



12 Evaluation of Alternatives

This chapter evaluates the effectiveness of the No-Build Alternative and the proposed METRO Blue Line Light Rail Transit (BLRT) Extension project based on the information contained in **Chapters 2 through 11**. The comparison of these alternatives is based on the proposed BLRT Extension project's Purpose and Need Statement as described in **Chapter 1**. This evaluation provides a basis for decision-makers and the public to assess the benefits and consequences of implementing the proposed BLRT Extension project.

The evaluation in this chapter differs from the evaluation in Chapter 11 – Evaluation of Alternatives of the Draft Environmental Impact Statement (Draft EIS) in that this evaluation focuses on the ability of the proposed BLRT Extension project and No-Build Alternative to meet the Purpose and Need. This chapter does not include a discussion of each alternative's attainment of broader goals and objectives and cost-effectiveness that was included in the Draft EIS. These considerations were primarily used and presented in the Alternatives Analysis and the Draft EIS to support the identification of the locally preferred alternative (LPA) and to compare the LPA with other alternatives being evaluated.

12.1 Effectiveness in Meeting the Purpose and Need

As presented in **Chapter 1 – Purpose and Need**, the proposed BLRT Extension project is intended to improve transit service in the proposed BLRT Extension project study area by addressing the deficiencies and needs that have been identified. The following discussions analyze the effectiveness with which the No-Build Alternative and the proposed BLRT Extension project address the needs and achieve the intended purpose of the proposed BLRT Extension project, which is as follows:

- The proposed BLRT Extension project will provide transit service that will satisfy the long-term regional mobility and accessibility needs for businesses and the traveling public.
- The proposed BLRT Extension project will improve access and mobility to the jobs and activity centers in the Minneapolis central business district.
- The proposed BLRT Extension will provide competitive, cost-effective travel options that support economic development goals and objectives of local, regional, and statewide plans.

12.1.1 Provide Transit Service to Satisfy Long-Term Regional Mobility and Access Needs

As described in detail in **Chapter 1 – Purpose and Need**, residents and businesses in the proposed BLRT Extension project area need improved access to the region's activity centers in order to fully participate in the region's economy. Access to jobs in downtown Minneapolis and northbound reverse-commute transit options to serve jobs in the growing suburban centers are crucial to continued economic vitality. Moreover, traffic congestion is expected by the Metropolitan Council



(Council) to intensify in the Twin Cities metropolitan area through 2040,¹ and fiscal conditions limit the ability of the region to address demand through highway capacity investment.

Chapter 1 – Purpose and Need and **Chapter 7 – Environmental Justice** also illustrate how there is a significant transit-dependent population in the proposed BLRT Extension project area (see **Section 1.4.3** and **Section 7.2**). **Chapter 1** also documents existing and future employment centers, which include downtown Minneapolis, North Memorial Medical Center in the City of Robbinsdale, and the planned development area north of Trunk Highway (TH) 610 in the City of Brooklyn Park where Target Corporation has one of its corporate campuses. Connecting transit-dependent populations to employment centers is a key piece of the Council’s equitable transportation and housing strategies for the region. As noted in the Council’s Fair Housing and Equity Assessment, titled *Choice, Place and Opportunity: An Equity Assessment of the Twin Cities Region*:

Transportation choices are as important to lower-income households as housing choices. The Council will continue to strengthen transit connections between lower-income residents and opportunities such as jobs and education. To expand the transportation choices that all households have, including in some neighborhoods the choice to live without a car, the Council will ... prioritize transportation investments that connect lower-income areas to job opportunities. (Council, 2014)

The proposed BLRT Extension project is consistent with this strategy.

12.1.1.1 No-Build Alternative

The No-Build Alternative would not add light rail or other high-capacity transit service to the proposed BLRT Extension project corridor and thus would not meet the purpose of and need for the project. With the No-Build Alternative, the bus network would have only modest changes to transit service in the proposed BLRT Extension project study area. Although transit vehicle-hours and vehicle-miles would increase with the No-Build Alternative, much of that increase would be devoted to allowing for increased bus travel times caused by increased traffic congestion.

