Attachment 3: Responses to Comments Received on the Draft EIS

A. Support for the Project

Summary of Comments: The FTA and the Council received approximately 130 comments on the Draft EIS that expressed support for the Southwest LRT Project. Those commenters included the following: City of St. Louis Park, St. Louis Park Planning Commission, Scott County Board of Commissioners, Bassett Valley Redevelopment Oversight Committee, Chamber of Commerce, the Sierra Club, businesses, community groups, non-profit organizations, and the general public. General support was often combined with opposition to certain elements of the Project, such as freight rail relocation or co-location (see Themes C and D, respectively).

Beyond the broad and general support for the Project, many of the comments noted specific benefits of the Project or support for specific Project elements. There were also comments that suggested refinements or options that have since been incorporated into the Project.

Comments in support of the Project noted that, compared to other alternatives, the Project as described in the Draft EIS would:

- Be the most cost-effective way of meeting the Project's Purpose and Need
- Result in greater light rail and transit ridership
- Have greater economic benefits
- Produce environmental benefits such as reduced energy use and improved air quality
- Result in overall improvements to mobility in the corridor, particularly reduced transit travel times and improved transit connections
- Improve transit access between residential areas in Minneapolis and employment centers in the corridor, particularly as it relates to reverse-commute markets
- Support the region's station area planning efforts along the proposed light rail alignment, including the indirect effects of increasing and accelerating the level of development in those areas, especially transit oriented development

Comments in support of the Project also stated that light rail would be preferable to other modes (e.g. enhanced bus service or bus rapid transit) and to the No Build Alternative.

Commenters also proposed design adjustments or expressed support for design adjustments and options that were ultimately incorporated into the Project, including:

- Co-location of freight rail, light rail, and the bicycle and pedestrian trail in the Kenilworth Corridor
- Placement of the light rail alignment in a tunnel in a portion of the Kenilworth Corridor
- Freight rail modifications that allow for improved placement of stations in St. Louis Park, including the freight and light rail "swap" and replacement of a portion of the Skunk Hollow freight rail switching wye with the Southerly Connection (which are described in Section 2.1 of the Final EIS)
- Incorporation of other freight rail modifications associated with the safe design and construction of freight rail modifications(e.g., design of joint light rail and freight rail at-grade crossings, safety measures to help prevent freight rail derailments, such as freight rail guard rails)
- Modification of the proposed light rail alignment, station locations, and park-and-ride lots within Eden Prairie
- Different location of the light rail operations and maintenance facility (OMF) than those locations evaluated in the Draft EIS
- Roadway modifications that accommodate implementation of the Project, while avoiding creating new or worsening congestion at nearby intersections

- Various measures to avoid, minimize and mitigate Project impacts
- Anticipated modifications to bus service to support the proposed light rail line
- Modifications to the design and location of proposed stations, park-and-ride lots, and related ancillary facilities (e.g., traction power substations), including the elimination of the proposed park-and-ride lots in Minneapolis
- Design adjustments to bicycle and pedestrian facilities affected by the Project

Response: *The Council has incorporated a variety of design adjustments into the Project since the publication of the Draft EIS, including freight rail modifications that allow for the co-location of freight rail and light rail within the Kenilworth Corridor. Many of the design adjustments incorporated into the Project specifically or generally address comments received on the Draft EIS. For example, some of the proposed adjustments that have been incorporated into the Project were included in the comments received on the Draft EIS, including the proposed light rail tunnel in a portion of the Kenilworth Corridor. The Project, which includes the design adjustments made since publication of the Draft EIS, is described and illustrated in Section 2.1 and Appendix E of the Final EIS. The evaluation of those design adjustments and the rationale for incorporating them into the Project are described in Sections 2.2 and Appendix F of this Final EIS.*

As presented in Chapter 1 of the Final EIS, the Project is intended to improve transit service in the Southwest Corridor by addressing the deficiencies and needs that have been identified. As described in Chapter 8 of the Final EIS, the following is a description of how the Project will address the Corridor Needs and achieve the intended Purpose of the Southwest LRT Project. In summary, the various design adjustments made since publication of the Draft EIS help the Project meet its Purpose and Need.

- ***Improve Access and Mobility to Jobs and Activity Centers for Commuters and Reverse Commuters.*** *The Project will introduce new light rail service that will meet both elements of this project purpose. First, the Project's proposed light rail extension will connect residential areas throughout the Corridor to employment and activity centers in the Minneapolis central business district. The light rail extension, including its connecting feeder bus service and new park-and-ride lots, will substantially improve both access and mobility to those centralized jobs and activity centers. Further, by providing one-seat rides to destinations served by the existing METRO Green Line, the Project will extend the improved access and mobility to include other employment and activity centers, such as the University of Minnesota and the St. Paul central business district.*

  Second, the Project will substantially increase access and mobility to jobs in the Corridor that are west and south of the Minneapolis central business district. Those reverse-commute trips will see substantial increases in the delivery and quality of transit service. In general, the frequency of service for reverse-commute trips on the proposed light rail extension *will be the same as for commute trips, thereby providing increased transit access. Further, transit travel times for reverse-commute trips via the new light rail service will tend to be substantially reduced, compared to existing and 2040 travel times under the No Build Alternative. In addition, those reverse-commute transit travel times will be much more reliable, because the light rail service will not operate on congested roadways and will be less likely to be impeded by adverse weather affecting roadways. Those improvements in transit travel times and reliability will substantially improve mobility for reverse-commute trips.*

- ***Attract Choice Riders to the Transit System by Providing a Competitive, Reliable, Cost-effective Travel Option.*** *The Project will meet the second purpose of attracting choice riders to the transit system in a cost-effective manner by: 1) providing a new diagonal transitway that reduces transit travel times in the Corridor, especially between the major activity centers and especially in the reverse commute direction; and, 2) grade-separating that transitway from the increasingly congested regional and local roadway network, thereby increasing the speed and reliability of transit service in the Corridor. In particular, the Project will introduce a grade-separated diagonal transitway in the Corridor that will: 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 Project will provide a competitive and reliable transit option that will attract choice riders.*

Except for at-grade light rail crossings of streets, the new light rail service will operate within exclusive transit right-of-way, which will separate the light rail service from the slowing and reliability-reducing effects of congestion. Under the Project, approximately one-third of the passenger miles within the Corridor will occur within that exclusive transit right-of-way, generally unaffected by roadway congestion and deteriorating speeds over time. Transit travel time improvements of the Project over the No Build Alternative reflect greater efficiency and reliability of transit service offered by the Project, as it would be able to adhere more strictly to its operations schedule and provide more predictable travel times, contrasted to bus service on more congested roadways under the No Build Alternative. As a result, the Project will attract those new choice transit riders in a more cost-effective manner, compared to the efficiency of Corridor bus network the No Build Alternative.

Because of its travel time and coverage advantages compared to the No Build Alternative, the Project is forecast to result in 13,240 new transit trips on an average weekday in 2040 compared to the No Build Alternative. Most of those new transit trips represent a shift from trips taken using a personal automobile. In total, the Southwest LRT Green Line Extension is forecast to carry 32,679 transit rides in 2040 on an average weekday. The increase in transit ridership under the Project reflects the demand for and attractiveness of faster and more reliable transit service in the Corridor.

- ***Be Part of a System of Integrated Regional Transitways.*** *The Project will meet this purpose through its expansion of the region's integrated transitways into the Southwest Corridor. Specifically, the Project will extend the existing METRO Green Line light rail service into the Corridor with approximately 14.5 miles of grade-separated right-of-way and 16 new light rail stations. That expansion of the regional transitway system into the Corridor will replace much of the No Build Alternative's reliance on the local bus network to provide that connection.*

  The long-range comprehensive land use and transportation plans for the Twin Cities region both call for continued investment in a system of regional transitways, including the Southwest LRT Project. As described in the plans, the region's investment policy includes land use development expectations to leverage and support its transit investments, identifying cost-effective means of improving multimodal access to regional destinations, and improving mobility and reliability on the regional highway system. Further, the Project's proposed light rail stations are expected to experience additional mixed-use development compared to the No Build Alternative. The expected increase in development density around light rail stations resulting from the construction of the Project is consistent with regional and local plans. These plans acknowledge the value of extending the regional transitway into the Corridor as an important way to support efficient land use development.

As noted in Section 2.5 of the Supplemental Draft EIS, the findings reached in the design adjustment process that occurred after publication of the Draft EIS led to adjustments to the Locally Preferred Alternative that would retain freight rail in the Kenilworth Corridor (LRT 3A-1). In April 2014, the Council identified the design adjustments to be incorporated into the Project: the "Shallow LRT Tunnels – Over Kenilworth Lagoon" (which will include co-location of light rail and freight rail in the Kenilworth Corridor – LRT 3A-1). In summary, the Council found that, relative to the other options considered, the "Shallow LRT Tunnels – Over Kenilworth Lagoon" (LRT 3A-1) alternative would provide the best balance of costs, benefits, and environmental impacts, and in doing so found that it would best meet the Project's Purpose and Need (see Chapter 1). In particular, the Locally Preferred Alternative with the "Shallow LRT Tunnels – Over Kenilworth Lagoon" (LRT 3A-1) will:

- *Result in less harm to Section 4(f)-protected properties (compared to the displacement of the Park Spanish Immersion School playground with freight rail relocation);*
- *Facilitate efficient freight rail movements by replacing the Skunk Hollow switching wye with the Southerly Connector;*
- *Minimize the reconstruction of freight rail tracks and related adverse impacts;*
- *Include design refinements that will help avoid diminishing the potential for TOD around light rail stations in close proximity to freight rail tracks;*

- *Provide safe and convenient pedestrian crossings of freight rail tracks at the proposed Wooddale, Beltline, and 21st Street stations;*
- *Avoid the displacement of residents and businesses in St. Louis Park and Minneapolis (compared to the full acquisition of approximately 32 residential, commercial, and institutional parcels under freight rail relocation);*
- *Include bicycle and pedestrian improvements and the study of potential traffic-related improvements that will improve access to light rail stations and across the light rail and freight rail alignment in the Kenilworth Corridor (compared to the construction of a berm for the freight rail alignment in St. Louis Park that would tend to divide a residential and commercial neighborhood); and,*
- *Permanently displace approximately six fewer acres of wetland.*

As a result of the design adjustments that occurred after publication of the Draft EIS, the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) is the Project's environmentally preferred alternative.

B. Opposition to the Project

Summary of Comments: FTA and the Council received approximately 15 comments opposing the Southwest LRT Project in general, notwithstanding alignment concerns, which are addressed in Themes C and F. Commenters with general opposition to the Project included members of the businesses, community groups, and the general public. Additional statements opposing or expressing specific concerns about particular elements of the Project are addressed in Themes C through F, H, and I.

Following are some of the key reasons cited in opposition to the Project under Theme B:

- The capital and operating costs of the Project are too high, will require a subsidy or increased taxes, or the Project is a general waste of money
- The Project will not create new jobs and will have negative economic impacts
- Ridership will be low due to a low density of jobs and residents around the proposed stations, only minor improvements in transit travel times, and the availability of buses that work fine and are more flexible
- The Project will not improve, or will actually worsen, traffic congestion
- The Project will have a variety of adverse environmental impacts in a variety of areas, including noise, vibration, visual and aesthetics, parks, trails, neighborhoods, wildlife, habitat, electromagnetic interference, visual/privacy, displacements, parking, groundwater, and wetlands
- The Project will present safety issues, including delays to emergency vehicles at new at-grade crossings
- The Project is not needed because transit travel times are fine as they are, or will be due to forthcoming changes in transportation and technology (e.g., telecommuting)
- The Project will lead to construction impacts
- The presence of compressible soils, which could make construction of the Project challenging and more expensive

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project.*

In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.

As noted in Theme T, "Concerns About Costs and Schedule," the Project's capital cost estimates were updated to reflect design adjustments made since publication of the Draft EIS. Currently, the Project (without locally requested capital investments) is estimated to cost $1.791 billion in year-of-expenditure dollars (see Sections 2.2 and 7.1 of the Final EIS for updated capital cost estimates in base-year and year-of-expenditure dollars, respectively). The project will be funded using the following sources: FTA Capital Investment Grant – 50 percent (proposed); State of Minnesota – 9.2 percent; Counties Transit Improvement Board – 27.7 percent; HCRRA – 9.2 percent; other local funding – 3.6 percent; Federal Surface Transportation Program – 0.2 percent. Increased taxes

are not anticipated as a funding source for the Project. Overall, the Project has merited a Medium-High rating from FTA (see Section 7.4). This rating considers various factors including costs and benefits.

The Project will result in positive economic gains in the form of increased wages and spending, creating long-term jobs and additional earnings as a result of Operations and Maintenance (O&M) expenditures. The Project is expected to add a total of 160 full-time equivalent jobs associated with operations of facilities and light rail vehicles. The Project will also increase O&M spending by $39.5 million (2016) annually over the No Build alternative. For the Minneapolis-St. Paul-Bloomington MSA, the effect of local O&M spending for the Project will result in an estimated $34.5 million in local annual wages and salaries, compared to the No Build Alternative (in 2040). Based on the economic analysis documented in Section 3.2 of the Final EIS, the local wages and salaries will support 172 jobs in the local economy.

The short-term effect of construction spending associated with the Project will result in an estimated $1.3 billion in overall economic activity (in year-of-expenditure dollars) for the Minneapolis-St. Paul-Bloomington MSA over the construction period. Construction-related spending is expected to provide regional economic benefits by generating approximately $475 million in additional wages and salaries for households and by creating approximately 10,600 person-year jobs for all industries in the Minneapolis-St. Paul-Bloomington MSA during the construction phase of the Project. A person-year job is defined as a job for one person for one year; if a job employs a single person for three years, it would equal three person-year jobs.

In addition, the Project is likely to contribute to a range of factors that could lead to increased development around proposed stations. This development could result in positive economic gains in the form of wages and spending. For additional information on wages and spending, refer to Theme M.1.

Ridership forecasts were derived from the 2040 TPP and are expected to be approximately 32,680 transit rides on the Project and 13,240 new system-wide transit trips on an average weekday. Further, the Project will provide a new, more reliable transit choice with reduced travel times and access to other existing and planned transit services across the corridor. It will connect communities to each other and to important community facilities, as well as providing access to housing and employment centers throughout the Project area. Importantly, the Project is designed to effectively serve both commute and reverse-commute markets in the corridor and extending outside of the corridor through other transit connections. Congestion is forecast to worsen by 2040, based on results within the Council's planning efforts for 2040. With the expected traffic increases caused by population and employment growth, the Council's 2040 Transportation Policy Plan (TPP) states the result will be more intense and more extensive congestion on the region's trunk highways, county highways, and city streets by 2040. According to the Metropolitan Council Transportation Division, travel times from Eden Prairie for cars are expected to increase by over 10 percent, from 30 minutes in 2000 to 34 minutes in 2040 during peak periods. For example, an automobile trip during the afternoon peak period from downtown Minneapolis or St. Paul to Eden Prairie is estimated to increase by approximately 9 percent and 15 percent by 2040, respectively, compared to existing conditions (changing from approximately 27.0 minutes to 29.5 minutes and from 35.3 to 60.1 minutes, respectively). Further, a reverse commute from Minnetonka and Eden Prairie to North Minneapolis during the afternoon peak period in 2040 is projected to increase by approximately 15 percent and 18 percent, respectively (changing from 25.7 minutes to 29.7 minutes and from 30.8 minutes to 36.4 minutes, respectively).

Due to a forecast reduction in regional vehicle miles traveled (VMT) under the Project, compared to the No Build Alternative (a reduction of 113,000 VMT), air pollution from mobile transportation sources will be slightly reduced in 2040. The reduction in vehicle miles traveled will also result in a reduction in regional energy use of approximately 109 billion Btus per year. The Project includes planned roadway improvements that will accommodate the introduction of the light rail alignment and related facilities and increase roadway capacity to respond to anticipated demand to use of one or more roadways at a specific locations (e.g., additional turn or through lanes, additional traffic signals). As noted in Section 4.2.3, roadway and intersection improvements included in the Project are listed and illustrated in the Preliminary Engineering Plans (see Appendix E). For a detailed description of the traffic operations analysis for the Project, including a description of the location of traffic movements with queuing issues, refer to the PEC-West Traffic Memorandum (2015) and PEC-East Traffic Memorandum (2015). In summary, of the 75 intersections analyzed:

- *No intersections that would operate at LOS A to D under the No Build Alternative will operate at LOS E or F under the Project.*
- *Three intersections that would operate at LOS E or F under the No Build Alternative will be improved to LOS A through D under the Project.*
- *Six intersections that would operate at LOS E or F under the No Build Alternative will continue to operate at LOS E or F under the Project.*

The Final EIS includes 17 environmental resource areas that were evaluated, each of which provides an overview of applicable methods and regulations, a description of the affected environment, an analysis of the environmental consequences that will result from the Project, and identification of mitigation measures to address adverse environmental impacts that will be committed to in the Record of Decision. The analysis of impacts

in each section covers long-term and short-term (construction) direct and indirect impacts, with the exception of Section 3.17, which addresses cumulative impacts related to the Project. Please review Table ES-1 for the list of environmental impacts and mitigation by environmental category.

As described in Section 4.6 of the Final EIS, based on the analysis and incorporation of identified safety and security-related design and operational elements into the Project, the Project will not adversely impact safety and security within the study area. Key safety and security measures described above that will be implemented under the Project include:

- *Design of freight rail modifications to meet applicable safety design standards*
- *Adherence to the Project's Safety and Security Management Plan and Metro Light Rail Transit Design Criteria when designing light rail facilities and at-grade light rail crossings*
- *Continued coordination with emergency responders, including the Fire Life Safety and Security Committee Design components related to the location of light rail service operating in the vicinity of freight rail service*
- *Implementation of design and operational safety measures for the proposed light rail tunnels.*

Section 4.6.4.2 describes short-term (construction) safety and security mitigation measures that will be implemented by the Project.

For instances where the roadway crossings will include crossings for sidewalks and trails, such as 21st Street in the Kenilworth Corridor, crossings and controls will be designed to maintain pedestrian and bicycle safety and will include space between the freight tracks and the light rail tracks to allow sidewalk and trail users to have refuge space in the event of a freight and light rail train passing simultaneously. In addition, these crossings will be equipped with detectable warnings and fences lining the crossing paths to bring attention to the freight or light rail crossing locations. The design of specific pedestrian and bicycle safety features will be made during Engineering and finalized prior to construction.

Metro Transit Police currently provide roving security for the bus transit facilities within the Metro Transit service area (i.e., 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 METRO Blue Line and METRO Green Line LRT lines to provide security at stations and on rail cars and will provide similar services for the Project and will patrol the area surrounding 21st Street Station with the Project. In addition, the Project will coordinate with MPRB Police regarding safety and security issues, particularly at 21st Street Station. This coordination will occur through the FLSSC, as described in the Project's SSMP (Council, 2014).

See the following within Appendix M, Comments and Responses on the Supplemental Draft EIS, for additional information concerning the Project's safety and security elements and assessment: Master Response 3: General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor; and Master Response 11: Safety concerns related to hazardous freight rail cargo within the Kenilworth Corridor.

Chapter 1, Purpose and Need, outlines the various existing and forecasted conditions that warrant consideration of transit improvements in the corridor, including the four primary need factors that are important for people who live and work in the southwest metropolitan area: (1) declining mobility; (2) limited competitive, reliable transit options for choice riders and people who rely on public transportation, including reverse-commute riders; (3) need to maintain a balanced and economically competitive multimodal freight system; and (4) regional/local plans calling for investment in additional light rail transit projects in the region. As noted in Section 1.5, the region will continue to experience increasing levels of traffic congestion, as a result of strong residential and employment growth and limited funding for continued expansion of the region's principal arterial highway system. As described in Section 8.1 of the Final EIS, the Project will substantially improve both access and mobility to jobs and activity centers and it will substantially increase access and mobility to jobs in the Corridor that are west and south of the Minneapolis central business district. Further, the Project will provide a new grade-separated transitway that reduces transit travel times and increases reliability, especially between the major activity centers and in the reverse commute direction. Finally, the areas near the Project's proposed light rail stations are expected to experience additional mixed-use development consistent with regional and local plans.

The Project's design and cost estimate are based on recent geology and soils studies, including numerous soil borings performed by the Council throughout the Project area. The results of those studies, including results from areas that have compressible soils, have been considered in the Project's design (see Appendix E of the Final EIS). Documentation of those studies can be found in the Southwest LRT Geology and Groundwater Evaluation Supporting Documentation Technical Memorandum *(Council, 2015f – see Appendix C for instructions on how to reference this document).*

Construction activities are described in Chapter 2 of the Final EIS. Major construction is expected to span approximately three years. The Council will develop a Construction Mitigation Plan and construction communication plan, which will be implemented prior to and during construction. The purpose of the Construction Communication Plan is to prepare Project-area residents, businesses, and commuters for construction; listen to concerns; and develop plans to minimize harmful or disruptive effects. The plan may include:

- *Issue and distribute regular construction updates;*
- *Provide advance notice of roadway closures, driveway closures, and utility shutoffs;*
- *Conduct public construction meetings;*
- *Establish a 24-hour construction hotline;*
- *Prepare communication materials with applicable construction information*
- *Address property access issues; and*
- *Assign staff to serve as liaisons between the public and contractors during construction (Source: Council, 2015a. Communications and Public Involvement Plan (CPIP). See Final EIS, Appendix C for instructions on how to access this document)*

Other construction-related impacts and mitigation measures that will be incorporated into the Project are summarized in Table ES-1 of the Executive Summary.

