnel comply with the specified safety practices, codes, and regulations as described in the Project's safety plan.

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.

- Avoidance of safety issues at LRT stations related to the Project would be achieved with guidance from the Project's SSAP[25] and through implementation of the Metro LRT Design Criteria.[26] 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.
- A police substation would be included in the park and ride adjacent to Downtown Robbinsdale Station. This facility would replace and enhance the existing Metro Transit Police facility at Robbinsdale Transit Center. Additionally, multiple bus platforms, a driver facility, and secure bike parking would be included.

[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] Minnesota Geospatial Commons. 2024. Public School Buildings in Minnesota Resources. Accessed at https://gisdata.mn.gov/dataset/struc-school-buildings.
[6] 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.
[7] Transit System Performance Evaluation, Twin Cities Metropolitan Region, Metropolitan Council, April 2019 found at https://metrocouncil.org/Transportation/Publications-And-Resources/Transit/SYSTEM/2019-Transit-System-Performance-Evaluation.aspx.
[8] Renters More Likely Than Homeowners to Spend More Than 30% of Income on Housing in Almost All Counties, accessed May 10, 2024, https://www.census.gov/library/stories/2022/12/housing-costs-burden.html.
[9] U.S. Census Bureau, ACS 5-Year Estimates, 2018 and 2022: "SELECTED HOUSING CHARACTERISTICS."
[10] Capturing the Value of Transit, prepared by Center for Transit Oriented Development for FTA, November 2008. https://www.reconnectingamerica.org/assets/Uploads/ctodvalcapture110508v2.pdf.
[11] University of Minnesota, Center for Urban and Regional Affairs, Blue Line Extension Anti-Displacement Recommendations (Minneapolis: University of Minnesota 2023), https://www.minnpost.com/wp-content/uploads/2023/12/6495e9e0ff53b24636eea09831ff1ea0_Blue-Line-Extension-Anti-Displacement-Project-Report-draft4.pdf.
[12] Minnesota Geospatial Commons. Metropolitan Council. Generalized Land Use 2020 Accessed at https://gisdata.mn.gov/dataset/us-mn-state-metc-plan-generl-lnduse2020.
[13] 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.
[14] U.S. Census Bureau. 2021. About [the Office of Management and Budget]. https://www.census.gov/programs-surveys/metro-micro/about.html.
[15] Wealth Building and Financial Stability, September 27, 2024, https://yourblueline.org/wealth-building-and-financial-stability.
[16] "Job-years" is a metric of economic impact that captures both the number of jobs and their duration. As an example, 10 job-years may be 10 jobs that last 1 year (if they refer to an activity taking place in 1 year only) or 5 jobs that last 2 years (if they refer to an activity taking place over a period of 2 years).
[17] For example, Chatman and Nolan (2013) find significant links between transit service and employment density or agglomeration in U.S. metropolitan areas and from agglomeration to average wages and GDP per capita. Chatman, Daniel and Robert Nolan. 2013. "Transit Service, Physical Agglomeration and Productivity in U.S. Metropolitan Areas." Urban Studies 2013, pages 1–21.
[18] 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.
[19] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[20] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[21] Metropolitan Council. 2016. Regional Transitway Guidelines. Available at https://metrocouncil.org/Transportation/System/Transit/Studies/Regional-Transitway-Guidelines/Regional-Transitway-Guidelines-Chapters.aspx.
[22] 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.
[23] Metro Light Rail Transit Design Criteria. 2015.
[24] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[25] Metropolitan Council. 2022b. Safety & Security Access Plan. Accessed at https://www.metrotransit.org/public-safety.
[26] Metropolitan Council. 2016. Regional Transitway Guidelines. Available at https://metrocouncil.org/Transportation/System/Transit/Studies/Regional-Transitway-Guidelines/Regional-Transitway-Guidelines-Chapters.aspx.