With the No-Build Alternative, there would not be a substantial increase in either the quantity or quality of transit service between the proposed BLRT Extension project corridor and downtown Minneapolis in either the commute or reverse-commute directions. Increased transit system linkages, access to regional destinations, and multimodal transportation opportunities would occur only with the addition of committed arterial rapid transit routes. Therefore, transit access to housing, employment, schools, community services, health care facilities, and activity centers would not be substantially increased.

As discussed in **Chapter 1 – Purpose and Need**, there are Areas of Concentrated Poverty (ACPs) within and adjacent to the proposed BLRT Extension project corridor. Connecting the residents in these ACPs to job and employment opportunities is another factor in the need for transit improvements in North Minneapolis and the northwestern suburbs. The opportunity to make these critical connections between people, jobs, and education would be missed with the No-Build Alternative.

¹ *Thrive MSP 2040 Transportation Policy Plan (2040 TPP)*



12.1.1.2 Proposed BLRT Extension Project

The proposed BLRT Extension project would introduce new light rail service that would meet the purpose of enhancing regional access to activity centers. The proposed BLRT Extension project would connect residential areas throughout the proposed BLRT Extension project corridor to employment and activity centers in downtown Minneapolis. The proposed BLRT Extension project, including its connecting feeder bus service and new park-and-ride lots, would substantially improve both access and mobility to those centralized jobs, educational institutions, and activity centers. Further, by providing one-seat rides to the existing METRO Blue Line, the proposed BLRT Extension project would extend the improved access and mobility to include other employment, educational institutions, and activity centers, such as the Minneapolis–St. Paul International Airport, Hennepin County Community College, and the Mall of America.

The proposed BLRT Extension project would substantially increase access and mobility to jobs and activity centers in the proposed BLRT Extension project corridor that are north and west of downtown Minneapolis. The reverse-commute trips would see substantial increases in the delivery and quality of transit service. The typical frequency of service for reverse-commute trips on the proposed light rail extension would be the same as for commute trips, thereby providing increased transit access.

The proposed BLRT Extension project would also meet the Council’s strategy of making transit investments that connect residents in ACPs to employment centers and education opportunities, both those along the proposed BLRT Extension project alignment and those along other transit system corridors (for example, downtown St. Paul, the University of Minnesota, the Minneapolis–St. Paul International Airport, and the Mall of America).

12.1.2 Providing Efficient, Travel-Time-Competitive Transit Service

The second purpose of the proposed BLRT Extension project is to attract riders to the transit system by providing a competitive, reliable, cost-effective travel option in an area of the region that is experiencing congested roadway connections. In particular, the intent of this purpose is to efficiently attract new riders to the transit system by providing a new transitway that augments the existing roadway network, thereby reducing transit travel times in the proposed BLRT Extension project study area, especially between the Minneapolis central business district and the northwest areas of the Minneapolis.

Between 2013 and 2040, daily vehicle trips in the region will increase by about 26 percent and, as a result, congestion is forecast to worsen by 2040. With the expected traffic increases caused by population and employment growth and few roadway capacity increases due to funding constraints, the proposed BLRT Extension project study area will experience more intense and more extensive congestion on the region’s regional highways and local streets. See the *Traffic Operations Technical Memorandum* in **Appendix F** for additional information regarding the substantial increase in traffic congestion that will occur by 2040.

Current transit options in the proposed BLRT Extension project area offer a limited number of travel-time-competitive alternatives to the single-occupant vehicle. Without major transit



investments, it will be difficult to effectively meet the transportation needs of people and businesses in the proposed BLRT Extension project corridor, manage highway traffic congestion in the proposed BLRT Extension project area, and achieve the region's 2040 goal, as identified in the Council's *2040 Transportation Policy Plan (2040 TPP)* (Council, 2015), of increasing transit ridership by providing multimodal options and encouraging transit-supportive land use.