C. Opposition to relocation of freight rail out of the Kenilworth Corridor

Summary of Comments: FTA and the Council received approximately 500 comments in opposition to the relocation of freight rail operations from a portion of the Bass Lake Spur and Kenilworth Corridor to sections of the MN&S Spur and Wayzata Subdivision through the City of St. Louis Park, which would have occurred under alternatives LRT 1A, LRT 3A, LRT 3C-1, and LRT 3C-2 as described in Chapter 2 of the Draft EIS. Those commenters included: the Cities of St. Louis Park, Granite Falls, Arlington, Bird Island, Buffalo Lake, Hector, Milan, Montevideo, Morton, Norwood Young America, Olivia, Plato, Stewart, Winthrop, Glencoe; the Counties of Carver, McLeod, Redwood, Renville, Roberts, Sibley, Wright; Scott County Board of Commissioners; St. Louis Park Public Schools; Minnesota Valley Regional Rail Authority; St. Louis Park Charter Commission; Bassett Creek Valley Redevelopment Oversight Committee; Upper Minnesota Valley Regional Development Commission; Glencoe Area Chamber of Commerce; Kiwanis Club, Canadian Pacific, and the Twin Cities & Western Railroad TC&W; and businesses, community groups, non-profit organizations, and the general public. The comments included opposition to the relocation of freight rail based on the findings in the Draft EIS, as well as revised or additional findings cited by the commenters to argue against the relocation of freight rail.

In particular, commenters expressed opposition to the findings summarized in Chapter 11 of the Draft EIS, which evaluated the range of alternatives in the Draft EIS based on the Project's Goals and Objectives, concluding at that time that LRT 3A, which included freight rail relocation, would best meet the Project's Purpose and Need Statement (as expressed by the goals of improving mobility, providing a cost-effective and efficient travel option, preserving the environment, protecting quality of life, supporting economic development, and developing and maintaining a balanced and economically competitive multimodal freight system). Many of the commenters that opposed the relocation of freight rail noted that they were not opposed to the Project in general, or even supported it (see Theme A); or that they supported another alternative that would not entail the relocation of freight rail, for example relocating the existing bicycle and pedestrian trail from the Kenilworth Corridor, rather than freight rail (see Theme G).

Commenters articulated a wide range of reasons for their opposition to the relocation of freight rail, including the following:

- That the capital cost of freight rail relocation would be much higher than represented in the Draft EIS (e.g., related mitigation measures were not included in the design or cost) and if calculated correctly would be much higher than the cost of co-locating freight rail in the Kenilworth Corridor (see also Theme T);
- That the Project's funding plans would not be feasible given the correct costs (see prior bullet) and increased freight rail operating costs due to the effect that freight rail relocation would have on freight rail operations would have to be offset (see also Theme T);
- That the Project's conceptual design of freight rail modifications in the Draft EIS for freight rail relocation was not feasible from a freight rail operations and safety perspective and modifications to make the design feasible and safe would increase anticipated costs and impacts over those disclosed in the Draft EIS;
- That the relocation of freight rail operations from a portion of the Bass Lake Spur and Kenilworth Corridor to sections of the MN&S Spur and Wayzata Subdivision through portions of St. Louis Park would substantially increase the travel time of freight trains operated by TC&W, thereby increasing TC&W's operating cost and reducing its market competitiveness, as well as increasing shipping costs for some of its customers;
- That adverse impacts (short-term and long-term direct, indirect, and cumulative) to the businesses and residents adjacent to the route of freight trains that would be relocated would be significant and greater when compared to co-location (including those affecting land use, economic factors, community cohesion, environmental justice, displacements/relocations, parks, historic properties, visual impacts, noise impacts, vibration impacts, hazardous and contaminated material, air quality, transit, roadways, and bicycle and pedestrian facilities), due to the increased frequency of freight trains through the affected community and/or to the long-term physical modifications within the affected community (e.g., to accommodate the

new freight rail connections between the Bass Lake Spur and MN&S Spur and between the MN&S Spur and the Wayzata Subdivision);

- That the relocation of freight trains would redirect freight rail traffic to the Dan Patch Line and impacts of that are missing from the Draft EIS;
- That the relocation of freight trains would jeopardize the safety of the adjacent community through the re-routing of trains within close proximity of schools, residences, and businesses, including freight trains carrying toxic and/or explosive cargo;
- That more frequent and longer freight trains would operate on the MN&S Spur, which would substantially increase traffic delays at at-grade crossings, increase road congestion and delay emergency vehicles;
- That they had concerns about the methods, assumptions, and data sources used for a variety of environmental and transportation categories, which call into question the validity of the metrics used in the Draft EIS to evaluate and compare the alternatives, including those that would lead to the relocation of freight rail (see Themes M, N, O, and P);
- That they had concerns about the NEPA and the public and agency involvement processes used to reach the findings and determinations in the Draft EIS relative to the relocation or co-location of freight rail (see Theme L);
- That City of St. Louis Park mitigation requests related to freight rail relocation were ignored;
- That the inclusion of improving of the state's freight rail system as a Project Need and Goal was inappropriate (see Theme K); and,
- That there is no binding agreement requiring the removal of existing freight rail operations from a portion of the Bass Lake Spur and Kenilworth Corridor.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.*

The Final EIS describes the process the Council used to develop and evaluate design adjustments since completion of the Draft EIS, including potential freight rail modifications, that were evaluated in the Supplemental Draft EIS. The Draft EIS evaluated two alternatives for incorporating freight rail modifications into the LPA. Under LRT 3A, TC&W freight trains currently operating on a portion of the Bass Lake Spur and in the Kenilworth Corridor would be rerouted to the MN&S Spur and Wayzata Subdivisions. Under LRT 3A 1, TC&W freight trains would continue to operate in the Bass Lake Spur and Kenilworth Corridor. LRT 3A and LRT 3A-1 are also referred to in the Draft EIS as freight rail "relocation" and "co-location," respectively. As noted in the Draft EIS and Supplemental Draft EIS, LRT 3A and LRT 3A-1 would provide the same transit service, with differing freight rail options, therefore the LPA is incorporated within both LRT 3A and LRT 3A 1.

After the close of the Draft EIS public comment period, the Council and FTA reviewed the comments received on the Draft EIS. Of note was the U.S. Army Corps of Engineers (USACE) designation of LRT 3A-1 (co-location) as the

least environmentally damaging practicable alternative. The FTA and Council were required to consider the co-location alternative in greater detail to satisfy the requirements under the Clean Water Act (CWA). The USACE is a cooperating agency under NEPA for the Project and must determine whether the Project complies with the CWA Section 404(b)(1) (Guidelines). The USACE stated "as proposed [in the Draft EIS] the chosen LPA, alternative LRT 3A, would not qualify as the least environmentally damaging practicable alternative, which as proposed would be alternative LRT 3A-1 (co-location)."

In addition, TC&W, the freight carrier operating on the existing freight rail line within the co-location segment of the Kenilworth Corridor, expressed concern that LRT 3A (freight rail relocation) would likely result in increased costs for TC&W to operate its trains to and from shippers in greater Minnesota and result in operational issues related to track alignments, and therefore TC&W and its shippers were opposed to LRT 3A as presented in the Draft EIS. TC&W is a private freight rail operator with operating rights within the Kenilworth Corridor, granted by a Trackage Rights Agreement (TRA) executed in 1998. As described in Section 5 of the TRA, terminating or vacating the freight rail service along the Kenilworth Corridor requires agreements by either TC&W or the Canadian Pacific (Soo Line) or after a new connection between the current operating route of TC&W and the MN&S Spur becomes operational, or at such time other feasible alternative(s) satisfactory to TC&W become available and operational.

Based on the comments received on the Draft EIS and through meetings with the public, businesses, municipalities, and other groups, the Council initiated a process to develop adjustments to the Project's design. The design adjustment process included a four-step process to develop and evaluate adjustments to LRT 3A and LRT 3A-1 directly related to the following: (1) whether TC&W freight trains currently operating along the Kenilworth Corridor should be rerouted to sections of the MN&S Spur and Wayzata Subdivision; or (2) whether the TC&W freight trains should continue to operate along the Bass Lake Spur and Kenilworth Corridor as they currently do. Following is a brief description of the process used to develop and evaluate adjustments to LRT 3A and LRT 3A-1 (see Section 2.2 and Appendix F of the Final EIS for additional detail):

- *The first step evaluation included the development of a relatively wide range of adjustments to the light rail improvements and freight rail-related modifications under the two freight rail operating scenarios (relocation and co-location), focusing on meeting key design parameters, while avoiding or minimizing adverse impacts and minimizing Project costs. Based on comments received from the public, stakeholders, and participating agencies and on various evaluation measures, the potential design adjustments were narrowed to one freight rail relocation and two co-location adjustments.*
- *The second step evaluation included a detailed analysis of the potential adjustments identified in the first step evaluation, narrowing to one design adjustment under each of the two freight rail operating scenarios (relocation and co-location).*
- *The third step evaluation included the refinement of the two second step design adjustments, addressing public and agency comments, followed by a detailed assessment of the tradeoffs between the two potential adjustments remaining after the second-step evaluation. As a result of the third step evaluation, the Freight Rail Relocation Brunswick Central design adjustment, which was developed in coordination with TC&W to meet their engineering standards, was dismissed from further study and the Shallow LRT Tunnel – Over Kenilworth Lagoon adjustment was advanced into the fourth step evaluation (see Exhibit 2.3-9).*
- *The fourth step evaluation involved three primary components: (1) preparation of an independent study that identified the MN&S North design adjustment for further evaluation; (2) development and evaluation of Shallow Cut-and-Cover Tunnel design variations; and (3) identification of additional design adjustments reflected in a memorandum of understanding between the Council and the City of Minneapolis.*

In December 2013, as mandated by Governor Dayton, the Council commissioned an independent study to analyze and evaluate the potentially feasible alternatives for Southwest LRT, including freight rail operations. This study evaluated previously identified design alignments and considered new design adjustments that would meet the Project's purpose and need. The results of the study were incorporated into the fourth step of the evaluation process discussed above. The independent study evaluated eight previously identified route options, two additional concepts developed by the Council, and one additional concept developed by the firm commissioned to

conduct the study. None of the design options were found to be satisfactory by TC&W from an operational or safety standpoint (refer to Appendix F of the Final EIS for additional information and Appendix D for how to access the independent study). In addition, abandonment and discontinuance of rail lines is governed by federal law (49 U.S.C. § 10903), and neither the FTA nor the Council have authority over freight rail service in the Kenilworth Corridor on a temporary or permanent basis. The TRA gives TC&W and CP the right to transport freight cargo over the Kenilworth Corridor, without restriction as to the type of freight cargo. In light of the broad statutory preemptions enacted by the US Congress in the Interstate Commerce Commission Termination Act of 1995, 49 U.S.C. § 10501(b) and the Federal Rail Safety Act, 49 U.S.C. §§ 20101-20153, the Council, HCCRA, the City of Minneapolis, the State and FTA cannot compel TC&W to relocate their operations. The co-location alternative selected by the Council accordingly does not result in any change to current rail operations. See CSX Transp., Inc. v. Williams, 406 F.3d 667 (DC Cir. 2005). (An ordinance of the District of Columbia to restrict the movement of hazardous material train operations through the city was enjoined as an undue burden on commerce and accordingly preempted by federal law.)

Based on the analysis, committee recommendations, and public comments received during the process, the Council adopted in April 2014 freight rail co-location and the Shallow LRT Tunnel – Over Kenilworth Lagoon alignment as part of the LPA. A Supplemental Draft EIS was developed to further evaluate the adjustments made to LRT 3A-1. Relative to the other options considered, the Shallow LRT Tunnel – Over Kenilworth Lagoon (i.e., LRT 3A-1 – co-location) design adjustment would best balance costs, benefits, and environmental impacts, and best meet the Project's Purpose and Need. See Section 8.2 for a description of the determination that the LPA with freight rail retained in the Kenilworth Corridor (LRT 3A-1) would be the Project's environmentally preferred alternative, rather than the LPA with the relocation of freight rail (LRT 3A).

As a result of this design adjustment process, the USACE stated "The project scope as identified by the Council on April 9, 2014, which would retain existing freight rail service in the Kenilworth Corridor, is consistent with USACE's comment letter from December 20, 2012, stating that LRT 3A-1, which would also have retained existing freight rail service in the Kenilworth Corridor, meets the USACE project purpose and has the least amount of impact to aquatic resources . . ." (page 5). LRT 3A-1 was advanced based on USACE's identification of LRT 3A-1 as the LEDPA.

In addition to the evaluation process described above, Minnesota Governor Mark Dayton requested that the Council review a range of lower cost transit options, including the No Build Alternative, Enhanced Bus, and Bus Rapid Transit (BRT) Alternatives (see http://metrocouncil.org/getdoc/73777f40-2fd1-48c8-af49-a62531e581c2/Presentation.aspx). In summary, the CMC reviewed the analysis of lower cost transit options and dismissed these alternatives as they do not meet the Project's Purpose and Need. The prior evaluation of these alternatives is also documented in Section 2.2 of the Final EIS, which provides the rationale for why the Enhanced Bus and BRT alternatives were previously dismissed from further study.

In summary, with the changes made during the design adjustment process and in comparison to freight rail relocation (LRT 3A), freight rail co-location (LRT 3A-1) would:

- *result in less harm to Section 4(f) protected properties;*
- *maintain regional freight rail connectivity;*
- *minimize reconstruction of freight rail tracks and construction-related disruptions;*
- *avoid diminishing the potential for transit oriented development around light rail stations located in the vicinity of freight rail tracks;*
- *avoid the displacement of any residents or businesses in the Kenilworth Corridor due to project construction;*
- *include bicycle and pedestrian improvements that would provide connections between light rail stations and their surrounding neighborhoods; and,*
- *minimize the displacement of wetlands and satisfy the concerns of the USACE.*

Based on the steps taken and process followed to identify LRT 3A-1 as the environmentally preferred alternative, the Final EIS does not include a detailed analysis on the impacts from the relocation of freight rail, as part of LRT 3A, for the following environmental categories as identified in comment letters:

- *Land use*
- *Economic activity, including property values and effects on businesses*
- *Neighborhoods and community*
- *Acquisitions and displacements*
- *Cultural resources*
- *Parks, recreation areas, and open spaces*
- *Visual quality*
- *Geology and groundwater resources*
- *Surface water resources (i.e., wetlands, stormwater, and floodplains)*
- *Ecosystems*
- *Air quality and greenhouse gases*
- *Noise*
- *Vibration*
- *Hazardous and contaminated materials*
- *Electro-magnetic fields, Electro-magnetic interference and utilities*
- *Energy*
- *Cumulative Impacts*
- *Transit*
- *Roadways and traffic*
- *Parking*
- *Pedestrian and bicycle*
- *Safety and security*

D. Opposition to co-location of freight rail and light rail in the Kenilworth Corridor

Summary of Comments: The Council and FTA received approximately 80 comments on the Draft EIS voicing opposition to the co-location of freight rail and light rail in the Kenilworth Corridor (i.e., LRT 3A-1). Those commenters included the following: MPRB, City of Minneapolis, businesses, community groups, non-profit organizations, and the general public. Several of the commenters stated their opposition to the co-location of freight rail and light rail in the Kenilworth Corridor (i.e., LRT 3A-1) and/or their support of the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor or another alternative, such as LRT 2C-1/2, without stating their reasons. Others provided one or several reasons supporting their position. The reasons cited for opposition to LRT 3A-1 and the co-location of freight rail and light rail in the Kenilworth Corridor include the following (usually compared to LRT 3A, freight rail relocation):

- That LRT 3A-1 (co-location) was not identified in the Draft EIS as the environmentally preferred alternative and that it does not meet various aspects of the Project's Purpose and Need Statement
- Impacts to parks and recreation areas in the vicinity of the Kenilworth Corridor, due to the greater right-of-way needs to accommodate both freight rail and light rail in the same corridor
- Impacts to the Kenilworth Trail that would parallel the proposed light rail alignment and impacts to other trails that intersect the Kenilworth Corridor, noting that right-of-way constraints and greater right-of-way needs could lead to substandard facilities, and specific concerns about bicycle and pedestrian safety and connections at West Lake Street
- Traffic impacts (e.g., delay, congestion) associated with shared freight rail and light rail at-grade road crossings
- The safety of continuing freight rail operations in the Kenilworth Corridor, especially co-located with light rail, including access points to parks and the potential for hazardous material spills
- Conflicts with freight rail operations at the proposed Beltline and West Lake Street station areas that can limit development potential around those stations, especially transit oriented development
- The potential for residential displacements, citing that the 60 residential displacements estimated to result from LRT 3A-1 adjacent to the Kenilworth Corridor, 57 townhome parcels and three single-family homes
- The potential for a drop in the value of properties that are adjacent to the Kenilworth Corridor
- Visual impacts within and near the Kenilworth Corridor, including greater adverse impacts to the "park-like setting" of the corridor due to the extra width required to accommodate both freight rail and light rail
- Increased noise impacts to surrounding land uses, including residences, trails, and parks, due to the additive and compounding impacts of freight rail and light rail trains, horns, and bells
- Impacts to water resources, wildlife, and habitat within the Kenilworth Corridor
- Past agreements were made with the expectation that the freight rail alignment within the Kenilworth Corridor would be temporary and that freight rail would be relocated from a portion of the Bass Lake Spur and the Kenilworth Corridor onto the TC&W Spur and Wayzata Subdivision when the Golden Auto National Lead site for hazardous materials was remediated (see also Appendix M, Master Response 6: Freight rail operations should not be considered an existing condition and should be excluded from the baseline data, for related information and Master Response 10: Rationale for incorporating freight rail co-location into the Project)

Response: *The Final EIS describes the process the Council used to develop and evaluate design adjustments since completion of the Draft EIS, including potential freight rail modifications that were evaluated in the Supplemental Draft EIS. The Draft EIS evaluated two alternatives for incorporating freight rail modifications into*

the LPA. Under LRT 3A, TC&W freight trains currently operating on a portion of the Bass Lake Spur and in the Kenilworth Corridor would be rerouted to the MN&S Spur and Wayzata Subdivisions. Under LRT 3A-1, TC&W freight trains would continue to operate in the Bass Lake Spur and Kenilworth Corridor. LRT 3A and LRT 3A-1 are also referred to in the Draft EIS as freight rail "relocation" and "co-location," respectively. As noted in the Draft EIS and Supplemental Draft EIS, LRT 3A and LRT 3A-1 would provide the same transit service, with differing freight rail options, therefore the LPA is incorporated within both LRT 3A and LRT 3A-1.

After the close of the Draft EIS public comment period, the Council and FTA reviewed the comments received on the Draft EIS. Of note was the U.S. Army Corps of Engineers (USACE) designation of LRT 3A-1 (co-location) as the least environmentally damaging practicable alternative. The FTA and Council were required to consider the co-location alternative in greater detail to satisfy the requirements under the Clean Water Act (CWA). The USACE is a cooperating agency under NEPA for the Project and must determine whether the Project complies with the CWA Section 404(b)(1) (Guidelines). The USACE stated "as proposed [in the Draft EIS] the chosen LPA, alternative LRT 3A, would not qualify as the least environmentally damaging practicable alternative, which as proposed would be alternative LRT 3A-1 (co-location)."

In addition, TC&W, the freight carrier operating on the existing freight rail line within the co-location segment of the Kenilworth Corridor, expressed concern that LRT 3A (freight rail relocation) would likely result in increased costs for TC&W to operate its trains to and from shippers in greater Minnesota and result in operational issues related to track alignments, and therefore TC&W and its shippers were opposed to LRT 3A as presented in the Draft EIS.TC&W is a private freight rail operator with operating rights within the Kenilworth Corridor, granted by a Trackage Rights Agreement (TRA) executed in 1998. As described in Section 5 of the TRA, terminating or vacating the freight rail service along the Kenilworth Corridor requires agreements by either TC&W or the Canadian Pacific (Soo Line) or after a new connection between the current operating route of TC&W and the MN&S Spur becomes operational, or at such time other feasible alternative(s) satisfactory to TC&W become available and operational.

Based on the comments received on the Draft EIS and through meetings with the public, businesses, municipalities, and other groups, the Council initiated a process to develop adjustments to the Project's design. The design adjustment process included a four-step process to develop and evaluate adjustments to LRT 3A and LRT 3A-1 directly related to the following: (1) whether TC&W freight trains currently operating along the Kenilworth Corridor should be rerouted to sections of the MN&S Spur and Wayzata Subdivision; or (2) whether the TC&W freight trains should continue to operate along the Bass Lake Spur and Kenilworth Corridor as they currently do.

In October 2013, as directed by the Chair of the Metropolitan Council, in coordination with Minnesota Governor Mark Dayton, the Council commissioned an independent study to conduct a review of existing and potential freight rail relocation alternatives. The independent study evaluated eight previously identified route options, two additional concepts developed by the Council, and one additional concept developed by the firm commissioned to conduct the study. None of the design options were found to be satisfactory by TC&W from an operational or safety standpoint (refer to Appendix F of the Final EIS for additional information and Appendix D for how to access the independent study). The results of the study were incorporated into the fourth step of the evaluation process. In addition, abandonment and discontinuance of rail lines is governed by federal law (49 U.S.C. § 10903), and neither the FTA nor the Council have authority over freight rail service in the Kenilworth Corridor on a temporary or permanent basis. The TRA gives TC&W and CP the right to transport freight cargo over the Kenilworth Corridor, without restriction as to the type of freight cargo. In light of the broad statutory preemptions enacted by the US Congress in the Interstate Commerce Commission Termination Act of 1995, 49 U.S.C. § 10501(b) and the Federal Rail Safety Act, 49 U.S. C. §§ 20101-20153, the Council, HCRRA, the City of Minneapolis, the State and FTA cannot compel TC&W to relocate their operations. The co-location alternative selected by the Council accordingly does not result in any change to current rail operations. See CSX Transp., Inc. v. Williams, 406 F.3d 667 (DC Cir. 2005). (An ordinance of the District of Columbia to restrict the movement of hazardous material train operations through the city was enjoined as an undue burden on commerce and accordingly preempted by federal law).

Based on the analysis, committee recommendations, and public comments received during the process, the Council adopted in April 2014 freight rail co-location and the Shallow LRT Tunnel – Over Kenilworth Lagoon (i.e., LRT 3A-1 – co-location) alignment as part of the LPA. A Supplemental Draft EIS was developed to further evaluate the adjustments made to LRT 3A-1. Relative to the other options considered, the Shallow LRT Tunnel – Over Kenilworth Lagoon design adjustment would best balance costs, benefits, and environmental impacts, and best meet the Project's Purpose and Need. See Section 8.4 for a description of the determination that the LPA with freight rail retained in the Kenilworth Corridor (LRT 3A-1) would be the Project's environmentally preferred alternative, rather than the LPA with the relocation of freight rail (LRT 3A).

As a result of this design adjustment process, the USACE stated "The project scope as identified by the Council on April 9, 2014, which would retain existing freight rail service in the Kenilworth Corridor, is consistent with USACE's comment letter from December 20, 2012, stating that LRT 3A-1, which would also have retained existing freight rail service in the Kenilworth Corridor, meets the USACE project purpose and has the least amount of impact to aquatic resources . . ." (page 5). LRT 3A-1 was advanced based on USACE's identification of LRT 3A-1 as the LEDPA.

In addition to the evaluation process described above, Governor Dayton requested that the Council review a range of lower cost transit options, including the No Build Alternative, Enhanced Bus, and Bus Rapid Transit (BRT) Alternatives (see http://metrocouncil.org/getdoc/73777f40-2fd1-48c8-af49-a62531e581c2/Presentation.aspx). In summary, the CMC reviewed the analysis of lower cost transit options and dismissed these alternatives as they do not meet the Project's Purpose and Need. The prior evaluation of these alternatives is also documented in Section 2.2 of the Final EIS, which provides the rationale for why the Enhanced Bus and BRT alternatives were previously dismissed from further study.

In summary, with the changes made during the design adjustment process and in comparison to freight rail relocation (LRT 3A), freight rail co-location (LRT 3A-1) would:

- *result in less harm to Section 4(f) protected properties;*
- *maintain regional freight rail connectivity;*
- *minimize reconstruction of freight rail tracks and construction-related disruptions;*
- *avoid diminishing the potential for transit oriented development around light rail stations located in the vicinity of freight rail tracks;*
- *avoid the displacement of any residents or businesses in the Kenilworth Corridor due to Project construction;*
- *include bicycle and pedestrian improvements that would provide connections between light rail stations and their surrounding neighborhoods; and,*
- *minimize the displacement of wetlands and satisfy the concerns of the USACE.*

Regarding past agreements to relocate freight rail from a portion of the Bass Lake Spur and the Kenilworth Corridor, this Project does not control the future disposition of freight rail operations within the Kenilworth Corridor. Freight rail service in the Kenilworth Corridor can only be terminated or vacated by the freight rail operators holding the trackage rights to operate in this segment—CP and TC&W. In addition, there are no public plans or policy documents stating the future removal of freight rail service in the Kenilworth Corridor. Freight rail has been in operation in the Kenilworth Corridor for nearly 20 years. Freight rail operations within the Kenilworth Corridor are subject to many factors, including Surface Transportation Board regulations that govern freight rail commerce and local, regional, and national market forces that effect freight rail operations and facility development, both of which are outside of the scope of influence of the Project. Furthermore, the permanency of freight rail operations in the Kenilworth Corridor is outside the scope of this Project. The Project is making minor infrastructure modifications to freight rail for very limited areas, mainly to facilitate the movement of light rail transit. As noted in Section 5 of the trackage rights agreement between CP/TC&W and Hennepin County Regional Railroad Authority, terminating or vacating the freight rail service along the Kenilworth Corridor is to be decided by the freight rail operators at their discretion, whenever a feasible alternative route is made available for their operation. Neither the FTA nor the Council can facilitate freight rail

service in the Kenilworth Corridor on a temporary or permanent basis. Following are responses to commenter's rationale for opposition to co-location of freight rail and light rail in the Kenilworth Corridor:

- ***Recreation and Historic Properties.*** *FTA has determined that the Project will result in the least overall harm, in furtherance of the Section 4(f) statute's preservation purpose. Further, FTA has determined that there is no reasonable and prudent alternative to the Project's use of the Kenilworth Lagoon/GRHD and that all possible planning to minimize harm to the properties has occurred. Further, FTA, with written concurrence from the applicable officials with jurisdiction, has determined that the Project will result in Section 4(f)* de minimis *impacts to other properties in the vicinity of the Kenilworth Corridor, including the Kenilworth Channel/Lagoon, and those* de minimis *impacts will not adversely affect the activities, features, and attributes that qualify those properties for protection (see also Theme S, Concerns about Section 4(f) and Section 106 Properties, and Master Response 4, Concern about inadequate evaluation of potential impacts to the Grand Rounds Historic district).*
- ***Trails and Pedestrian Crossing.*** *The Project will maintain the Kenilworth Trail within the Kenilworth Corridor, as well as other trails connecting to and across the Kenilworth Corridor, with relatively minor changes to facilitate implementation of light rail in the corridor. The Project will maintain all current existing official trail connections in the Kenilworth Corridor (see also Theme P, Concerns about Transportation System Effects). Further, the Project will provide safe and convenient pedestrian crossings of freight rail tracks at the proposed Wooddale, Beltline, and 21st Street stations, including improved bicycle and pedestrian facilities (compared to the construction of a berm for the freight rail relocation alignment in St. Louis Park that would tend to divide a residential and commercial neighborhoods). The Council, City of Minneapolis, MPRB, and Hennepin County undertook the West Lake Multimodal Transportation Study, completed in February 2016. The goal of the study was to identify opportunities to address non-motorized and motorized travel within the West Lake LRT Station area with recommendations that can be implemented as a part of the construction of the Southwest LRT or as part of other capital initiatives. The study report includes Green Line Design Recommendations that will be constructed as part of the Project, including enhanced crosswalk markings at specific intersections, and wayfinding signage. In regard to the informal pedestrian crossings near the West Lake Station, and concerns that the Project will eliminate these crossings, the study recommends a formal crossing as a long-term recommendation (to be implemented separately from the Project). The Project includes a proposed pedestrian crossing at the west end of the West Lake Station, which will cross the eastbound LRT track only. Provisions are included in the design to permit a future crossing of the westbound LRT track and the freight track, if the full crossing is pursued in the future.*
- ***Traffic.*** *As noted in Section 4.2.3, roadway and intersection improvements were incorporated into the Project to avoid new or worsened congested intersections, compared to the No Build Alternative in 2040, and the proposed improvements are reflected in the traffic operations analysis. These roadway and intersection improvements included in the Project are shown in Table E-2 and are illustrated in the Preliminary Engineering Plans (see Appendix E). For a detailed description of the traffic operations analysis for the Project, including a description of the location of traffic movements with queuing issues, refer to the PEC-West Traffic Memorandum (2015) and PEC-East Traffic Memorandum (2015). In summary, of the 75 intersections analyzed (which include intersections in the vicinity of the Kenilworth Corridor):*
  - *No intersections that would operate at LOS A to D under the No Build Alternative will operate at LOS E or F under the Project.*
  - *Three intersections that would operate at LOS E or F under the No Build Alternative will be improved to LOS A through D under the Project.*
  - *Six intersections that would operate at LOS E or F under the No Build Alternative will continue to operate at LOS E or F under the Project.*
- ***Freight Rail.*** *The Project will provide for safe operation of freight rail and light rail within the Kenilworth Corridor, including the implementation of best management practices identified through a survey of other transit agencies that currently operate light rail co-located freight rail within their systems (see also Sections 4.4 and 4.6 of the Final EIS, Theme Q, Concerns about Modifications to Freight Rail Infrastructure and Theme R, Concerns about Safety and Security in Appendix L.3, and Master Response 3, General concerns related to*

safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor, and Master Response 11, Safety concerns related to hazardous freight rail cargo within the Kenilworth Corridor, in Appendix M). The Project will help maintain efficient freight rail movements by replacing the Skunk Hollow switching wye with the Southerly Connector and modification to freight rail tracks, while avoiding adverse impacts to freight rail operations and economics (see also Theme Q, Concerns about Modifications to Freight Rail Infrastructure).

- ***Station Area Development.*** *The Project includes design refinements that will help avoid diminishing the potential for TOD around light rail stations in close proximity to freight rail tracks, including the "Swap" of light rail and freight rail in the Bass Lake Spur and the potential Beltline Station joint development project (see Section 2.1 and Chapter 10 of the Final EIS);*
- ***Displacements.*** *Due to design refinements that occurred after publication of the Draft EIS, the Project will avoid the displacement of any residents and businesses in the Kenilworth Corridor, compared to the acquisition of approximately 12 residential, 18 commercial, and two institutional parcels in St. Louis Park that would have occurred with freight rail relocation (see Section 3.3 of the Final EIS).*
- ***Property Values.*** *The Project will likely result in an overall increase in property values within the proposed light rail station areas, as well as increased and/or accelerated development within station areas, due to the improved transit assess to jobs and housing provided by the Project, with the exception of the 21st Station, due to its existing type and level of development (see also Theme M.2, Concerns about Social and Economic Impacts).*
- ***Visual.*** *The Project will avoid and minimize visual quality impacts in the Kenilworth Corridor through incorporation of the proposed light rail tunnel between West Lake Street and the Kenilworth Lagoon, thus avoiding the light rail bridge over Cedar Lake Parkway as proposed in the Draft EIS and avoiding the substantial visual impacts in St. Louis Park that would have been associated with the potential freight rail berm that would have been needed to accommodate the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor. Further, the Project will incorporate as appropriate the visual mitigation measures for the Kenilworth Corridor as described in Section 3.7 of the Final EIS.*
- ***Noise and Vibration.*** *Section 3.12, Noise, of the Final EIS provides the noise analysis for the Project. The section documents severe and moderate noise impacts caused by the Project and identifies mitigation measures for the impacts, including noise impacts in the Kenilworth Corridor. The primary avoidance measure for noise impacts within the Kenilworth Corridor is the proposed shallow LRT tunnel. Implementation of the tunnel will avoid most noise impacts compared to an at-grade LRT alignment within the same segment of the corridor. Without the tunnel, the number of noise impacts would be greater.*

  From Lake Citihomes to South Upton Avenue there will be 18 buildings with moderate noise impacts and one building with a severe noise impact without mitigation; with mitigation, there will be residual noise impacts (moderate) at five buildings (seven units at Lake Citihomes and four residences at Burnham Road North). The residences with residual moderate noise impacts do not meet the threshold for mitigation (e.g., impact does not meet 3-dB increase threshold) as defined by Council's Regional Transitway Guidelines (see Appendix D).

  Some of the noise impacts near 21st Street Station will be mitigated by the use of wayside bells instead of the routine sounding of train horns. For the residences not mitigated by the use of a wayside bell (one severe and four moderate impacts identified along Thomas Avenue South and Burnham Road North), interior noise testing will be conducted to determine if the residences meet the interior noise level criteria (defined in Appendix K). Based on the results, the Council will identify the noise mitigation to be implemented for the residences. If the interior noise level exceeds the criteria set in the Council's Regional Transitway Guidelines (Appendix D), the Council will work with property owners on applicable mitigation. This could include implementation of sound insulation, which would require approval by the property owner(s).
- ***Wetlands, Wildlife, and Habitat.*** *The Project, including co-location of freight rail and light rail in the Kenilworth Corridor, will permanently displace approximately six fewer acres of wetland compared to LRT 3A (relocation) and none of the Project's wetland displacements will be within the Kenilworth Corridor. Through the implementation of identified best management practices, the Project is not expected to have an adverse effect on state or federally protected species, including federally listed threatened and endangered species,*

bald or golden eagles, or migratory birds. While the Project will result in the removal of habitat within the Kenilworth Corridor, the impacts have been avoided or minimized as appropriate at various locations through the design adjustment process, including shifting and/or elevating the transitway alignment and associated civil improvements, and using retaining walls and ballast curbs. The Council will also continue to work with the Kenilworth Landscape Design Committee, established in May 2015. The purpose of this committee is, in part, to help ensure that landscape design will restore the natural setting, while incorporating the regional trail system, light rail, and freight rail. This group focuses on landscape design in the Kenilworth Corridor from West Lake Station to Penn Avenue Station. Furthermore, the Council retained a landscape design consultant to prepare a landscape design study for the Kenilworth Corridor, which will be implemented into the Project. See Section 9.2 of the Final EIS for additional detail on this committee. To avoid habitat fragmentation in the Regional Ecological Corridor in the Kenilworth Corridor, appropriately sized and spaced openings will be provided in the permanent safety/security barriers (fences) in the area located approximately between 21st Street Station and Penn Station, to help maintain connectivity of terrestrial habitat and allow movement of terrestrial species, primarily small mammals (see also Section 3.10 of the Final EIS).

- ***Past agreements.*** *See Appendix M, Master Response 6: Freight rail operations should not be considered an existing condition and should be excluded from the baseline data, for related information.*

E. Concerns about LRT within the Kenilworth Corridor

Summary of Comments: The Council and FTA received approximately 150 comment letters related to concerns about placement of LRT within the Kenilworth Corridor. The comments are addressed below and are organized according to 10 categories:

- Community cohesion and land use;
- Impacts to parklands, Kenilworth Trail, Cedar Lake Trail, greenspace, Section 4(f) properties, Section 6(f) properties, and historic properties;
- Impacts to the water system;
- Noise, vibration, visual quality, and privacy impacts;
- Hazardous and contaminated materials;
- Health impacts near electromagnetic fields and overhead catenary wires;
- Continuation of trails near LRT crossings and trail safety;
- Various impacts associated with the proposed light rail bridge over Cedar Lake Parkway;
- Safety and security; and
- Other concerns.

Those commenters included the cities of Minneapolis and St. Louis Park, MPRB, businesses, community groups, non-profit organizations, and the general public. MPRB comments about impacts to Section 4(f) properties, parklands, trails, and opposition to the co-location alternative presented in the Draft EIS are responded to under Themes S, N, P and D, respectively.

Commenters had a wide range of concerns specific to the Kenilworth Corridor that are addressed throughout this section. Commenters stated preferences for other alignments or alternatives, including tunnels, trenches, and routing the proposed light rail alignment along the Midtown Greenway or another route through Minneapolis. The City of St. Louis Park stated that relocating the Kenilworth Trail to make room for co-locating freight rail and light rail in the Kenilworth Corridor should be evaluated. Other commenters asserted that the Draft EIS underestimated impacts, that additional analysis was needed to identify impacts including impacts on quality of life, that additional analysis was needed to identify mitigation measures, and that the environmental impact evaluation should focus more on the Kenilworth Corridor.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project.*

In particular, the design adjustments and freight rail modifications incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Final EIS analysis is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS, which incorporates design adjustments and freight rail modifications made since publication of the Draft EIS. Specifically within the Kenilworth Corridor, a shallow light rail tunnel will be constructed between West Lake Street and south of the Kenilworth Lagoon. With the shallow tunnel, light rail vehicles will go under Cedar Lake Parkway; therefore, an LRT bridge over Cedar Lake Parkway is no longer needed. Freight rail operations will

remain at-grade across Cedar Lake Parkway. The alternative selection process and design adjustment process are documented in Chapter 2 and Appendix F in the Final EIS.

Planning for the Project considered several route options within Minneapolis other than the Kenilworth Corridor. Two of these options (3C-1 and 3C-2) called for routing LRT along the Midtown Greenway (29th Street) and Nicollet Avenue. Section 2.2 of the Final EIS describes the decision-making process leading up to the Final EIS, including the Alternatives Analysis, Draft EIS, and Supplemental Draft EIS. Theme G in this appendix documents responses to comments received concerning other alternatives and alignments.

In Chapters 3, 4, and 6, the Final EIS evaluates impacts to environmental resources, the transportation system, and Section 4(f) properties, respectively, along the length of the proposed light rail alignment, including the Kenilworth Corridor. Those chapters also discuss mitigation measures to address unavoidable adverse impacts. See the subthemes below for responses to comments received about specific environmental resources, transportation system, and Section 4(f) properties within the Kenilworth Corridor.

E.1 Community cohesion and land use

Summary of Comments: Commenters, including community groups, businesses, and the general public, stated concerns about impacts on neighborhoods in the Kenilworth Corridor due to the frequency of LRT operations, compared to the existing frequency of freight trains, as well as the construction of LRT track infrastructure. These concerns included community cohesion and a lack of official or unofficial access points or routes to and across the Kenilworth Corridor. Commenters also stated concerns about impacts to the community in the form of future development, zoning, and land use changes caused by locating West Lake Station, 21st Street Station, and Penn Station in the corridor.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued development of designs for bicycle and pedestrian facilities, additional analysis of impacts to neighborhoods and community facilities along the proposed LRT alignment, additional analysis of land use in the vicinity of the Project, and additional analysis of the Project's compatibility with adopted official community plans and policies.*

Table 3.3-16 in the Final EIS lists impacts to community cohesion for each neighborhood along the LRT alignment, including those in the Kenilworth Corridor. The Project will include the operation of approximately 220 trains per day through the Kenilworth Corridor, but will not create a new physical barrier. All existing connections crossing the Kenilworth Corridor will be maintained and will include safety features and treatments that will maintain or improve safety, such as flashing lights and vehicle gates (refer to Section 4.6.3 for more information on safety for at-grade crossings). Unauthorized paths across existing freight rail tracks will be blocked by fencing included as part of Project safety features separating trail users from the adjacent freight or light rail alignments, with openings at officially designated crossings across the freight and/or light rail alignments (e.g., at-grade roadway intersections) (see Appendix E).

New and reconstructed pedestrian and bicycle facilities, curb ramps, and intersections will be compliant with the requirements of the Americans with Disabilities Act. At the West Lake Station, there will be a net loss of 80 on-street parking spaces; however, there will be adequate parking supply to meet the needs of existing land uses.

As shown in Table 4.6-1, 15 new LRT crossings, at-grade with existing roadways, will be introduced as part of the Project. Light rail vehicles will also sound horns or bells when entering a station and when approaching at-grade roadway crossings, except in locations where a quiet zone is implemented. In these locations, additional safety measures (e.g., non-traversable medians) will be installed in accordance with the Quiet Zone Final Rule (49 CFR Part 222).

At-grade light rail crossings of sidewalks and multiuse trails have been designed based on the Metro Light Rail Transit Design Criteria (Council, 2015) and will include flashing light signals with an audible warning to notify pedestrians of a train's arrival and detectable warnings and signs.

The Council, City of Minneapolis, MPRB, and Hennepin County completed the West Lake Multimodal Transportation Study in February 2016. The goal of the study was to identify opportunities to address non-motorized and motorized travel within the West Lake LRT Station area with projects that can be implemented as

a part of the construction of the Southwest LRT Project or as part of other capital initiatives. The study report includes Green Line Design Recommendations that will be constructed as part of the Project, including enhanced crosswalk markings at specific intersections, and wayfinding signage. In regard to the informal pedestrian crossings near the West Lake Station, and concerns that the Project will eliminate these crossings, the West Lake Multimodal Transportation Study recommends a formal crossing as a long-term recommendation (to be implemented separately after the Project opens). The study includes a proposed pedestrian crossing at the west end of the West Lake Station which will cross the eastbound LRT track only. Provisions are included in the design of the Project to permit a future crossing of the westbound LRT track and the freight track, if the full crossing is pursued in the future. The Project includes conduit for future active warning devices and minimal ballast curb between freight and LRT tracks to accommodate a future pedestrian walk.

As noted in both the Draft EIS and Final EIS, the Project will likely increase and/or accelerate development and redevelopment around proposed light rail stations, except in the area around the proposed 21st Street Station where future development potential is limited by the existing type and level of development in the area. Development and redevelopment are regulated by the affected local agencies and are driven by regional and local economic conditions, within limits allowed by local comprehensive plans. The assessment of the potential for increased development or redevelopment around proposed light rail stations is based on the Southwest Corridor Investment Framework (Hennepin County, 2013).