12.1.2.1 No-Build Alternative

The No-Build Alternative would not introduce a new travel option that reduces travel time and attracts new transit riders, and thus it would not meet the purpose of and need for the proposed BLRT Extension project. First, the No-Build Alternative would not introduce a new transitway into the proposed BLRT Extension project corridor, and thus transit travel times in the corridor would not become more competitive. Instead, bus service in the corridor would continue to operate on the existing roadway network.

Second, bus service in the proposed BLRT Extension project corridor with the No-Build Alternative would continue to use local roads and regional highways that will become increasingly congested. Congested roads and intersections will result in longer delays for both automobile traffic and bus transit. Compared to today, corridor transit travel times with the No-Build Alternative would tend to increase and transit reliability would tend to decrease. Most importantly, buses in the corridor would tend to have no, or reduced, competitive advantages in travel time or reliability relative to automobiles. As traffic volumes exceed the capacity of roads and intersections along the corridor, travel times will increase. Longer traffic delays and reduced bus transit service reliability would be detrimental to the quality of life of residents and employees in the corridor.

12.1.2.2 Proposed BLRT Extension Project

The proposed BLRT Extension project would introduce a new transitway in the proposed BLRT Extension project corridor that would reduce transit travel times, improve transit reliability, increase the overall transit demand, and increase transit's mode share. That is, the new light rail transit service introduced in the corridor by the proposed BLRT Extension project would provide a competitive and reliable transit option that maximizes total transit riders with projected average weekday boardings of 27,000 in 2040. This level of weekday boardings is directly attributable to the improvement in travel time in the corridor that would be produced by the implementation of the proposed BLRT Extension project. Taken together, these measures demonstrate that the proposed BLRT Extension project would meet the purpose of and need for transit service in the corridor.

Further, transit travel times for commute trips in both directions via the new light rail service are projected to be substantially reduced, compared to existing and 2040 travel times with the No-Build Alternative. The No-Build Alternative end-to-end travel times by automobile would be 39 minutes and in excess of 70 minutes by bus transit as compared with the proposed BLRT Extension project travel time of 31 minutes. In addition, those commute transit travel times would be much more reliable, because the light rail service would not operate on congested roads, and it would be less likely to be impeded by adverse weather affecting roads. Those improvements in transit travel times and reliability would substantially improve mobility for commute trips.



12.2 Environmentally Preferable Alternative

The National Environmental Policy Act (NEPA) requires that, in cases where an EIS has been prepared, the Record of Decision must identify all alternatives that were considered, specifying the alternative or alternatives that were considered to be environmentally preferable (40 CFR Part 1505.2(b)). The environmentally preferable alternative(s) is (are) the alternative(s) that would promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative(s) that causes the least damage to the biological and physical environment and the alternative(s) that best protects, preserves, and enhances historic, cultural, and natural resources. However, the Council on Environmental Quality (CEQ) recognizes that the identification of the environmentally preferable alternative may involve difficult judgments, particularly when one environmental value must be balanced against another. Through the identification of the environmentally preferable alternative, the decision-maker may be faced with a choice between that alternative and others, and must consider whether the decision accords with the declared policies of NEPA (CEQ, 1981).

The proposed BLRT Extension project will avoid or minimize impacts to the natural, developed, and cultural environments. For the proposed BLRT Extension project, 16 technical segment-specific and system-wide issues were evaluated (see [Figure 2.5-2](#) and [Table 2.5-1](#)). Issue Resolution Teams (IRTs) were formed consisting of city staff and other stakeholders for each of the 16 issues identified to examine possible BLRT Extension project design and other adjustments to the Draft EIS LPA. The resolution of these technical issues resulted in design adjustments, including proposed adjustments to accommodate local goals and objectives, improve the performance of the proposed light rail extension, reduce project costs, and avoid or minimize adverse environmental impacts.