See the following sections in the Final EIS for additional information: Section 3.1, Land Use; Section 3.3, Neighborhood and Community; and Section 4.5, Pedestrian and Bicycle. The Final EIS also includes updated Preliminary Engineering Plans in Appendix E. For responses to comments about neighborhoods and community, land use, and access that are not specific to Kenilworth Corridor, please see Themes M and P in this appendix.

E.2 Impacts to parklands, Kenilworth Trail, Cedar Lake Trail, greenspace, Section 4(f) properties, Section 6(f) properties, and historic resources

Summary of Comments: The City of Minneapolis and several other commenters stated concerns about impacts to the Kenilworth Trail, which traverses the Kenilworth Corridor, and the Cedar Lake Trail, which crosses the north end of the Kenilworth Corridor. The City of Minneapolis also commented that affected trails need to be replaced as required to standards (trail width, trail thickness, wayfinding, etc.) defined in AASHTO Guidelines, MnDOT Guidelines, and Minneapolis Bicycle Design Guidelines with minimal interruption to trail use during construction. The City of St. Louis Park questioned the Draft EIS's finding that impacts to Cedar Lake Park constituted a 4(f) use. Commenters expressed various concerns that a decline in quality of trail experience could lead to a drop in trail users and were also concerned about reductions in trail access and safety. Commenters also had various concerns about the need for additional analysis of impacts to parklands, greenspace, historic properties, Section 4(f) properties, and Section 6(f) properties within the Kenilworth Corridor and measures to mitigate those impacts. Additionally, commenters stated concerns that the Project would block unofficial trails into Cedar Lake Park.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including analysis of impacts to the Kenilworth Trail, parklands, greenspace, Section 4(f) properties, Section 6(f) properties, and historic properties; and the development of the Final Section 4(f) Evaluation, Section 106 Assessment of Effects for Historic Properties; and the Section 106 Memorandum of Agreement, which identifies avoidance and mitigation measures for historic properties. Additionally, the Council advanced the design of the Project and identified approaches to avoid, minimize and mitigate impacts to the above-mentioned resources.*

The design of the Project has been adjusted since the publication of the Draft EIS, including identification of freight rail modifications incorporated into the Project that will allow for the continuation of freight rail service in the Kenilworth Corridor (LRT 3A-1, co-location). Historic properties and districts located within the Kenilworth Corridor are described in Appendix H of the Final EIS. It is important to note that the "Kenilworth Corridor" is not a historic or federally protected property unto itself, but rather is a geographical area reference that contains portions of Section 106 historic and Section 4(f) properties (e.g., Kenilworth Lagoon and Cedar Lake Parkway). The Final EIS also includes updated Preliminary Engineering Plans in Appendix E. For responses to

comments about trails, parklands, greenspace, Section 106 Properties, and Section 4(f) properties that are not specific to Kenilworth Corridor, please see Themes P, N, and S in this appendix.

Kenilworth Trail and Cedar Lake Trail

The Project will be within a shallow tunnel between West Lake Street and south of the Kenilworth Lagoon, which will minimize long-term impacts in the Kenilworth Corridor, including to the Kenilworth Trail. The Kenilworth Trail will be reconstructed parallel to its existing alignment, and the Cedar Lake Trail will be reconstructed to cross the existing freight rail alignment and the proposed LRT alignment at-grade, just west of the proposed Penn Station (the trail currently crosses the freight rail alignment at-grade at that location). Trails will be maintained on detour routes within the corridor or on roadways surrounding the trails in specific locations during construction. The roadways in this area are predominantly low-speed, low-volume residential roads with sidewalks. A portion of the Kenilworth Trail between Burnham Road Bridge and Penn Station will be reconstructed at a reduced width. The reduced width will not affect operation of the trail and is compliant with Draft EIS comments received from the City of Minneapolis and MPRB with respect to minimum trail widths. The trails are not considered a noise-sensitive land use under FTA criteria. Six viewpoints within the Kenilworth Corridor were studied as part of the Final EIS assessment of visual impacts. Section 3.7.4 of the Final EIS documents the level of visual impact anticipated at each viewpoint. For the viewpoints within the Kenilworth Corridor, these impacts ranged from low to substantial. See also Section 4.5, Pedestrian and Bicycle, for additional information.

Parklands and Greenspace

The Project will not have long-term adverse effects on the recreational features of Cedar Lake Park and the Kenilworth Lagoon/Channel. Construction-related disturbances will occur at the Kenilworth Lagoon/Channel and Cedar Lake Park; however, areas and features within these properties that are altered or disturbed due to construction activities will be restored to existing condition or better in coordination with MPRB. The Project also includes landscape design in the Kenilworth Corridor that preserves and builds upon the natural character of the Kenilworth Corridor where applicable and appropriate. See Section 3.6, Parklands, Recreation Areas, and Open Spaces for additional information.

Section 4(f) Properties

For the Section 4(f) process and properties, FTA and the Council coordinated with applicable jurisdictions with ownership of Section 4(f) properties, including MPRB and MnHPO. The Final EIS includes the Project's Final Section 4(f) Evaluation (see Chapter 6), which considers if the Project has a temporary or permanent use of qualifying publicly owned and publicly accessible parks and recreation areas, historic resources (independent of ownership), and publicly owned wildlife and waterfowl refuges protected under Section 4(f). The assessment of constructive use takes into account "proximity impacts," such as noise, vibration, visual, and access impacts, and uses analysis results taken from applicable Final EIS discipline area sections.

Please refer to Chapter 6 for the Final Section 4(f) Evaluation and Theme S in this appendix for responses to comments on the Section 4(f) Evaluation.

Section 6(f) Properties

Under the Project, no long-term right-of-way will be acquired from Section 6(f) resources within the parks, recreation areas, and open spaces study area. Therefore, no properties planned, developed, or improved with funds from the Land and Water Conservation Fund Act of 1965 will be converted by the Project to non-outdoor recreation use, and this issue is not discussed further in this Final EIS (see Section 6(f) Technical Memorandum listed in Appendix C of the Final EIS).

Historic Properties

FTA and the Council advanced the Project's Section 106 process to determine the Project's effects on historic properties and resolve any adverse effects. As a result of the design adjustment process and other activities that occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed. Note that in all cases, Section 106 determinations in the Draft EIS were characterized as potential or preliminary and that within the Final EIS, those Section 106 determinations are final, including MnHPO's written concurrence.

Note that there were potential Section 106 determinations of effect in the Draft EIS for properties that would have been affected by alternatives other than LRT 3A-1 (co-location) that are not affected by the Project. See Section 3.5 and Appendix H of the Final EIS for the assessment completed for historic properties and Theme S of this appendix for a description of changes that have occurred since the Draft EIS.

E.3 Impacts to the water system

Summary of Comments: Commenters, including community groups and the general public, stated concerns about water resources within or near the Kenilworth Corridor, including surface water resources, groundwater resources, and stormwater management.

Response: *For a response to this topic, refer to Appendix M, Master Response 17: Concern over impacts to groundwater and surface water in the Kenilworth Corridor. For responses to comments about water resources, that are not specific to Kenilworth Corridor, please see Theme N in this appendix.*

E.4 Noise, vibration, visual, and privacy impacts

Summary of Comments: Commenters stated concerns about impacts due to living in close proximity to the Project within the Kenilworth Corridor. These comments covered the following topics: noise and vibration, visual impacts to the natural setting of the area, visual impacts caused by placements of TPSS, light pollution, and reduction in property values.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including evaluations of noise, vibration, and visual quality impacts, advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

See Theme S for a description of changes in the Section 4(f) evaluation that have occurred since the Draft EIS. See Theme N1 for responses to comments about parks, recreation areas, and open spaces.

<u>Noise and Vibration</u>

Section 3.12, Noise, of the Final EIS provides the noise analysis for the Project. The section documents severe and moderate noise impacts caused by the Project and identifies mitigation measures for the impacts, including noise impacts in the Kenilworth Corridor. The primary avoidance measure for noise impacts within the Kenilworth Corridor is the proposed shallow LRT tunnel. Implementation of the tunnel will avoid most noise impacts compared to an at-grade LRT alignment within the same segment of the corridor. Without the tunnel, the number of noise impacts would be greater.

From Lake Citihomes to South Upton Avenue there will be 18 buildings with moderate noise impacts and one building with a severe noise impact without mitigation; with mitigation, there will be residual noise impacts (moderate) at five buildings (seven units at Lake Citihomes and four residences at Burnham Road North). The residences with residual moderate noise impacts do not meet the threshold for mitigation (e.g., impact does not meet 3-dB increase threshold) as defined by Council's Regional Transitway Guidelines (see Appendix D).

Some of the noise impacts near 21st Street Station will be mitigated by the use of wayside bells instead of the routine sounding of train horns. For the residences not mitigated by the use of a wayside bell (one severe and four moderate impacts identified along Thomas Avenue South and Burnham Road North), interior noise testing will be conducted to determine if the residences meet the interior noise level criteria (defined in Appendix K). Based on the results, the Council will identify the noise mitigation to be implemented for the residences. If the interior noise level exceeds the criteria set in the Council's Regional Transitway Guidelines (Appendix D), the Council will work with property owners on applicable mitigation. This could include implementation of sound insulation, which would require approval by the property owner(s).

The assessment at the Kenilworth Channel/Lagoon indicated a moderate noise impact to the channel, but not to the banks of the lagoon which are located further from the tracks. Mitigation recommended at this location is a low height noise barrier (parapet wall) on the bridge and rail dampers on the tracks to minimize the noise. While the banks of the lagoon were not identified as impacts, the mitigation for the channel on the bridge would reduce the noise levels at the banks as well. See Section 3.12 and Appendix K of the Final EIS for a completing listing of noise impacts and mitigation measures.

The Project will result in no long-term vibration impacts for residential land uses; therefore, no mitigation measures are warranted for long-term direct or indirect impacts from vibration. The slab for the shallow LRT tunnel in the Kenilworth Corridor eliminates the long-term vibration impacts, relative to an LRT tunnel system with no slab in the same segment of the corridor. There are ground-borne noise impacts in the shallow LRT tunnel area in the Kenilworth Corridor, which will be fully mitigated by implementing the use of highly resilient rail fasteners in the Kenilworth Corridor tunnel section (approximately 2,200 feet). See Section 3.13 and Appendix K in the Final EIS for additional information on the evaluation of vibration.

See Theme O for responses to comments about noise and vibration methodology, impacts, and mitigation measures not specific to the Kenilworth Corridor.

Visual Quality

For the viewpoints within the Kenilworth Corridor, impacts ranged from low to substantial. Viewpoints 5 and 6, included in the Supplemental Draft EIS, are renumbered to 16 and 18, respectively, in the Final EIS. Further, an additional viewpoint from the Burnham Road Bridge looking southeast down the channel toward the Kenilworth Corridor bridges was added to the analysis—viewpoint 17. The level of impact remains the same for viewpoints 16 and 18 (low level of impact), however, there will be a substantial level of impact at viewpoint 17 as construction of the new bridges will require noticeable clearing of trees and other vegetation on the west side of the right-of-way.

The visual quality evaluation for the area north of the Kenilworth Channel (viewpoint 18 – looking toward the 21st Street Station) concluded that the level of visual impact will be low. Removal of trees is a contributing factor in the visual assessment for this area. The visual evaluation found that the removal of trees will slightly decrease the vividness of the view. However, the addition of street trees, the widened sidewalk, and the plantings at the 21st Street Station area will make a positive contribution. For a more detailed explanation of the rationale for this conclusion, refer to the "Concern over visual impacts at 21st Street Station" in Master Response 16: Concerns related to 21st Street Station and related impacts in Appendix M.

These findings are based on FHWA's Visual Impact Assessment of Highway Projects (FHWA, 1988). The method was designed to provide a systematic and objective approach to evaluation of the visual changes. The FHWA methodology is well established and widely accepted for the assessment of visual impacts and is well suited to assess the visual impacts of linear transportation facilities in urban areas. The assessment for the Project was based on visual assessment of the Project corridor, completed through site visits, analysis of existing conditions, and an evaluation of visual change. All viewpoint sites were visited and the corresponding views were photographed to document the existing views. This field work, review of the photographs, and the subsequent coordination/consultation process with the Project team provided a basis for understanding the typical visual issues for each visual assessment area. Computer modeling and rendering techniques were then used to produce simulated images of the with-Project conditions for the viewpoints evaluation (see Appendix J). These visual simulations provided the basis for the assessment of visual change.

Within the Kenilworth Corridor, the Council developed a landscape design that preserves and builds upon the natural character of the corridor, where applicable and appropriate. The Council will also continue to work with the Kenilworth Landscape Design Committee, established in May 2015. The purpose of this committee is, in part, to help ensure that landscape design will restore the natural setting while incorporating the regional trail system, light rail, and freight rail. This group focuses on landscape design in the Kenilworth Corridor from West Lake Station to Penn Avenue Station. Furthermore, the Council retained a landscape design consultant to prepare a landscape design study for the Kenilworth Corridor, which will be implemented into the Project. See Section 9.2 of the Final EIS for additional information on this committee.

At West Lake Station and 21st Street Station the impacts of the new lighting will be attenuated by use of lighting fixtures with shielding that directs the light to the areas where it is required, and which minimize light spill and glare effects. Project-related overhead lighting will be installed only at stations and the parking lots associated with them, as well as at TPSS sites. No nighttime lighting will be installed along the right-of-way between stations. Additionally, the headlights on the fronts of the light rail vehicles have focused beams that direct the

light downward onto the track straight ahead and do not project light out into the surrounding environment; therefore, the impacts of light from vehicles will be minor.

See Section 3.7 in the Final EIS for additional information on the visual quality impact assessment and mitigation measures for the Project. For responses to comments about visual quality, that are not specific to Kenilworth Corridor please see Theme N in this appendix.

Property Values

See Theme M2 for response to comments about decreased property value impacts.

E.5 Hazardous and contaminated materials

Summary of Comments: Commenters stated that existing hazardous and contaminated materials must be dealt with appropriately. Commenters also stated concerns about the creosote-treated pylons used at the existing crossing of the Kenilworth Channel.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including completion of Phase I and II Environmental Site Assessments (ESAs) and development of Response Action Plans (RAPs), advanced the design of the Project, and identified approaches to avoid, minimize and mitigate impacts.*

The Kenilworth Corridor was evaluated as part of the Phase I and Phase II ESAs conducted for the Project. The Phase I ESA identified one site within the vicinity of the proposed shallow tunnel and one site within the vicinity of the Cedar Lake Junction where there is a risk of encountering hazardous and contaminated materials. As part of a Phase II ESA, these sites were tested and the extent of the existing contamination was verified. The Kenilworth Corridor is addressed in a Response Action Plan (RAP) developed for the Project (Southwest Light Rail Transit East Segment, November 2015). The Council will conduct site remediation in accordance with the Minnesota Pollution Control Agency (MPCA) Brownfield Program regulatory framework and the approved RAP.

Regulated waste assessments were completed for existing bridge structures that will be modified or demolished as part of the Project. The purpose of the work is to assess the presence and quantity of asbestos and regulated waste at the seven bridges and two pier protection locations along the Southwest LRT alignment. The effort included documenting and sampling suspect regulated waste, including asbestos, lead-based paint, polychlorinated biphenyl (PCB)-containing caulk, and mercury-containing light bulbs and ballasts. Potentially hazardous materials will be handled and managed in compliance with all applicable regulatory standards and will be disposed of in accordance with the Hazardous Materials Abatement Plans for in-place hazardous/regulated materials and the RAP/CCP for hazardous/regulated materials in the site soils. The creosote-treated pylons at the existing bridges over the Kenilworth Channel will be removed above grade and disposed of properly. The remainder located below grade will be left in place when the bridges are replaced. The demolition and civil engineering specifications address the regulated waste and specify that it be managed in accordance with federal and state laws.

For additional information see Section 3.14, Hazardous and Contaminated Materials, in the Final EIS. The Final EIS also includes updated preliminary engineering plans in Appendix E. For responses to comments about hazardous and contaminated materials, that are not specific to Kenilworth Corridor, please see Theme N in this appendix.

E.6 Health impacts near electromagnetic fields and overhead catenary wires

Summary of Comments: Commenters stated concern about the health impacts of living near the electromagnetic field and overhead catenary wire associated with the Project in the Kenilworth Corridor. Commenters also stated concerns about impacts to migratory birds that come into contact with the catenary wires.

Response: *The Final EIS includes an analysis of electromagnetic fields and electromagnetic interference associated with the Project. Based on this analysis, there are no health impacts related to exposure to magnetic fields to people riding the LRT, in buildings adjacent to the light rail alignment, or outdoors within the vicinity of the LRT.*

In addition, the Project is not expected to have an impact on birds. The death of birds by electrocution is not likely because a bird that lands on the electrified catenary wire system would need to touch another wire or something that is grounded in order to complete the circuit and become electrocuted.

See the following sections in the Final EIS for additional information: Section 3.10, Threatened and Endangered Species, Habitat, and Migratory Birds and Section 3.15, Electromagnetic Fields, Electromagnetic Interference, and Utilities. For responses to comments about electromagnetic fields and electromagnetic interference that are not specific to Kenilworth Corridor please see Theme N in this appendix.

E.7 Continuation of trails near LRT crossings and trail safety

Summary of Comments: Commenters stated concerns about continuation of trail connectivity and access to trails within the Kenilworth Corridor, including the continuation of the unauthorized connections across existing freight rail tracks. Commenters also stated safety concerns about trails and LRT operating in close proximity to one another and where trails cross roads and LRT tracks.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued development of design for bicycle and pedestrian facilities and identifying design features and measures to avoid, minimize, and mitigate safety and connectivity impacts.*

The Council will maintain existing public bicycle and pedestrian connections within the Kenilworth Corridor and the Project will include safety features and treatments that will maintain or improve safety at locations where bicycle and pedestrian facilities cross the light rail alignment at-grade (refer to Section 4.6.3 for more information on safety for at-grade crossings). The locations of reconfigured existing trails and sidewalks, as well as proposed new facilities are shown in Appendix E of the Final EIS. Subtheme E1 above provides additional information on unauthorized paths across existing freight rail tracks. Subtheme E1 also discusses a potential future crossing of freight rail and light rail at West Lake Station.

All trails will be reconstructed at their current width, except one portion of the Kenilworth Trail between Burnham Road Bridge and Penn Station, which will be reconstructed with a reduced width. The reduced width will not impact operations of the trail and is compliant with Draft EIS comments received from the City of Minneapolis and MPRB with respect to minimum trail widths. During construction, some trails and sidewalks may be detoured either on a signed route on other trails/roadways or on a temporary facility built to re-route pedestrian and bicycle traffic around an obstruction.

For additional information about pedestrian and bicycle trail safety and LRT crossings, see Section 4.5, Pedestrian and Bicycle and Section 4.6, Safety and Security in the Final EIS. The Final EIS also includes updated preliminary engineering plans in Appendix E. For responses to comments about trails and safety that are not specific to Kenilworth Corridor please see Themes P and R in this appendix.

E.8 Impacts associated with the proposed LRT bridge over Cedar Lake Parkway

Summary of Comments: The City of Minneapolis, MPRB, and other commenters stated concerns about an LRT bridge over the Cedar Lake Parkway. Comments included concerns about visual and noise impacts, impacts to Section 4(f) properties and historic resources, impacts to trails or trail connections, impacts to Burnham Road, suggestions of alignment alternatives such as a trench or tunnel, and requests to study alternatives other than the proposed LRT bridge. In addition to opposing the LRT bridge over Cedar Lake Parkway many commenters also opposed the possibility of an at-grade crossing citing traffic and safety concerns.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period in December 2012, the Council developed and evaluated design adjustments, including potential freight rail modifications that were evaluated in the Supplemental Draft EIS. This design adjustment process resulted in the incorporation of a shallow light rail tunnel between West Lake Street and south of the Kenilworth Lagoon into the design of the Project. With the shallow LRT tunnel, light rail vehicles will operate under Cedar Lake Parkway; therefore, an LRT bridge over Cedar Lake Parkway is no longer needed and associated impacts are avoided. Freight rail operations will remain at-grade across Cedar Lake Parkway.*

E.9 Safety and security

Summary of Comments: Concerns raised by commenters included trail safety, safety at parks, emergency response and coordination with emergency responders, and derailment. MPRB commented on the safety of trails and at parks adjacent to the Project that are under its jurisdiction, including the Cedar Lake Regional LRT Trail, the Kenilworth Trail, Cedar Lake Park, Cedar Lake Parkway, and Park Siding Park. MPRB also commented on concern over ice and debris falling from bridges over the Kenilworth Channel, noting the Channel is used year round. Additionally, MPRB stated that the Minneapolis Park Board Police should be included in the references to police agencies in the corridor. Other commenters stated concerns about safety and security at LRT facilities and around the Project.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including advancing the design of the Project and identifying design features to address safety and security concerns raised by commenters and measures to avoid, minimize, and mitigate impacts.*

Please see subtheme E7 above for a description of trail safety measures included in the design of the Project. Also see Master Response 3, General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor, in Appendix M for additional information.

For additional information see Section 4.6, Safety and Security, of the Final EIS. This section addresses safety and security including the design criteria, design of safety features, the Safety and Security Management Plan (SSMP), operations and maintenance safety, and coordination with emergency response providers. Minneapolis Park Board Police are included in the analysis in Section 4.6, Safety and Security, in the Final EIS. See Theme R in this appendix for other response to comments about safety and security not specific to the Kenilworth Corridor.

E.10 Other concerns

Summary of Comments: Commenters stated concerns specific to the Kenilworth Corridor on a variety of other topics. These topics included traffic impacts, park-and-ride lots and parking impacts, ridership, property acquisitions, impacts to threatened and endangered species, wildlife, habitat, and migratory birds, as well as air pollution, cumulative impacts, construction impacts, and access to stations.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including advancing the design of the Project, and identifying measures to avoid, minimize, and mitigate impacts. The following discussion by topic area responds to comments received on these concerns within the Kenilworth Corridor.*

Traffic, Parking, and Park-and-Ride Lots

The design adjustment process resulted in a shallow LRT tunnel between West Lake Street and south of the Kenilworth Lagoon. With the shallow tunnel, light rail vehicles will operate under Cedar Lake Parkway. As a result, the Project is not expected to have an impact on traffic operations along Cedar Lake Parkway. Design adjustments also included the removal of previously proposed park-and-ride lots from LRT stations located in the City of Minneapolis.

While spillover parking could occur at stations where there are no park-and-ride lots planned, spillover parking is not expected to occur at 21st Street Station, as the cumulative (i.e., Project-wide) supply of park-and-ride lot spaces will meet and exceed the forecasted demand for park-and-ride lot parking spaces in the Project's opening year (2020). The travel demand forecasts show a deficit of approximately 650 park-and-ride spaces in the Project's forecast year (2040), but this forecast deficit is predominantly concentrated at the proposed SouthWest and Beltline Stations, and is not anticipated to affect 21st Street Station (see Section 4.3.3.1 of the Final EIS for more information on the travel demand forecasts for park-and-ride lots and Section 4.3.3.2 for more information on spillover parking). Spillover parking impacts can also be curbed by local jurisdictions and residents implementing a "residents parking" permit program, which would allow unlimited parking for residents and visitors of residents.

In order to mitigate potential unauthorized use of on-street and/or off-street parking, the Council will complete a Regional Park-and-Ride System Report on an annual basis. As part of this effort, the Council and Metro Transit will collaborate with regional transit partners, local governments, and the Minnesota Department of Transportation to conduct an annual regional park-and-ride survey, that tracks facility use and emerging travel patterns by park-and-ride users across the region to identify the appropriate mitigation, as needed and where feasible. The results of this survey will be published in an annual report. See Chapter 4 of the Final EIS for additional information on the traffic and parking analysis and mitigation measures. See Theme I.1 for additional response to comments about park-and-ride lots and spillover parking.

Ridership

Since the publication of the Draft EIS, the travel demand forecasting for the Project has been updated to a 2040 forecast year based on the adopted 2040 TPP. For additional information about projected ridership, see Section 4.1, Public Transportation, and the Travel Demand Methodology Forecast Report listed in Appendix C of the Final EIS.

Property Acquisitions

Property acquired for the Project will be acquired in accordance with the Uniform Relocation and Real Property Acquisitions Policies Act of 1970, as amended, (42 U.S.C. 4601 et seq.), which also is known as the Uniform Relocation Act. The objective of the Uniform Relocation 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; help ensure that relocation assistance is provided; and help ensure that decent, safe, and sanitary housing is available within the displaced person's financial means. Property acquired for the Project will also be subject to Minn. Stat. 117 which sets forth requirements for acquisition of land (Minn. Stat. 117.38), compensation (Minn. Stat. 117.155 – 117.187), and uniform relocation benefits (Minn. Stat. 117.52). The provisions set forth in Minn. Stat. 117 mirror the requirements set forth in the Uniform Relocation Act, with the Uniform Relocation Act taking precedence over Minn. Stat. 117. Minn. State 117 also includes additional requirements which are not included in the Uniform Relocation Act, such as higher relocation reimbursement limits and provisions for reimbursement of appraisal fees. Assessments and agreements of property value are determined through the property acquisition process as regulated by the Uniform Relocation Act. See Section 3.4.3, Acquisitions and Displacements, and the Southwest LRT Acquisitions Report listed in Appendix C of the Final EIS for an evaluation of partial and full property acquisitions.

Threatened and endangered species, wildlife, habitat, and migratory birds

The Council will continue to work with the Kenilworth Landscape Design Committee, established in May 2015 to help ensure that landscape design will restore the natural setting while incorporating the regional trail system, light rail, and freight rail. Furthermore, the Council retained a landscape design consultant to prepare a landscape design study for the Kenilworth Corridor, which will be implemented into the Project. Section 3.10 of the Final EIS provides an updated assessment of impacts to threatened and endangered species, habitat, and migratory birds and applicable mitigation measures. This evaluation covers the entire Project including the alignment through the Kenilworth Corridor.

Air Pollution

Section 3.11 of the Final EIS includes the updated analysis of air quality and greenhouse gases for the entire Project, including alignment through the Kenilworth Corridor.

Cumulative Impacts

Section 3.17 in the Final EIS contains environmental categories selected for analysis, including resources that are particularly susceptible to cumulative effects and would be affected directly or indirectly by the Project, as well as one or more other projects that, in aggregate over time, would result in a cumulative effect.

Construction Impacts

Specific mitigation measures for short-term (construction) impacts will be identified in the Construction Mitigation Plan and Construction Communication Plan, which will be implemented by the Council prior to and

during construction. The purpose of the Construction Communication Plan is to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. Specific mitigation measures included in the Construction Communication Plan will be site-specific and may include the following:

- Issue construction updates and post them on the Project website.
- Provide advance notice of roadway closures, driveway closures, and utility shutoffs.
- Conduct public meetings.
- Establish a 24-hour construction hotline.
- Prepare materials with applicable construction information.
- Address property access issues.
- Assign staff to serve as liaisons between the public and contractors during construction.

In addition, the Council will develop and implement a construction staging plan (staging plan), which will be reviewed with the appropriate jurisdictions and railroads, and the contractor will be required to secure the necessary permits and follow the staging plan, unless otherwise approved. Components of a staging plan include traffic management plans and a detailed construction timeline.

See Tables 3.0-1 and 4.0-1 in the Final EIS for mitigation measures for short-term impacts for the Project.

Access to Stations

Construction of new sidewalks or continuation of existing sidewalks around station areas will improve general pedestrian circulation and provide station access. Where appropriate, sidewalks will connect the light rail stations to offsite pedestrian origination and destination points within 1/2 mile of the platform. For additional information, see Final EIS Section 4.5, Pedestrian and Bicycle. For responses to comments about pedestrian and bicycle facilities, please see Theme P in this appendix. See Theme I.2 for additional response to comments about access to individual stations.

F. Concerns about Eden Prairie LRT alignment

Summary of Comments: FTA and the Council received approximately 40 comments that expressed concerns about the alignment through Eden Prairie. Those commenters included the following: the City of Eden Prairie, MnDOT, Eden Prairie Chamber of Commerce, businesses, and private individuals. The primary concerns were traffic congestion and roadway impacts, parking, access to businesses or property, property acquisition, impacts to wetlands and floodplains, and construction impacts. Several commenters, including the City of Eden Prairie, expressed concerns about the design and location of stations.

Several commenters were concerned about impacts associated with the proposed light rail alignment between SouthWest Station and Mitchell Road, just south of Highway 212, including impacts to businesses. The City of Eden Prairie had concerns about traffic impacts of a proposed at-grade light rail crossing of Mitchell Road. Several commenters, including the Eden Prairie Chamber of Commerce, were concerned about impacts associated with the proposed light rail alignment along Technology Drive between SouthWest Station and Flying Cloud Drive. Several commenters, including MnDOT and the City of Eden Prairie, expressed concern that an at-grade crossing of the Flying Cloud/Valley View Road intersection could affect the operation of the adjacent Highway 212 ramp terminal intersections with Valley View Road.

The City of Eden Prairie and businesses on Technology Drive commented that the location of the Eden Prairie Town Center Station should be moved southeast to be more centrally located and improve pedestrian access. Some commenters asked that the Project stop at SouthWest Station or Eden Prairie Town Center Station. Some commenters expressed concern about impacts to businesses on the south side of Flying Cloud Drive between I-494 and Valley View Road, and on the west side of Flying Cloud Drive near Eagle Ridge Academy. Other commenters supported the proposed light rail alignment shown in the Draft EIS.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following objectives: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 404 of the Clean Water Act and Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. One focus of this design adjustment process was the proposed light rail alignment and associated improvements in Eden Prairie, including station locations, park-and-ride locations and sizing, and associated roadway improvements. Many of the comments received on the Draft EIS have been addressed through incorporation of the design adjustments and through other activities that have occurred since publication of the Draft EIS.*

During the Draft EIS public comment period, the City of Eden Prairie and other commenters asked the Council to investigate the feasibility of a more centrally located and walkable Eden Prairie Town Center Station and associated light rail alignment that would provide better opportunities for transit-oriented development and redevelopment. The City noted that a light rail station within walking distance of the Eden Prairie Town Center (a regional shopping mall) would help meet the City's long-term economic development goals and provide higher ridership due to its proximity to concentrations of existing and future employment and commercial activity centers. For similar reasons, the City also asked the Council to evaluate a location for the Mitchell Station south along Technology Drive, somewhere between Mitchell and Wallace Roads, additionally noting that this location for a park-and-ride lot may be better positioned to intercept automobile traffic coming from the west.

The design adjustment process also resulted in a change to the proposed light rail alignment in Eden Prairie along Flying Cloud Drive, northeast of I-494. Within the Draft EIS, the light rail alignment would have crossed over Flying Cloud Drive on a new bridge, immediately north of I-494. Section 2.2 and Appendix F of the Final EIS describe the options evaluated through the design adjustment process and how those options were evaluated and screened.

Based on design adjustments resulting from that process, which were identified by the Council in April 2014, the proposed light rail alignment in Eden Prairie will run on a new bridge over Technology Drive and Prairie Center Drive, then pass south of Lake Idlewild, and follow the north side of Flying Cloud Drive over I-494. Running on the south side of Highway 212, the light rail tracks will go over Flying Cloud Drive and Valley View Road on new bridge. The light rail alignment west of SouthWest Station was adjusted south to Technology Drive, to a proposed Mitchell Station on the south side of Technology Drive, west of Mitchell Road. The Project's Supplemental Draft EIS, published in May 2015, was based on the design adjustments identified by the Council in 2014 (including a potential southwest terminus at SouthWest Station, rather than Mitchell Road).

On April 27, 2015, the Council released a revised and increased Project cost estimate. To address the increased Project cost estimate, the Council's Southwest LRT Corridor Management Committee (CMC) and Project staff developed and evaluated a variety of options aimed at lowering Project costs, in consultation with the Project's local participating jurisdictions. The evaluation of options focused on three key criteria: cost savings incurred; Project ridership; and local jurisdiction consensus. CMC meetings held on May 20, June 3, June 24, and July 1, 2015 included review, discussion, and evaluation of the various options developed, which resulted in a recommendation by the CMC to the Council on July 1, 2015. On July 8, 2015, the Metropolitan Council adopted design adjustments to address the increased cost estimates. In doing so, the Council considered recommendations from the CMC, the Southwest LRT Business Advisory Committee (BAC), and the Southwest LRT Community Advisory Committee (CAC). In summary, the Council identified $250 million in reductions to the Project's scope and budget. The reductions in the Project's scope included: the elimination of Mitchell Station and deferral of the Eden Prairie Town Center Station (until after 2020 but before 2040); the elimination of five new light rail vehicles from the Southwest LRT fleet; a reduction in the Project-wide park-and-ride lot capacity (including elimination of the proposed park-and-ride lot at the proposed Eden Prairie Town Center Station); the reduction in the size of the proposed Hopkins OMF (with future expansion capacity on-site); elimination of station artwork; and reductions in landscaping and off-platform station furnishings. The cost savings measures were identified, developed, and analyzed in consultation with the Project's local participating agencies, including the City of Eden Prairie. Appendix E of the Final EIS illustrates the Project with and without the Eden Prairie Town Center Station and associated roadway improvements. See Section 2.1.1 of the Final EIS.

The Final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS, which reflects the design adjustments within the City of Eden Prairie identified by the Council in April 2014 and July 2015. As a result of those design adjustments, many of the comments received on the Draft EIS concerning impacts and options with the City of Eden Prairie are no longer relevant, primarily based on the removal of Mitchell Station from the Project and alignment adjustments around the Eden Prairie Town Center Station. Following is a summary of how many of the impacts and concerns identified in comments on the Draft EIS have been avoided or substantially minimized in Eden Prairie:

<u>Along Highway 212, Between Mitchell Road and SouthWest Station</u>

Impacts associated with the proposed light rail alignment along the south side of Highway 212, from west of SouthWest Station to Mitchell Road (as proposed in the Draft EIS), have been avoided through the elimination of the proposed Mitchell Station and the associated park-and-ride lot, as well as the elimination of the proposed light rail alignment between the proposed Mitchell and SouthWest Stations (south of Highway 212). Avoided impacts include: traffic impacts west of SouthWest Station, particularly on Mitchell Road at Highway 212; residential noise impacts just west of SouthWest Station; and a crossing of Purgatory Creek and related construction adjacent to the creek.

<u>Along Technology Drive, East of SouthWest Station</u>

Impacts associated with the proposed light rail alignment along Technology Drive, between SouthWest Station and Flying Cloud Drive, have substantially been avoided as a result of the design adjustment that will route the light rail alignment via Eden Road to Prairie Center Drive. This design adjustment avoided the following: the acquisition of business property and the displacement of commercial off-street parking spaces on the south side of Technology Drive; traffic impacts to the intersections of Technology Drive at Prairie Center Drive and Flying Cloud Drive due to the elimination of the proposed Eden Prairie Town Center Station park-and-ride lot; and an at-grade crossing of Technology Drive. A short section of Technology Drive, just west of Prairie Center Drive, will

be reconstructed as part of the Project to accommodate intersection improvements needed at Technology Drive and Prairie Center Drive. Property acquisition impacts, including loss of parking, have been minimized since the Draft EIS, while other impacts which remain or have been minimized are included in the Final EIS.

Along the South Side of Flying Cloud Drive, Northeast of I-494

Design changes that shifted the proposed light rail alignment from the south side to the north side of Flying Cloud Drive, northeast of I-494, avoided and minimized impacts to businesses located on the south side of Flying Cloud Drive, northeast of I-494, including avoiding visual and noise impacts from the proposed light rail bridge across Flying Cloud Drive just north of I-494.

West of Flying Cloud Drive, at Nine Mile Creek crossing (Near Eagle Ridge Academy)

In the Draft EIS, the LRT alignment was at-grade through this area, which would have affected wetlands and required the realignment of Flying Cloud Drive, which would have affected off-street parking. The adjustment to the proposed light rail alignment northeast of Valley View Road and where it will cross Flying Cloud Drive and Nine Mile Creek grade separated, near the Eagle Ridge Academy, will avoid the displacement of off-street parking spaces and help minimize impacts to adjacent wetlands. The adjustments also eliminate an at-grade crossing of Flying Cloud Drive.

Design adjustments in the vicinity of West 70th Street are discussed in Theme J. Theme F.1 addresses comments on impacts or concerns that remain related to the Project's current design in Eden Prairie.

F.1 Eden Prairie impacts remaining after design adjustments

Summary of Comments. Several commenters noted impacts to businesses and a range of environmental resources in Eden Prairie that will not be fully avoided by the design adjustments previously described. These include impacts to businesses and off-street parking at SouthWest Station, impacts to businesses affected by the Project's adjusted alignment south of Lake Idlewild, wetland and floodplain impacts, transit facilities and service, and traffic. Several commenters expressed concern about construction impacts to businesses, including, traffic, noise and vibration, and access to businesses and loss of sales during construction. The City of Eden Prairie commented on the need to maintain access to properties during construction and the need to evaluate and coordinate tunnels and grade crossings with the City. The owner of SouthWest Station noted the poor soil in the vicinity of their property and expressed concern over structures sinking.

***Response**: Since the publication of the Draft EIS, design adjustments in Eden Prairie have resulted in changes in impacts to businesses, parking, traffic operations and environmental resources, and in many cases impacts have been minimized or avoided. Nonetheless, within Eden Prairie, the Project will result in business displacements, off-street parking impacts, changes to transit service and facilities, noise impacts, effects on wetlands and floodplains, measures to address compressible soils, and changes to roadways and traffic operations. The Council has advanced the design of the Project since the Draft EIS, which has allowed the remaining impacts to be better defined. Mitigation measures addressing those impacts that will be incorporated into the Project are identified in Chapters 3 and 4 of the Final EIS.*

Business-Related Acquisitions, Displacements, and Off-Street Parking

The Project will affect approximately 10 businesses by shifting the proposed light rail alignment from Technology Drive to south of Lake Idlewild. Eight businesses will be fully displaced and there will be two partial acquisitions of property which are not anticipated to result in business displacements. See Section 3.4 of Final EIS for details on the specific parcels affected. In some cases, loss of off-street parking will be mitigated by allowing on-street parking in areas where it is currently not allowed. Any lost surface parking for the SouthWest Station commercial development will be replaced with parking available in the new structured parking garage built for the SouthWest Station park-and-ride lot. The existing structured SouthWest Transit park-and-ride lot will be retained, and the two park-and-ride facilities will be shared by light rail and bus park-and-ride users.

The Council will complete a Regional Park-and-Ride System Report on an annual basis. As part of this effort, the Council and Metro Transit will collaborate with regional transit partners, local governments, and MnDOT to conduct an annual regional park-and-ride survey that tracks facility use and emerging travel patterns by park-

and-ride users across the region to identify the appropriate mitigation, as needed and where feasible. The results of this survey will be published in an annual report.

Impacts to businesses are described in Section 3.4 of the Final EIS and Theme M of this Appendix. Parking impacts are described in Section 4.3 of the Final EIS.

Construction Impacts on Businesses

The Project will result in short-term impacts that could affect businesses in Eden Prairie, including potential increases in noise levels, dust, traffic congestion, visual changes, and increased difficulty accessing commercial and other uses. Some businesses may experience economic hardship during the construction period. The Council has and will continue to coordinate with the City of Eden Prairie on construction techniques to minimize disruption during construction. Construction-related mitigation measures for visual quality, noise, vibration, and traffic impacts are described in Sections 3.7, 3.12, 3.13, and 4.2 of the Final EIS, respectively. In order to minimize short-term impacts, the Council has developed a Construction Communication Plan. The purposes of the Construction Communication Plan are: to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. See Section 3.2.4 for more information on the Construction Communication Plan and mitigation measures for short-term impacts.

Wetlands and Floodplains

The design adjustments identified after publication of the Draft EIS have avoided and minimized impacts to wetlands and floodplains. Exhibit 3.9-2 in the Final EIS illustrates the existing wetlands along the LRT alignment and the remaining wetland impacts in Eden Prairie. The remaining impacts to wetlands will be mitigated in conformance with applicable CWA and WCA requirements. The Council and FTA have coordinated with the City of Eden Prairie, RPCWD, NMCWD, and USACE on implementing the applicable sequencing requirements related to wetlands and on the identification of mitigation measures addressing wetland impacts in Eden Prairie. The results of this coordination are reflected in the wetland permit applications to the USACE and the City of Eden Prairie. Section 3.9 of the Final EIS and Theme N.5 describe impacts to wetlands.

Exhibit 3.9-4 in the Final EIS illustrates the existing regulated floodplains along the LRT alignment and the remaining impacts to floodplains. Impacts to locally regulated floodplains will be mitigated by appropriate compensatory storage within or adjacent to the affected waterbody, as summarized in Table 3.9-8 in the Final EIS. The Project will utilize the following methods to create compensatory storage: excavation of upland adjacent to existing floodplain, excavation of existing floodplain, and construction of stormwater BMPs with the capacity for storage. The Project's final design will include the appropriate compensatory storage required by applicable local agencies. Where it is not feasible to meet this requirement, a variance will be requested from the applicable regulatory agency and the appropriate documentation provided to justify the variance.

Noise and Vibration

Design adjustments within Eden Prairie after publication of the Draft EIS have helped to avoid and minimize noise impacts and avoid vibration impacts within Eden Prairie, including impacts west of SouthWest Station. Without mitigation, the Project would result in noise impacts north of Flying Cloud Drive, between I-494 and Valley View Road, but those impacts will be mitigated as described in Section 3.12 of the Final EIS. See Sections 3.12, Noise; 3.13, Vibration; and Appendix K for additional information about the noise and vibration analyses. See Theme O for responses to comments about other noise concerns.

Geology and Soils

Since publication of the Draft EIS, the Council has continued evaluation of soil conditions, as well as the determination of measures to mitigate those conditions, if necessary. As illustrated in Exhibit 3.8-3 in the Final EIS, there are areas of compressible soils along the alignment around SouthWest Station, at the southern edge of Bryant Lake, along Nine Mile Creek, and around Golden Triangle Station. Areas of compressible soils along the Project will be addressed with appropriate design and construction techniques to avoid the potential for uneven ground settlement and bearing failure of the building foundations for the light rail alignment, stations, structures, and surface parking lots/parking structures. Methods of addressing soft soils include removing the

soft soils and replacing them with suitable fill, deep foundations, driven piles, drilled shaft-supported foundations, or lightweight fill. The Council will continue to evaluate compressible soils during the engineering phase and will obtain additional soil data where necessary to assist in making the decision about where to excavate and replace soft soils.