Results and recommendations from each of the IRTs form the basis for the proposed BLRT Extension project definition. The proposed BLRT Extension project will avoid or minimize effects associated with the LPA (as identified in the Draft EIS) as follows:

- Impacts to wetlands are similar to those disclosed in the Draft EIS at about 10 acres of permanent wetland impact, of which about 4.16 acres will require compensatory mitigation under Section 404 of the Clean Water Act and about 6.28 acres will require compensatory mitigation under the Minnesota Water Conservation Act.
- Impacts to floodplains will be reduced from the 18,700 cubic yards disclosed in the Draft EIS to 17,000 cubic yards.
- Impacts to cultural resources will result in adverse effects on six historic resources.
- Impacts to park resources will be reduced to 2.11 acres of permanent easement and 17.52 acres of temporary easement.
- The visual character of the proposed BLRT Extension project corridor as a whole will not be substantially changed.



- Noise effects from the proposed BLRT Extension project will result in 120 severe impacts to sensitive receptors with Quiet Zones² at all Federal Railroad Administration (FRA)-shared at-grade crossings and two residual severe impacts with further mitigation; 176 moderate impacts to sensitive receptors with Quiet Zones at all FRA-shared at-grade crossings will be reduced to five residual moderate impacts with further mitigation.
- Vibration effects for residential land uses will be eliminated with implementation of mitigation measures.
- Property acquisitions required for the proposed BLRT Extension project will affect 292 parcels with a combined area of 75.5 acres of permanent and temporary easements. Of these 75.5 acres, about 28.9 acres will be temporary easements, most commonly involving a strip of land needed to allow for construction activities to occur. The remaining acreage (about 46.7 acres) will be permanent acquisition or easement.
- Short- and long-term effects on property access and on-street parking will be reduced to a loss of 92 on-street parking spaces; mitigation for lost on-street parking will be coordinated with local jurisdictions as necessary.
- The proposed BLRT Extension project includes a variety of roadway modifications that will avoid new congested intersections, and, with one exception, the proposed BLRT Extension project will not worsen conditions at intersections that would be congested with the No-Build Alternative in 2040.
- Implementation of the proposed BLRT Extension project results in an overall finding of no disproportionately high and adverse effects on the region's minority and/or low-income communities.

The following are affirmative ways that the LPA was changed to address environmental justice and other community concerns.

- The proposed BLRT Extension project includes both the Plymouth Avenue and Golden Valley Road stations in order to serve the distinct markets and populations that are present in these locations in addition to adding a park-and-ride at the Golden Valley Road Station.
- The proposed BLRT Extension project will provide enhanced trail and other pedestrian facilities.
- The proposed BLRT Extension project will add signalized pedestrian crossings of Olson Memorial Highway (TH 55) and will enhance the pedestrian and bicyclist experience by narrowing travel lanes for a 35-miles-per-hour design speed.
- The proposed BLRT Extension project will provide space for the addition of a cycle track (by others) on the north side of Olson Memorial Highway.

² Quiet Zones are locations, at least one-half mile in length, where the routine sounding of horns has been eliminated because of safety improvements at at-grade crossings, including modifications to the streets, raised median barriers, four quadrant gates, and other improvements designed and implemented as a part of the proposed BLRT Extension project and consistent with Quiet Zone readiness. Horns are sounded in emergency situations at these locations. Municipalities must apply to FRA for approval of Quiet Zones.



- The proposed BLRT Extension project will add a park-and-ride at the Bass Lake Road Station and will build all at-grade crossings of the freight and light rail track as Quiet Zone-ready.
- The proposed BLRT Extension project will facilitate the future directed development of the City of Brooklyn Park in the area north of TH 610.

The proposed BLRT Extension project (the LPA as modified through the IRT process) meets the purpose of and need for the proposed BLRT Extension project corridor. It will best protect, preserve, and enhance social, historic, and cultural resources. However, because of the effects the proposed BLRT Extension project will have on biological and natural resources, the proposed BLRT Extension project will not cause the least damage to the physical environment. Consistent with CEQ guidance on selecting the environmentally preferable alternative, the Federal Transit Administration (FTA) and the Council are faced with a trade-off between the proposed BLRT Extension project's benefits and ensuing environmental impacts. FTA and the Council have determined that the proposed BLRT Extension project is the environmentally preferable alternative after consideration that their decision is in accord with the declared policies of NEPA.



This page intentionally left blank