Exhibit 3.8-4 in the Final EIS illustrates bedrock geology in the vicinity of the Project, including within the City of Eden Prairie. No impacts on bedrock geology are expected.

See Section 3.8, Geology and Groundwater Resources, of the Final EIS for additional information. See Theme N.3 of this Appendix for response to other comments on geology and soils.

Transit

Since publication of the Draft EIS, the Council has continued to coordinate with SouthWest Transit on the Project's effects on SouthWest Transit facilities and bus service. The Council prepared a Bus Transit Operations Plan (Technical Memorandum, Revision 2.1. July 2015) that provides detailed documentation of existing bus transit service in the Southwest Corridor and summarizes the transit service plans for the Project (see Final EIS Appendix C). In summary, there will be some changes to SouthWest Transit bus routes and schedules to allow coordination with the proposed light rail service in Eden Prairie. The existing SouthWest Station bus facility will continue to be owned and maintained by SouthWest Transit and used by SouthWest Transit buses, but there will be modifications to that facility to accommodate the proposed light rail alignment, station, and park-and-ride lot (see Final EIS Appendix E). The existing and proposed park-and-ride structures will be jointly used by light rail users and bus users. See Section 4.1.3 for a more detailed description of the existing transit systems in Eden Prairie and how they will be affected by the Project.

Roadways and Traffic

Since publication of the Draft EIS, the Council has identified a range of roadway improvements in Eden Prairie as part of the Project. Traffic operations are discussed in Section 4.2 of the Final EIS and Theme P of this appendix. The Project includes planned roadway improvements in Eden Prairie that will accommodate the introduction of the light rail alignment and related facilities and increase roadway capacity to respond to anticipated demand to use of one or more roadways at specific locations (e.g., additional turn or through lanes, additional traffic signals). Roadway and intersection improvements included in Eden Prairie that will be in the Project are listed and illustrated in Final EIS Appendix E. See Theme P, Concerns about transportation system effects, for a description of traffic impacts in Eden Prairie.

G. Prefers or proposes other alternatives

Summary of Comments: FTA and the Council received approximately 140 comments that stated preferences for alignment alternatives other than LRT 3A. Those commenters included the Cities of Granite Falls, Glencoe, Winthrop, Stewart, Plato, Olivia, Morton, Norwood Young America, Hector, Buffalo Lake, Bird Island, Montevideo and the Minnesota counties of Carver, Sibley, Wright, Renville, Redwood, McLeod; and Roberts County, South Dakota. Sections G.1 to G.3 summarize comments received on alternatives in the following three categories: a preference for an alternative considered in the Draft EIS processes other than LRT 3A; other recommended freight rail or light rail alignments; and proposed modes other than LRT or bus.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process. Theme A and Chapter 8 of the Final EIS describe FTA's and the Council's rationale for their finding that the Project (LRT 3A-1) best meets the Project's Purpose and Need, compared to the No Build Alternative, and why it is the environmentally preferred alternative.*

Theme G responds to the following sets of comments: a preference for an alternative considered in the Draft EIS processes other than LRT 3A; other proposed freight rail or light rail alignments; and proposed modes other than LRT or bus. Theme A responds to comments received on the Draft EIS in favor of the project and Theme B responds to comments received in opposition to the project. Themes C and D respond to comments received on the Draft EIS in opposition to the relocation of existing freight rail service from a portion of the Bass Lake Spur and Kenilworth Corridor and in opposition to the co-location of freight rail and light rail service in the Kenilworth Corridor, respectively. Themes E and F respond to comments received on the Draft EIS about the impacts of light rail in the Kenilworth Corridor and the light rail alignment in Eden Prairie, respectively.

G.1 Preference for alternatives considered in the Draft EIS other than LRT 3A[1]

Summary of Comments: Approximately 80 commenters supported alignments or options that were studied in the Project's Draft EIS, but that were not selected as the environmentally preferred alternative for the Project. Those commenters included the following: the Cities of Granite Falls, Glencoe, Winthrop, Stewart, Plato, Olivia, Morton, Norwood Young America, Hector, Buffalo Lake, Bird Island, Montevideo; the Minnesota counties of Carver, Sibley, Wright, Renville, Redwood, McLeod; and Roberts County in South Dakota. Most of the commenters, including the jurisdictions previously listed, recommended LRT 3A-1 as an alternative to LRT 3A, as well as two other alternatives addressed in Section G.2. Several commenters recommended LRT 3C-1 and/or 3C-2, because they asserted that development along that alternate alignment would generate higher

[1] This section responds to comments made on alternatives other than LRT 3A that were evaluated in the Draft EIS. LRT 3A was identified as the environmentally preferred alternative in the Draft EIS (see Section 11.2.3), based on the definition of the alternatives in the Draft EIS at that time. As previously noted, the Council identified design adjustments in 2014 to LRT 3A-1, with retention of freight rail in the Kenilworth Corridor. As a result, FTA and the Council have determined that LRT 3A-1 is now the environmentally preferred alternative (see Section 8.2 of the Final EIS).

ridership, and because trains operated along a portion of that route in the recent past. Other commenters expressed support for LRT 1A and improved bus service.

Response: *A wide range of alternatives were proposed, developed, evaluated, and screened prior to and within the Draft EIS. The process spanned the Project's AA, identification of the LPA, Draft EIS and Supplemental Draft EIS, which is described in Section 2.2 of the Final EIS, and reviews the rationale for the identification of the LPA and why other alternatives were dismissed from further study.*

The Draft EIS examined seven alternatives, which included the No Build Alternative, the Enhanced Bus Alternative, and five light rail alternatives (LRT 1A, LRT 3A, LRT 3A-1, LRT 3C-1, and LRT 3C 2).[2] *Four of the alternatives studied in the Draft EIS included the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 1A, LRT 3A, LRT 3C-1, and LRT 3C 2) and three did not (the No Build Alternative, the Enhanced Bus Alternative, and LRT 3A-1). LRT 3A was identified as the locally preferred alternative and the environmentally preferred alternative in the Draft EIS.*

- ***LRT 3A-1.*** *As documented in Section 11.2.5 of the Draft EIS, FTA and the Council found at that time that, while LRT 3A-1 (co-location) would result in benefits similar to LRT 3A (relocation), those benefits would not be achieved without the associated environmental impacts, based on the alternatives' designs as described in Chapter 2 of the Draft EIS. LRT 3A-1 includes the transit improvements that are included in LRT 3A, with the continued operations of TC&W freight trains currently operating along the Bass Lake Spur and Kenilworth Corridor, rather than the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor. The Draft EIS noted that at that time, LRT 3A-1 would fail to rise to the environmentally preferred alternative because LRT 3A-1 would result in the following: 1) acquisition of Cedar Lake Park property, resulting in a Section 4(f) use; 2) failure to provide a direct connection between the Bass Lake and TC&W spurs; 3) high construction-related impacts related to reconstruction of freight rail tracks; 4) diminished economic development potential at light rail stations in close proximity to freight rail tracks; 5) pedestrian safety concerns at stations in close proximity to freight rail tracks; 6) 60 residential displacements; and 7) adverse effects on community cohesion in the Kenilworth Corridor.*

  As previously noted, following publication of the Draft EIS, the Council identified design adjustments to LRT 3A-1 and FTA and the Council found that of the alternatives considered, LRT 3A-1 now best meets the Project's Purpose and Need (see Chapter 1 of the Final EIS) and it best balances the Project's costs, benefits, and environmental impacts. Further, FTA and the Council found that LRT 3A-1 is now the environmentally preferred alternative, for the reasons described in Theme A and Section 8.2 of the Final EIS. The Project, based on LRT 3A-1, includes the design adjustments identified by the Council in April and July 2014 and July 2015, with the retention of freight rail in the Kenilworth Corridor (LRT 3A-1). See Theme A, Section 2.2, and Appendix F for a description of the rationale for the Council's identification of the design adjustments to the LPA and identification of LRT 3A-1 as the environmentally preferred alternative. See also Appendix M, Master Response 10: Rationale for incorporating freight rail co-location into the Project.

- ***The Enhanced Bus Alternative.*** *As documented in Section 11.2.2 of the Draft EIS, FTA and the Council determined that, while the Enhanced Bus Alternative would avoid potential disruption to neighborhoods, commercial districts, and historic areas in the corridor, the Enhanced Bus Alternative would not adequately support the Project's Purpose and Need as expressed through the project's evaluation goals, objectives, criteria, and measures. In summary, FTA and the Council determined that the Enhanced Bus Alternative was inconsistent with local and regional comprehensive plans, which include or are consistent with implementation of the Project. Further, the Enhanced Bus Alternative would only marginally improve mobility, and it would not provide an efficient travel option or support economic development. Finally, FTA*

[2] In the Draft EIS, the transit improvements included in LRT 3A and LRT 3A-1 are coupled with the proposed relocation or co-location of TC&W freight trains currently operating along the Bass Lake Spur and the Cedar Lake Junction (locally referred to as the Kenilworth Corridor). LRT 3A includes the proposed relocation of TC&W trains to the MN&S Spur and Wayzata Subdivision, while LRT 3A-1 includes the continued operations of TC&W freight trains currently operating along the Bass Lake Spur and Kenilworth Corridor. While the Draft EIS notes that LRT 3A-1 is identical to LRT 3A in the transit service it would provide (see page ES-23 and Chapter 2 of the Draft EIS), it only identifies LRT 3A as the LPA (see pages 2-31 and 2-41 of the Draft EIS for examples). The LPA is a subset of both LRT 3A and LRT 3A-1 of the Draft EIS; therefore, in the Draft EIS, the Project's LPA is included within both LRT 3A and LRT 3A-1.

and the Council determined that the Enhanced Bus Alternative would compromise the Project to a degree that, under the Enhanced Bus Alternative, the Purpose and Need for the Project would not be met.

- ***LRT 1A**. As documented in Section 11.2.4 of the Draft EIS, LRT 1A would be less able to support the goals of improved mobility and economic development. In particular, FTA and the Council determined that LRT 1A had among the lowest projected ridership of the light rail alternatives, which made it less cost effective. Contributing to its low ridership was its lack of compatibility with the study area's comprehensive plans. That lack of compatibility and lower projected ridership were due to routing sections of proposed light rail alignment though areas of lower density development that are not intended, based upon the plans, to become denser over time.*
- ***LRT 3C-1**. As documented in Section 11.2.6 of the Draft EIS, FTA and the Council determined that LRT 3C-1 would be the least cost effective of the alternatives considered in the Draft EIS, due to its relative high costs and lowest ridership estimates. FTA and the Council also found that LRT 3C-1 was not compatible with approved comprehensive plans, because of potential disruptions to regional roadways, such as Nicollet Mall, and impacts to pedestrian facilities. Further, LRT 3C-1 would have had greater construction impacts, due to extensive in-street construction. Finally, FTA and the Council determined that LRT 3C-1 would have disproportionately high and adverse impacts to low-income and minority populations due to displacements, impacts to community cohesion, and increased traffic congestion in environmental justice areas identified in the Draft EIS.*
- ***LRT 3C-2**. As documented in Section 11.2.7 of the Draft EIS, FTA and the Council determined that LRT 3C-2 would be incompatible with approved comprehensive plans, because of potential disruptions to regional roadways, such as Nicollet Mall, and impacts to pedestrian facilities. Further, LRT 3C-2 would have had greater construction impacts, due to extensive in-street construction. Finally, FTA and the Council determined that LRT 3C-1 would have disproportionately high and adverse impacts to low-income and minority populations due to displacements, impacts to community cohesion, the most severe construction impacts, and increased traffic congestion in environmental justice areas identified in the Draft EIS.*

G.2 Other recommended freight rail, light rail, and trail alignments or modifications

Summary of Comments: The FTA and Council received approximately 120 comments that supported other freight rail or light rail alignments that were not studied in the Draft EIS, including recommended changes to alternatives evaluated in the Draft EIS. Of those, approximately 65 recommended either using the MN&S freight rail corridor for light rail or rerouting freight rail back to the Midtown Greenway/West 29th Street (where TC&W operated until 1998). Those commenters included the following: the Cities of Granite Falls, Arlington, Glencoe, Winthrop, Stewart, Plato, Olivia, Morton, Norwood Young America, Hector, Buffalo Lake, Bird Island, Montevideo; the Minnesota counties of Carver, Sibley, Wright, Renville, Redwood, McLeod; Roberts County in South Dakota, Minnesota Valley Regional Rail Authority, and Upper Minnesota Valley Regional Development Commission. Additional recommendations by commenters included the following: an underground light rail alignment design in the Kenilworth Corridor area—either a covered trench or a bored tunnel; route light rail along I-494 and Highway 100 or via Wayzata Subdivision and MN&S Spur; modifications to LRT 3A and LRT 3C; route light rail via Lyndale Avenue; relocate the existing Kenilworth Trail away from the Kenilworth Corridor, instead of relocating freight rail; single track light rail alignment through the Kenilworth Corridor.

***Response:** Following are responses to various new alternative alignments or modifications included in comments on the Draft EIS. Comments on proposed changes to the light rail alignments in Eden Prairie are responded to within Theme F, and comments suggesting other relatively minor light rail alignment design changes are addressed within Theme J (e.g., tunneling under Highway 62).*

Freight Rail Alignments

After publication of the Draft EIS, the Council undertook a four-step study of potential design adjustments focused on whether the Project should include: 1) the relocation of TC&W freight trains currently operating along the Bass Lake Spur and Kenilworth Corridor to sections of the MN&S Spur and Wayzata Subdivision (LRT 3A); or 2) the continued operation of TC&W freight trains along the Bass Lake Spur and Kenilworth Corridor (LRT 3A-1). As

described in detail in Appendix F of the Final EIS, the fourth step of that design adjustment process was initiated by responding to a request from the Governor of Minnesota. This first component of the fourth step involved the preparation of the independently prepared Southwest LRT Engineering Evaluation of Freight Rail Relocation Alternatives *(TranSystems, 2014 – see Appendix D for instruction on how to access the report). As requested by the Governor, the purpose of the independent study commissioned by the Council was to provide a comprehensive analysis of prior freight rail relocation designs that would provide for the rerouting of TC&W freight rail trains out of the Kenilworth Corridor and identification of new design adjustments or concepts. In particular, the study consisted of an analysis of the technical, safety, and operational considerations of eight options that would allow for the rerouting of TC&W freight trains that were developed in prior freight rail studies and two additional concepts previously developed by the Project. The scope of the independent analysis generally covered the following: identification of operational cost drivers; identification of community impacts and other environmental impacts; and assessment of possible operational adjustments. The TranSystems analysis and report evaluated in their "Tier 1 Screening" the following options for relocation of freight rail from the Kenilworth Corridor:*

- *Far Western Minnesota Connection – Appleton to Benson*
- *Western Minnesota Connection – Granite Falls to Willmar*
- *Chaska Cutoff*
- *Highway 169 Alignment to Burlington Northern Santa Fe*
- *Midtown Corridor/West 29th Street*
- *United Transportation Route*
- *MN&S South Connection with Union Pacific*
- *MN&S North (Source: TranSystem's Concept)*

In summary, the independent report includes the following (see Appendix F for illustrations of the referenced freight rail alignments):

1. *The independent study finds that five of the freight rail relocation options evaluated are "fatally flawed" for a variety of reasons, primarily related to an assessment showing that the affected freight rail operators would not find them acceptable due to economic, operations, or safety concerns. As such, the report does not recommend any additional study of those five options (Far Western Minnesota Connection – Appleton to Benson; Western Minnesota Connection – Granite Falls to Willmar; Chaska Cutoff Highway 169 Alignment to Burlington Northern Santa Fe; MN&S South Connection with Union Pacific).*
2. *After the first tier screening, TranSystems evaluated the following freight rail alternatives: United Transportation Route, MN&S South, Brunswick Central, and the Midtown Corridor/West 29th. Based on TranSystems' "Tier 2 Screening," the independent report does not recommend further study of the United Transportation Route and MN&S South, primarily due to significant impediments to their implementation. In particular, the TranSystems study dismissed the United Transportation Route from further study, because it was found to be inferior to the MN&S North route, because it would entail "a longer freight rail route with more costly infrastructure requirements on the north end of the route . . . [and] some upgrades would infringe upon parklands." The final report also finds that the MN&S South option, which would connect the Bass Lake Spur south to the MN&S Spur, might be able to be designed to meet engineering standards, but that it "would face severe obstacles with respect to property acquisition and permitting . . .," as well as potential impacts to parks (TranSystems, 2014; page 34). The final report also finds that, while the Brunswick Central alignment (which was developed by the Council in consultation with TC&W and which was not evaluated in the first tier study) was acceptable to TC&W from an operational, economic, and safety perspective, it was dismissed from further study (in step three of the Council's evaluation) due to its wide range of adverse impacts (e.g., use of the Spanish Park Immersion School playground; residential, business, and public displacements, and neighborhood cohesion and character impacts). Finally, due to several identified implementation challenges, the report does not recommend further study of the Midtown Corridor/West 29th Street. The identified challenges to the Midtown Corridor/West 29th Street for the relocation of freight rail include: likely "significant" capital costs; the corridor is listed on the National Register of Historic Places as a Historic*

District and two bridges on the alignment are on park land; and it may "complicate or thwart plans for a streetcar in the corridor." (TranSystems, 2014; page 19)

3. *The independent study by TranSystems also resulted in the identification of an additional freight rail relocation alignment not previously studied (MN&S North) in the vicinity of St. Louis Park High School that could potentially accommodate the relocation of freight rail from the Kenilworth Corridor to the MN&S Spur and the Wayzata Subdivision.*

The MN&S North concept was dismissed from further study by the Council based on the following: the MN&S North adjustments were opposed by the affected freight rail operator (TC&W), primarily based on safety and operational concerns, including three reversing horizontal curves in the proposed freight rail alignment that would be especially problematic (the operator did not express similar concerns about the freight rail modifications under co-location (LRT 3A-1). In addition, the advantage of co-location (LRT 3A-1), is that it would avoid the following impacts from the MN&S North: the potential displacement of approximately six residences and seven businesses and the acquisition of some St. Louis Park High School property; additional cost increases due to project delay of approximately $45 to $50 million; closure of local streets; and extension of the project's construction schedule by up to two years. See Appendix F of the Final EIS for additional information on the independent TranSystems study, including maps illustrating the freight rail relocation options that were identified and evaluated.

- ***Return Freight Rail to the Midtown Greenway.*** *The "Midtown Corridor" (or 29th Street) route was the original east – west mainline used by the Milwaukee Railroad for the better part of the 20th Century. Freight rail service in the Midtown Corridor was phased out in the 1990s as part of the TH55/Hiawatha Avenue project funded by MnDOT and the Federal Highway Administration (FHWA). MnDOT and FHWA made the decision to sever the freight rail line, rather than to construct a grade separated crossing, with the intent to re-route the freight rail service to the MN&S Spur and Wayzata Subdivision. Hennepin County Regional Railroad Authority (HCRRA) purchased the Midtown Corridor to preserve it for a future transit use. Rerouting TC&W trains to the MN&S Spur and Wayzata Subdivision was delayed by the environmental remediation work at the National Lead/Golden Auto Superfund site, which was on the path of the proposed connection. In 1998, freight rail service was moved from the Midtown Corridor to the Kenilworth Corridor, based on a trackage rights agreement between TC&W, CP, and HCRRA. As noted in Section 5 of the trackage rights agreement between CP/TC&W and HCRRA, terminating or vacating the freight rail service along the Kenilworth Corridor is to be decided by the freight rail operators at their discretion, whenever a feasible alternative route is made available for their operation. As previously noted, TranSystems reported that using the Midtown Corridor/West 19th Street for the relocation of freight rail would include significant cost and environmental challenges, and would preclude the future of the corridor for a streetcar. Based on the findings, freight rail in the Midtown Corridor was dismissed from further study.*

Modifications to LRT 3A-1

Following are responses to recommended modifications to LRT 3A-1 in the Kenilworth Corridor and at the Royalston Station, including placing the light rail alignment in a tunnel or trench; re-aligning a portion of the Kenilworth Trail; using a single-track light rail alignment; and alternative locations for the proposed Royalston Station:

- ***Light Rail Alignment in a Tunnel or Trench in the Kenilworth Corridor****. As suggested by commenters, the Council identified design adjustments to the Project that proposed the light rail alignment be in a shallow or deep bore tunnel in the Kenilworth Corridor. In 2014, the Council forwarded the shallow tunnel concept as the Project, which would construct a cut-and-cover tunnel between West Lake Street and just south of the Kenilworth Lagoon, as suggested by many of the commenters. Incorporating the light rail tunnel into the Project effectively avoided or minimized many of the adverse impacts that would have occurred in the Kenilworth Corridor between West Lake Street and just south of the Kenilworth Lagoon. In contrast, placing the light rail alignment in a trench in the Kenilworth Corridor would have increased capital costs, but without avoiding or minimizing adverse impacts in the area of the trench, such as visual impacts or the number of residential displacements (because the width of the required right-of-way between West Lake Street and just south of the Kenilworth Lagoon would not have been reduced as it would under the Project with the shallow*

light rail tunnel). See Section 2.2 and Appendix F of the Final EIS for additional information on the design adjustment process that resulted in the incorporation of a light rail tunnel within the Project. See Section 2.2 and Appendix E for a more detailed description and illustration of the proposed light rail tunnel within the Kenilworth Corridor.

- ***Relocating the Kenilworth Trail.*** *Relocating the Kenilworth Trail out of the Kenilworth Corridor was a potential adjustment that was addressed and evaluated after publication of the Draft EIS. As noted in Chapter 2 of the Supplemental Draft EIS and Appendix F of the Final EIS, the alternative to relocate the Kenilworth Trail from a portion of the Kenilworth Corridor was dismissed because it would require additional property acquisitions and the construction of a new trail route between Inglewood Avenue South and Cedar Lake Parkway, including at-grade crossings or trail overpass structures over Highway 25 and France Avenue. Further, the alignment of the trail would be less direct and travel times for trail users would be increased. Elevating the Kenilworth Trail was also evaluated and dismissed from further study, because of visual impacts to trail users and from viewpoints adjacent to the Kenilworth Corridor, and because of potential impacts to the setting of the Kenilworth Lagoon due to the height of the structure and the need for connecting ramps. Further, trail grade changes needed to transition from at-grade to above-grade would adversely affect trail users.*
- ***Single Track Light Rail Alignment in the Kenilworth Corridor.*** *Operating light rail on a shared single track (by alternating inbound and outbound light rail vehicles), was dismissed from further study, because of the limitations that single tracked operations would have on the long-term capacity and transit of the Project and because of potential delays that would be incurred by transit riders as light rail vehicles would be required to wait at times for opposing light rail vehicles to clear the single-track segment. In particular, the maximum headways on the proposed light rail extension would be reduced, compared to the Project, because of the need to meter inbound and outbound light rail trains through the single-track segment.*
- ***Alternative Royalston Station Locations.*** *Alternative Royalston Station locations were considered and dismissed from further study for several reasons. Moving the proposed Royalston Station onto Border Avenue would involve the acquisition of right-of-way, because of the narrowness of the existing right-of-way on Border Avenue. Moving Royalston Station onto 6th Avenue North would not serve additional areas of downtown Minneapolis and would have overlapping ridership with Target Field Station. Additional issues associated with moving Royalston Station include increased length of the proposed light rail alignment, tighter curves, and functional difficulty interfacing with the Target Field Station. Target Field Station cannot be moved because it is an existing station and the Project is intended to directly connect with the existing METRO Green and Blue Line LRT routes. See Appendix E of the Final EIS for the Preliminary Engineering plans that show the current design, which minimizes property acquisitions and provides enhanced pedestrian access to the nearby Minneapolis Farmer's Market.*

Routing Light Rail along I-494 and Highway 100 or via Wayzata Subdivision and MN&S Spur

Routing the proposed light rail alignment along I-494 was suggested as a modification. LRT along I-494 was evaluated in the LRT 2A and 2C alternatives in the Alternatives Analysis (AA) Report*, published in 2007. Alternatives 2A and 2C were not carried forward to the Draft EIS because they did not support the goals and objectives developed by the Southwest Transitway Policy Advisory Committee. Eden Prairie and Minnetonka have comprehensive plans that do not support development in a significant segment of the alignment along I-494, and these alignment alternatives are therefore considered to not support local and regional economic development goals. Further, alternative alignments using a combination of the Wayzata Subdivision, the TC&W Spur, and Highway 100 were evaluated as Alternatives E2 and E4 and they were dismissed from further study due to longer transit travel times, reduced transit coverage in higher density areas of St. Louis Park and Minneapolis, thus not supporting local and regional plans and goals. In particular, two of the station areas with the highest projected ridership under the Project (West Lake Station and Beltline Station) would be bypassed.*

Modifications to LRT 3C

Several modifications of the LRT 3C Alternative were proposed, such as using Minnetonka Avenue, France Avenue, and Chicago Avenue. Other similar modifications to LRT 3C have been evaluated. These modifications proposed to continue the light rail alignment on the Midtown Corridor to a north-south street where the light rail would turn

north to downtown Minneapolis. Following evaluation in the Draft EIS (e.g. LRT 3E on Park Avenue), these modifications were dismissed from further study because of the reasons cited for LRT 3C-1 and LRT 3C-2 under Section G.1. In particular, these modifications were not consistent with regional and local planning, were inferior in performance and cost effectiveness, and presented significant engineering, traffic and LRT operational issues (See Draft EIS Sections 11.2.6 and 11.2.7).

Lyndale Avenue Alignment

In the Rail Feasibility Study *(Hennepin County, 2007), the rationale for excluding the Lyndale Avenue LRT alternatives (i.e., LRT 1B, LRT 2B, LRT 3B, and LRT 4B) included traffic, business, visual/aesthetic, and cost impacts. In terms of traffic impacts, a median running Lyndale Avenue light rail line would result in the elimination of the center two lanes of traffic on Lyndale Avenue, which would lead to a substantial increase in congestion and vehicle delay along the proposed alignment. In addition, the Bryant and Aldrich bridges over the Midtown Greenway Corridor would need to be removed to allow the light rail vehicles sufficient space to accomplish the grade change that exists between the Midtown Greenway Corridor and Lyndale Avenue. There were also parking impacts, additional costs, and interstate access structure modifications that would be associated with these alternatives.*

G.3 Proposed new mode

Summary of Comments: One commenter proposed the shared use of light rail and freight rail trains on freight rail tracks within the Kenilworth Corridor, which would use diesel multiple units (DMUs) for the light rail vehicles.

Response: *The 2003 Southwest Rail Transit Study presented a comparison of the DMU and light rail modes for the Project. The DMU system was dismissed from further consideration for a number of factors. DMU vehicles cannot be through-routed with the Green Line for a one-seat ride to destinations between downtown Minneapolis and downtown St. Paul. Other differences involved power systems, travel time, and track ownership that did not favor the DMU. Further, frequency, capacity, and travel times of a DMU line would be limited by freight train movements on the shared tracks.*

H. Concern about the Operations and Maintenance Facility (OMF) and ancillary facilities

Summary of Comments: The FTA and the Council received approximately 30 comments on the Draft EIS concerning the OMF and ancillary facilities such as traction power substations (TPSS). Those commenters included the following: City of Eden Prairie, City of Minnetonka, City of Minneapolis, MnDOT, EPA, businesses, community groups, non-profit organizations, and the general public. The comments expressed concern related to a lack of information about impacts from the OMF, opposition to locating the OMF in particular areas, and opposition to the potential location of a commuter rail facility at Linden Yards in Minneapolis. Specific comments presented rationales for not locating the OMF in particular areas.

Response: *Since publication of the Draft EIS, design of the Project has advanced and an OMF site has been selected. The Project includes an OMF in the City of Hopkins, which was not one of the locations studied in the Draft EIS. The process by which the OMF location was selected is documented in Chapter 2, Alternatives Considered, and the environmental and transportation analysis of the OMF and ancillary facilities are documented in Chapters 3 and 4, respectively, of the Final EIS. For additional information about responses to comments related to environmental issues such as methodology, impacts, and mitigation see Themes M, N, O, and P. The commuter rail facility at Linden Yards, which was being studied when the Draft EIS was prepared, is not part of the Project. As a result of the OMF selection process and results and other activities that occurred since publication of the Draft EIS, many of the comments received on the Draft EIS concerning the Project's OMF have been addressed through incorporation of the proposed Hopkins OMF into the Project.*

H.1 Different location of Operations and Maintenance Facility (OMF)

Summary of Comments: Commenters expressed concern about alternative OMF locations within Eden Prairie and Minneapolis. Primary concerns were lack of information about acquisitions and impacts on businesses, nonconformity with locally adopted land use plans, and statements that the selection process was not adequate and that a more thorough OMF site evaluation was needed. The City of Eden Prairie stated that a more thorough evaluation was needed before an OMF site was selected, cited a lack of impact analysis, and also cited a conflict with the Project's Purpose and Need Statement related to the placement of the Project's OMF within the City of Eden Prairie. The City of Minneapolis opposed locating the OMF in Minneapolis and stated that the impacts of an OMF in Minneapolis could not be mitigated. MnDOT commented that the information provided in the Draft EIS was too general and that MnDOT was unable to determine impacts to roadway operations from an OMF location. EPA stated that the process for selecting OMF sites in the Draft EIS was not adequate and that the Final EIS needed to include a rationale for selecting an OMF location as well as an analysis of impacts caused by construction and operation of the OMF.

Response: *Since publication of the Draft EIS, design of the Project has advanced and a proposed OMF site has been identified in the City of Hopkins. The Supplemental Draft EIS identified 30 sites for evaluation for OMF siting. The first step in this evaluation—a preliminary site evaluation—reduced the number of sites from 30 to 18. The second step in this evaluation included a detailed assessment of these 18 sites based on 13 criteria. This narrowed the potential OMF sites from 18 to seven. The seven remaining sites underwent a third evaluation step, which entailed an operational analysis and public and jurisdiction review and input. After the third step, the two remaining sites were subjected to a final detailed assessment and further public and jurisdictional review. Through the four-step evaluation process, the Hopkins OMF site (site 9A) was identified to be incorporated into the Project. Compared to the other sites considered, this evaluation determined that selection of the Hopkins OMF would result in improved out-of-service operations and operating cost savings due to its relatively central location on the proposed light rail line. Exhibit 2.1-3 provides illustrations of the OMF site. The proposed Hopkins OMF will be located approximately 1,000 feet south of the proposed Shady Oak Station. The Hopkins OMF will be located within existing office/warehouse and light manufacturing development land use. The proposed Hopkins OMF will occupy an approximately 15-acre site between the CP Bass Lake Spur to the south, 5th Street South/K-Tel Drive to the north, just east of 16th Avenue South on the east, and the proposed LRT mainline to the west.*

The proposed Hopkins OMF will include the closure of 16th Avenue South, which is in the middle of the proposed site, between K-Tel Drive and 6th Street South. In addition, a cul-de-sac will be constructed on 6th Street South and at 5½ Street, immediately east of the former 16th Avenue South alignment. Automobile and truck access to the OMF site will be provided on the existing roadway network via 5th Street South, K-Tel Drive, and 15th Avenue South. Light rail transit vehicles will access the proposed OMF site via the inbound tracks of the light rail alignment. Inbound light rail trains will access the site directly from the inbound tracks. Outbound light rail trains will access the OMF by crossing over to the inbound tracks south of 5th Street, and enter the OMF site via the inbound tracks.

In general, light maintenance activities and the storage of vehicles not in service will occur within enclosed structures, although some maintenance activities, including moving vehicles between functional areas within the OMF, will occur outside of buildings. Activities on the site will include washing, routine cleaning, routine maintenance, and inspections of the trains; parts storage; and maintenance-related office functions. The proposed OMF site will be in operation 24 hours a day, 365 days a year.

See Section 2.1 and Appendix F of the Final EIS for a summary of the process the Council undertook to identify the location for the OMF. Exhibit 2.1-3 of the Final EIS provides an illustration of the Hopkins OMF site and the proposed site plan (see also Appendix E of the Final EIS). As noted above, Chapter 3 of the Final EIS documents the environmental impacts, including Surface Water Resources. Transportation analysis and effects of the OMF and ancillary facilities are documented in Chapter 4, of the Final EIS.

H.2 Commuter Rail Storage Yard at Linden Yards

Summary of Comments: Commenters stated their opposition to a commuter rail storage facility at Linden Yards in Minneapolis and noted its impact on development potential near Van White Station. Further, EPA recommended that the Final EIS be updated to include any potential development in the Linden Yards area, including the potential diesel rail storage yard. In particular, the EPA noted that the Final EIS should address community concerns that siting a diesel rail storage yard could eliminate the siting of the Van White Station, and/or other developments.

Response: *The design and location of Van White Station has shifted since publication of the Draft EIS. The proposed light rail alignment and Van White Station will be northwest of Linden Yards and will not preclude the use of portions of the Linden Yards site for a rail storage or maintenance facility, nor will it preclude other development from occurring on that site. Conversely, development of Linden Yards (or lack of development of Linden Yards) will not preclude the proposed light rail alignment and station, nor would that development cut off access to the proposed station. The current design for the Van White Station was included in Appendix G of the Supplemental Draft EIS and will be included in Appendix E of the Final EIS.*

Regarding a high speed rail layover facility, or a diesel rail storage facility, at Linden Yards, there are no adopted plans or funding for either of these facilities. The Council has confirmed with the Minnesota Department of Transportation, the authority for passenger rail in the state, that there are no adopted plans for a rail storage facility at Linden Yards. Therefore, these facilities will not be evaluated in the cumulative impact assessment within the Final EIS, consistent with Considering Cumulative Effects Under the National Environmental Policy Act (Council on Environmental Quality [CEQ], 1997). Specifically, a potential high speed rail layover or maintenance facility is not included in the Cumulative Effects section of the Final EIS as a reasonably foreseeable action because it is not included within any adopted plans nor is it funded; therefore, the use of the land as a potential rail storage yard facility is not noted as a "reasonably foreseeable" use. MnDOT's draft Minnesota GO State Rail Plan, which would note all rail and storage facilities within the state of Minnesota, does not include any future rail facility in Linden Yards. The City of Minneapolis has no current adopted plans for the Linden Yards facility. The City of Minneapolis noted to the Council that any future high speed or commuter rail layover facility will be many years in the future, and due to very poor soils and complexities of phasing, any future rail layover facility can only occur on distinct land parcel east of the two office towers closest to the Van White station on Linden Yards East, and a future rail facility cannot support vertical development. As such, the Final EIS's land use and other analyses are based on the City of Minneapolis' applicable adopted land use plans, including the Bassett Creek Valley Master Plan (2007). That plan designates much of the Linden Yards site as mixed-use, commercial and other development, with some park land; the plan recognizes that the site's current use is industrial.

Additionally, a potential high speed rail layover facility or a storage yard at Linden Yards is not included in the No Build Alternative because it is not included within an adopted plan nor is it a funded project.

H.3 Concerns about location of ancillary facilities such as traction power substations (TPSS) and signal bungalows

Summary of Comments: The City of Eden Prairie, City of Minnetonka, City of Minneapolis, and others commented that the locations of TPSS should be selected to optimize development and public access, and that visual impacts must be properly mitigated. The EPA stated that TPSS locations should be sited in upland (non-wetland) locations.

Response: *The TPSS locations depicted in the Draft EIS had a large siting radius intended to identify general TPSS locations. Since then, advancement of the design of the Project has identified specific locations for TPSSs, as shown in Appendix E, Preliminary Engineering Plans, in the Final EIS. The proposed sites were located to minimize impacts to the surrounding properties. TPSS sites were selected through consultation with applicable local jurisdictions. The process of TPSS siting considered the locations of wetlands and other sensitive areas (e.g., historic resources) and avoided these areas. The current design alternative completely avoids the direct placement of any TPSS within a wetland. However, construction of the required access road to the TPSS located near Opus Station will result in a small amount of unavoidable permanent impact to one wetland. The avoidance and minimization measures associated with this impact were included in the CWA Section 404 permit application. See Appendix D in the Final EIS to access the CWA Section 404 permit application.*

Section 3.7 of the Final EIS describes the Visual Quality and Aesthetics assessment of the Project, including elements such as TPSS. The Project has been designed to locate, screen, and design TPSSs and signal bungalows to avoid adverse impacts to existing and planned development, as appropriate, and within available budget. The Council will continue to coordinate with municipalities on the siting and design of TPSS facilities.

I. Concerns about park-and-ride lots and stations

Summary of Comments: FTA and the Council received approximately 160 comments on the Draft EIS concerning the design of stations, park-and-ride lots, and parking near stations. Those commenters included the following: the cities of Eden Prairie, Hopkins, Minneapolis, Minnetonka, and St. Louis Park; the MCWD and NMCWD; MnDOT; the Sierra Club; Eden Prairie Chamber of Commerce; businesses, community groups, and non-profit organizations; and the general public.

Commenters expressed concern about parking at light rail stations, potential for spillover parking on adjacent streets at proposed light rail stations, park-and-ride lot location and size, station design, and station access. Comments were related to specific light rail stations, as well as parking near stations in general. Comments on specific stations addressed a variety of issues including location, design, traffic impacts, pedestrian and bicycle access, on-street and off-street parking, park-and-ride lots, coordination with existing businesses, and future development plans.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The Final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.*

Since publication of the Draft EIS, the Council has worked closely with Hennepin County, cities, businesses, property owners, community groups and many other stakeholders to address their concerns and comments made on the Draft EIS. For example, park-and-ride lots within the City of Minneapolis that were proposed in the Draft EIS have been removed from the Project based on concerns described in Theme I.1 below. The design of the Project and associated roadway improvements have been adjusted to avoid traffic impacts. Coordination with the cities and other jurisdictions has resulted in pedestrian and bicycle improvements with connections to the stations and key destinations, residential neighborhoods and trails. As the Project progresses, FTA and the Council will continue to work with property owners and communities on specific design issues related to stations and park-and-ride lots.

Section 2.1.2 of the Final EIS describes the project including stations with planned park-and-ride lots and they are illustrated in Appendix E of the Final EIS. Exhibit 2.1-2 of the Final EIS illustrates which stations have park-and-ride lots and which do not.

I.1 Park-and-Ride Lots and Parking Demand

Summary of Comments: The Council and FTA received comments on the Draft EIS concerning opposition to park-and-ride lots at particular stations (West Lake, 21st Street, and Penn Stations) due to concerns about traffic congestion, impacts to neighborhood character, future development, and visual quality impacts. Those commenters included the following: the City of Minneapolis, businesses, community groups, and the general public.

Response: *Since publication of the Draft EIS, the three previously proposed park-and-ride lots at stations in Minneapolis (West Lake Street, 21st Street and Penn Avenue stations) have been removed from the Project. In response to public concerns, the Council completed a park-and-ride study, which determined that there was not sufficient demand for park-and-ride facilities at these stations because they will be used primarily by neighborhood residents, bus riders transferring to LRT, and people using nearby trails.*

<u>Spillover Parking</u>

Summary of Comments: Comments were received concerning park-and-ride lots filling up, resulting in transit users parking their cars in the adjacent neighborhoods. Business groups in Eden Prairie asked to review station and park-and-ride designs to make sure they allow adequate parking and avoid spillover into private properties; for example, the Eden Prairie Town Center Station Park-and-Ride lot should be planned to assure adequate parking for park-and-ride users to avoid parking conflicts with other Eden Prairie Center businesses.

Response: *The Project description in Section 2.1.1 of the Final EIS identifies the Project's proposed light rail stations with park-and-rides, and Table 2.1-1 of the Final EIS shows the number of parking spaces planned for each park-and-ride lot.*

Based on the travel demand forecasts completed for the Project (described in Section 4.1 of the Final EIS), the total number of park-and-ride lot spaces will meet and exceed the forecasted demand for park-and-ride lot parking spaces in the Project's opening year (2020). However, the travel demand forecasts show a deficit of approximately 650 park-and-ride spaces in the Project's forecast year (2040). This forecast deficit is predominantly concentrated at the proposed SouthWest and Beltline Stations, with most (about two-thirds) of the deficit occurring at SouthWest Station.

The Project could lead to indirect impacts related to "spillover" parking in neighborhoods adjacent to proposed light rail stations. Spillover parking is unwanted parking by light rail riders in off-street parking lots or at on-street parking spaces adjacent to a light rail station. Spillover parking can result from a lack of park-and-ride lot capacity relative to demand for park-and-ride lot spaces, and can affect both businesses and residences by limiting available parking spaces for residents, visitors, customers, and employees. The Council will complete a Regional Park-and-Ride System Report on an annual basis to attenuate the impacts related to spillover parking. As part of this effort, the Council and Metro Transit will collaborate with regional transit partners, local governments, and the MnDOT to conduct an annual regional park-and-ride survey, which tracks facility use and emerging travel patterns by park-and-ride users across the region to identify the appropriate mitigation. The results of this survey are published in the annual report. In addition, the Council will develop a joint use agreement to share parking with SouthWest Transit for the park-and-ride lot adjacent to the station. Spillover parking impacts can also be curbed by the local jurisdictions and residents by implementing a "residents parking" permit program, which would allow unlimited time parking for residents and visitors of residents.

<u>Design of park-and-ride lots</u>

Summary of Comments: The Council and FTA received comments on the Draft EIS concerning the location, size and design of park-and-ride facilities. Comments included concerns about traffic and visual impacts on adjacent neighborhoods. Those commenters included the City of Eden Prairie, the NMCWD, and the general public. The City of Eden Prairie commented on the need for the park-and-ride lots to be sized and designed to fit the demand and character of each site, especially at the Golden Triangle and Eden Prairie Town Center stations, and asked to be involved in the design process. The City of Minnetonka requested additional study into exact park-and-ride locations and potential for parking to be shared with adjacent uses. NMCWD stated that park-and-ride lots would be considered impervious surface requiring a permit.

Response: *Since publication of the Draft EIS, the Council worked closely with the cities of Eden Prairie, Minnetonka, Hopkins and St. Louis Park, SouthWest Transit, along with stakeholders, to refine the location, size and design of the nine park-and-ride facilities that are part of the Project. In general, the proposed light rail alignment and station locations were adjusted to provide better connections to local activity centers, while avoiding or minimizing adverse impacts, as described in Chapter 2 and Appendix F and illustrated in Exhibit 2.2-5 as well as Appendix E of the Final EIS. As previously noted, the Council completed a park-and-ride study that determined the demand for park-and-ride at each stations. Section 4.1 of the Final EIS describes the travel demand model that was used to assess ridership and mode. For additional information about the travel demand model, see the Draft Travel Demand Methodology & Forecast, Southwest LRT Technical Report in Appendix C of the Final EIS. For the nine stations with park-and-rides, the model informed the size of the park-and-ride. Section 2.1.1 of the Final EIS describes the project including stations with park-and-rides and Table 2.1-2 of the Final EIS identifies the number of spaces planned for each park-and-ride. The project includes changes to increase roadway capacity to respond to anticipated demand to use of one or more roadways at a specific location in response to*

new park-and-ride demand at a new park-and-ride lot. Section 2.2 and Appendix F of the Final EIS summarize the process used to engage the cities in the design adjustment process.

Table 9.5-1 of the Final EIS provides a list of required permits, approvals and reviews, including those required by the NMCWD.

I.2 Station Design, Access, and Circulation

Summary of Comments: Commenters noted concerns about the location, size and design of stations, including concerns related to visual impacts, accessibility, cost, protection from the elements and bicycle facilities. Those commenters included the cities of Eden Prairie, Hopkins, Minneapolis; MnDOT; community groups; and the general public.

The cities of Eden Prairie, Hopkins, Minneapolis; community organizations; and the general public requested that access to the stations and transportation networks be designed to handle increases in pedestrian, bicycle and automobile traffic near stations. MnDOT commented on the need for passenger drop-off zones at stations to avoid traffic back-ups. The City of Minneapolis commented about the need for all five Minneapolis stations proposed in the Draft EIS, to be constructed, and for these stations to be designed and built in a way that serves all modes of transportation, including people with disabilities. The City of Minneapolis also commented on the integration of art into station design. Community groups stated that the effects of freight rail colocation on the design of the Wooddale, Beltline, West Lake, 21st Street, and Penn Avenue stations had not been adequately analyzed. Commenters expressed concern about the acquisitions that may be required for the stations and proposed park-and-ride lots.

One commenter suggested that proposed light rail stations be connected to the downtown Minneapolis skyway system. The City of Eden Prairie commented on the traffic impacts that the proposed activity at the stations could generate. The City of St. Louis Park indicated that roadway, bicycle and pedestrian access improvements were needed to handle additional circulation in the station areas. The City of Hopkins stated that pedestrian improvements were needed, especially between the proposed Downtown Hopkins Station and its associated park-and-ride lot, as well as roadway improvements to handle increased traffic and access to the Blake Station. The City of Minneapolis commented that light rail stations should be easy to access and safe, and that the Project should provide connections to the stations that minimize conflicts between bicyclists and pedestrians. Community groups expressed concerns about increased traffic impacts and about the trail crossings of the freight rail tracks near West Lake Street and 21st Street Stations.

Response: *Since publication of the Draft EIS, the Council worked closely with Hennepin County, the cities along the alignment and the public to design stations that are functional and cost effective, fit with the surrounding neighborhoods, provide access to the stations for pedestrians, bicycle, transit users, and drivers; protect passengers from the weather and meet the requirements of the Americans with Disabilities Act. All five proposed stations in Minneapolis remain in the Project and the park-and-rides originally proposed for these stations have been removed. Chapter 9 of the Final EIS summarizes the process used to engage the cities and the public in the station design process. Section 3.7 and Appendix J, of the Final EIS describes the analysis of visual quality and aesthetics impacts and includes a summary of the visual impacts of the Project, including stations. The Council worked closely with MnDOT, Hennepin County and the cities to design roadway modifications, add pedestrian improvements, and accommodate passenger drop-off or transfer areas that will allow safe crossing of tracks and access to the stations. The Project also includes intersection modifications, new traffic signals, changes to existing traffic signals, and other traffic management techniques at intersections and at at-grade crossings of roadways. Section 4.2 of the Final EIS includes a traffic analysis; Section 4.2.2.2 discusses impacts to local roadway networks. Appendix E, Preliminary Engineering Plans, includes a complete list of roadway and intersection modifications that will be implemented with the Project and illustrates the roadway improvements and passenger drop-off areas at each station.*

Section 4.5 of the Final EIS includes information about the pedestrian and bicycle system, including a detailed analysis of the existing pedestrian and bicycle environment, summarized in Table 4.5-1. A complete list of pedestrian and bicycle improvements that will be implemented with the Project is also included in in Appendix E.

The station design process took into account capital costs as well as costs associated with long-term operations and maintenance. As described in Section 2.2 of the Final EIS, the Council removed public art from the Project scope in July 2015; however, the Council has continued to work closely with each of the cities along the line on the design of stations so that each station is integrated with the surrounding environment and community. Chapter 7 of the Final EIS includes a financial analysis of the Project, including capital costs associated with the stations, as shown in in Table 7.1-1. See Theme T for response to other comments related to cost.

In regards to comments that the Project should connect to the downtown skyway system, passengers will have access via the METRO Green Line. Passengers will be able to continue riding LRT to the Nicollet Mall Station and access the skyway system through nearby buildings.

See Theme P for responses to comments regarding transportation system effects, and Theme R for responses to comments related to safety.

Transit oriented development

Summary of Comments: FTA and the Council received comments on the Draft EIS supporting Transit Oriented Development around stations. Those commenters included: the City of Minneapolis, the Sierra Club, community organizations, and the general public.

The Sierra Club commented that station area planning should include multi-use, sustainable and compact development. The City of Minneapolis encouraged the other cities along the corridor to take advantage of the development potential around light rail stations and stated that pedestrian improvements and feeder bus routes should be used to promote access, instead of relying solely on park-and-rides. Some community groups expressed support for development at all proposed light rail stations, except the 21st Street Station.

Response: *To coordinate station area planning efforts with the development of the Project's station and infrastructure plans, the Council worked with Hennepin County, the cities along the line, and community and community groups through the Southwest LRT Community Works program and joint advisory committees. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

Section 3.1 of the Final EIS includes a summary of existing and planned land uses along the alignment. While development and redevelopment is regulated by local jurisdictions and driven by regional and local economic conditions, light rail lines can increase the speed and intensity of development (within the limits allowed by local comprehensive plans), particularly in areas surrounding proposed stations. To fully leverage this development potential and to support local land use goals, Hennepin County, in partnership with the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis, undertook a station area planning effort. The resulting Southwest Corridor Investment Framework (Hennepin County, 2013) identifies short-term and long-term infrastructure needs and land use plans for the Project station areas. These station area plans are intended to help coordinate the Project design with the plans and decisions of local jurisdictions and adjacent property owners. The Framework identifies potential redevelopment plans for all of the stations along the line except 21st Street Station.

Individual Stations

Summary of Comments: *Multiple comments dealt with more detailed design issues such as requesting a shift in the alignment, the location of a station or access to a particular business or planned project. These comments are addressed below and fall into the general categories of station location and design, local access, track layout and design, trail design and access, and construction impacts.*

Mitchell Station

Summary of Comments: Commenters expressed concern about property acquisition and traffic impacts.

Response: *Since publication of the Draft EIS, Mitchell Station has been removed from the Project (see Theme F and Section 2.2 of the Final EIS for additional information). Section 2.1.1 of the Final EIS describes the Project and includes a list of proposed stations.*

SouthWest Station

Summary of Comments: The City of Eden Prairie commented on the need to coordinate with SouthWest Transit through the Preliminary Engineering phase, suggested that additional parking should be provided by a parking structure rather than in a surface lot, and expressed concern over traffic impacts within the station site and on nearby public streets. The Eden Prairie Chamber of Commerce and other commenters stated concerns about parking needs and traffic impacts. SouthWest Station LLC had additional concerns specific to this station about wetland impacts, access during construction, property acquisition, property values and noise and vibration impacts. Other commenters expressed the need for better pedestrian, bicycle, and motor vehicle access and parking facilities for the SouthWest Station. Concern regarding the lack of space to expand around SouthWest Station was mentioned and their preferred option would be land for across Prairie Center Drive or at the Eden Prairie Center regional mall.

Response: *Since publication of the Draft EIS, the Council worked closely with the City of Eden Prairie, business groups, and the public to minimize impacts and design a station that serves the needs of both light rail and bus customers. Section 2.2 of the Final EIS summarizes the alternatives considered, including changes to the alignment in Eden Prairie. The proposed light rail alignment and the design of SouthWest Station were adjusted to provide better connections to local activity centers, while avoiding or minimizing adverse impacts. The design adjustments are described in Chapter 2 and Appendix F and as illustrated in Exhibit 2.2-10 and Appendix E of the Final EIS.*

The Council worked closely with the City of Eden Prairie, SouthWest Transit and the business community to refine the location, size and design of the SouthWest Station park-and-ride structure. Chapter 9 of the Final EIS summarizes the process used to engage the cities in the technical issue resolution and design process.

The Council conducted detailed noise and vibration analyses since publication of the Draft EIS. There are no moderate or severe noise impacts, or vibration impacts, anticipated in the SouthWest Station area. See sections 3.12 and 3.13, and Appendix K, in the Final EIS for information about the noise and vibration analyses, including noise impacts and measures to mitigate noise impacts.

Section 3.4 of the Final EIS and Exhibit 3.4-1 identify the property acquisitions anticipated for implementation of the Project. Section 3.3.3.1 of the Final EIS summarizes community impacts associated with property acquisitions and Table 3.3-12 identifies property acquisitions needed in Eden Prairie by the station area. SouthWest Station will result in full property acquisition of one business. Other partial acquisitions of property will result in loss of parking stalls that will be replaced in the structured parking facilities serving both the businesses around SouthWest Station and the Project. Section 2.1.1 of the Final EIS includes detailed discussion of the improvements within the City of Eden Prairie. These acquisitions are not anticipated to change the overall land use of the surrounding areas or result in any residential displacements. All property will be acquired in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Relocation Act), FTA's Circular 5010.1D, Grants Management, and Minn. Stat. 117. Any businesses or persons displaced from the property will be compensated in accordance with provisions of the Uniform Relocation Act and Minn. Stat. 117. Relocation benefits will be available, under the provisions of the Uniform Relocation Act and Minn. Stat. 117, for displaced businesses and non-profit organizations including moving costs, tangible personal property loss as a result of relocation or discontinuance of operations, reestablishment expenses, and costs incurred in finding a replacement site.

The Project will result in short-term impacts during construction including potential increases in noise levels, dust, traffic congestion, visual changes, and increased difficulty accessing commercial and other uses, and some businesses may experience economic hardship during the construction period. It is anticipated that construction-related detours will affect SouthWest Transit bus routes. In order to minimize short-term impacts, the Council has developed a Construction Communication Plan. The purpose of the Construction Communication Plan is to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. See Section 3.2.4 for more information on the Construction Communication Plan and mitigation measures for short-term impacts. Potential mitigation measures for visual quality, noise, vibration, and traffic impacts are discussed in Sections 3.7, 3.12, 3.13, and 4.2, respectively.

<u>Eden Prairie Town Center Station</u>

Summary of Comments: Commenters requested that the LRT alignment and Eden Prairie Town Center Station be moved closer to the Town Center and Eden Prairie Center mall and minimized to allow for new development. The City of Eden Prairie suggested relocating the Technology Drive alignment (as proposed in the Draft EIS) to avoid adverse impacts to specific businesses along the route and to provide pedestrian access to the station. Further, the City of Eden Prairie indicated that a new road may be necessary to provide access to the proposed station and, as proposed, the Eden Prairie Town Center Station location on Technology Drive creates conflicts with surrounding businesses. Businesses supported the proposal by the City of Eden Prairie to relocate the Eden Prairie Town Center Station to the southeast off of Technology Drive and closer to Eden Prairie Center.

Response: *Since publication of the Draft EIS, the Council worked closely with the City of Eden Prairie and the business community to adjust the LRT alignment in order to minimize impacts and locate the station (without a park-and-ride lot) closer to the Eden Prairie Town Center. The Eden Prairie Town Center Station and associated roadway improvements are deferred and are not expected to be in place when the Project opens in 2020. The station and associated roadway improvements are planned to be in place by 2040. The adjusted station location was incorporated into the Project in order to provide closer access to the activity centers north and south of Singletree Lane, based on the city's request for a more centrally located and walkable Eden Prairie Town Center Station. This design adjustment is consistent with the light rail alignment shown in the city's officially adopted Major Center Area Study (2006) (shown as LRT Alternative B) and Comprehensive Guide Plan (2009) and is the city's adopted route. Section 2.2 of the Final EIS summarizes the alternatives considered, including changes to the alignment in Eden Prairie. See Appendix E of the Final EIS for an illustration of the adjusted LRT alignment and the location of Eden Prairie Town Center Station.*

Golden Triangle Station

Summary of Comments: The City of Eden Prairie asked that the park-and-ride at the Golden Triangle Station be minimized to allow for redevelopment.

Response: *Since publication of the Draft EIS, the Council worked closely with the City of Eden Prairie and property owners, to design parking and road improvements. The Golden Triangle Station park-and-ride lot is located where there is currently surface parking, minimizing the footprint of the park-and-ride lot. The Council also included the city's West 70th Street extension project in the Southwest LRT Project to provide access to the station and park-and-ride lot.*

Section 4.2 of the Final EIS includes detailed information regarding changes to roadways and traffic, Section 4.3 of the Final EIS includes a description of park-and-ride facilities and Appendix E of the Final EIS illustrates the roadway improvements and park-and-ride facilities that will occur as part of the project.

See response to Theme P for response to other comments related to traffic impacts and Subtheme I.1 for response to comments regarding the sizing of park-and-ride facilities.

City West Station

Summary of Comments: Commenters expressed concerns about connectivity between the proposed City West Station and the UnitedHealth Group development, as well as visual impacts, related to the raised station platform and alignment. Commenters raised concerns about coordination with the Shady Oak Road reconstruction project (being completed by others, UnitedHealth Group and the City of Eden Prairie), and overlap between the third phase of the development and the Project.

Response: *The Council worked closely with the City of Eden Prairie and UnitedHealth Group to integrate the proposed City West Station and its park-and-ride lot into the plans for the development. Since publication of the Draft EIS, development has proceeded and several buildings are now complete and occupied. The City West Station will be at-grade (versus elevated as included in the Draft EIS) and the design of the Project has been adjusted to include a shallow light rail tunnel under Highway 62, just west of the City West Station; this design adjustment avoids the connectivity issues caused by a raised station platform and minimizes visual quality impacts. Appendix E of the Final EIS illustrates the location of the proposed light rail station, park-and-ride, alignment, tunnel under Highway 62, and future development footprint adjacent to the City West Station.*

Opus Station

Summary of Comments: Commenters expressed concern about access to Opus Station.

Response: *Since publication of the Draft EIS, the Council has worked closely with the City of Minnetonka on roadway design. Roadway and intersection improvements will be made to Bren Road West, Bren Road East, and Yellow Circle Drive. Trail improvements will also be made in the vicinity of Opus Station. Sections 4.2 and 4.5 of the Final EIS include detailed information about changes to roadways and trails, respectively. Appendix E of the Final EIS illustrates the location of the station and the roadway, trail and pedestrian facilities that will be made to provide access to the station. See Theme P for responses to comments on transportation impacts.*

Shady Oak Station

Summary of Comments: A comment from the general public suggested that the cities of Minnetonka and Hopkins work together to plan for future land uses around Shady Oak Station. The City of Hopkins asked for additional access points to the station along 17th Avenue, 47th Street, and 5th Street/K-Tel Drive, as well as a connection for the nearby Westbrooke neighborhood. Hopkins also asked that the park-and-ride lots be designed to support future development opportunities and to accommodate demand. The City of Minnetonka expressed concern regarding station access because the land surrounding the station is controlled by private property owners.

Response: Since *publication of the Draft EIS, the Council worked with Hennepin County, and cities of Minnetonka and Hopkins through the Southwest LRT Community Works program to coordinate station area planning efforts with the development of the Project's station and infrastructure plans, including extension of 17th Avenue with pedestrian improvements which connects 5th Street/K-Tel drive and Excelsior Blvd to the proposed park-and-ride lots. The Project does not include an access point from West 47th Street. The connections from the 17th Avenue extension provide public access from the existing transportation system to and from the proposed park-and-ride lots, which addresses the City of Minnetonka concerns about station access due to private property surrounding the station Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

Sections 4.2, 4.3 and 4.5 of the Final EIS includes detailed information regarding changes to roadways and traffic impacts, park-and-ride facilities and pedestrian improvements, respectively. Appendix E of the Final EIS illustrates the roadway and pedestrian improvements and park-and-ride facilities that will occur as part of the Project.

Section 3.3.3.1 of the Final EIS summarizes community impacts, including those caused by property acquisitions and displacements. Table 3.3-14 summarizes property acquisitions needed near Shady Oak Station, including full acquisition of seven industrial parcels (30 acres) and partial acquisition of 12 industrial, commercial, and residential parcels (50 acres). These acquisitions are not anticipated to change the overall land use of the surrounding areas. Section 3.4 of the Final EIS illustrates the location of each property identification and property identification for those parcels.

See Theme P for responses to other comments related to traffic impacts and Subtheme I.1 above for response to comments regarding the sizing of park-and-ride facilities.

Downtown Hopkins Station

Summary of Comments: Commenters suggested the station could become a gateway to Downtown Hopkins. The City of Hopkins expressed concern about the light rail parking facility detracting from the economic vitality of the nearby historic downtown if used only by commuters. The City of Hopkins also suggested a shared parking facility north of 8th Avenue and 1st Street South that would be used as a destination station and contribute to the redevelopment plans for the Hopkins downtown area.

Response: *Since publication of the Draft EIS, the Council worked with Hennepin County and the City of Hopkins through the Southwest LRT Community Works program to coordinate station area planning efforts with the development of the Project's station and infrastructure plans. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

The location of the Downtown Hopkins Station, and the design of the associated public plaza, pedestrian improvements, and park-and-ride facility have been coordinated with the City of Hopkins master plans to create a pedestrian-friendly connection between the light rail station and historic Main Street. The existing park-and-ride lot will be closed to accommodate the station and a public plaza. A new park-and-ride lot will be constructed as part of the Project, in the northwest quadrant of the intersection between Excelsior Boulevard and 8th Avenue South. Sections 4.2, 4.3 and 4.5 of the Final EIS includes detailed information regarding changes to roadways and traffic impacts, park-and-ride facilities and pedestrian improvements, respectively. Appendix E of the Final EIS illustrates the station, roadway and pedestrian improvements, and park-and-ride facilities that will occur as part of the Project.

Blake Station

Summary of Comments: Commenters stated concerns about impacts to traffic and existing businesses, especially the non-profit organization called 43 Hoops. Other comments were concerned about pedestrian access; one comment suggested locating the station on the south side of the freight rail tracks to improve pedestrian access. The City of Hopkins stated its preference for the park-and-ride not to be located on the 43 Hoops property, and suggested that the park-and-ride facility be incorporated into a transit oriented development project, and also asked for pedestrian improvements across Blake Road. The MCWD provided information about the redevelopment of 325 Blake Road (stormwater management and community greenspace that could provide stormwater management for the Blake Station Area) and stated interest in collaborating to explore interaction of the redevelopment with the Project.

Response: *Since publication of the Draft EIS, the Council worked with Hennepin County, the City of Hopkins and adjacent businesses and residents to minimize impacts and improve pedestrian access. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

As a result of this coordination, the location of the proposed Blake Station was shifted from north of the light rail and freight rail tracks to the south, and the station will be located west of Blake Road with access to the park-and-ride from a new full intersection at Pierce Avenue and Excelsior Boulevard. The Project will not require the relocation of 43 Hoops. The design also includes pedestrian and trail improvements to provide safe access to the station, including an underpass under Blake Road for the regional trail. The location of the park-and-ride facility has been reviewed and approved by City of Hopkins staff. Refer to Appendix E for the preliminary engineering plans.

Section 4.2 of the Final EIS includes detailed traffic analysis including Subsection 4.2.2.2 that looks at impacts to the local roadway network. The analysis shows that no intersections that would operate at level of service (LOS) A to D under the No Build Alternative will operate at LOS E or F under the Project. The LOS of the intersection of Blake Road and LRT/freight rail, adjacent to 43 Hoops, is not expected to change in 2040 (the forecast year). The LOS of the intersection of Blake Road and 2nd Street NE, adjacent to 43 Hoops, is expected to change from LOS B to LOS C in 2040 (the forecast year).

Appendix E includes a complete list of roadway and intersection modifications that will be implemented with the Project in the Roadway Improvements Table and Preliminary Engineering Plans found in Appendix E. Section 4.5 of the Final EIS discusses the pedestrian and bicycle system, including a detailed analysis of the existing pedestrian and bicycle environment, summarized in Table 4.5-1 of the Final EIS. A complete list of pedestrian and bicycle improvements that will be implemented with the Project is also included in in Appendix E (Table E.3). See Theme P for response to comments regarding transportation system effects.

The Council has also worked closely with the cities and watershed districts to identify necessary permits. Chapter 9 of the Final EIS summarizes the process used to engage the cities in the technical resolution and design process for stormwater mitigation. Section 9.3.2 of the Final EIS describes coordination with other jurisdictions and agencies including watershed districts. Table 9.5-1 of the Final EIS provides a list of required permits, approvals and reviews, including stormwater permits required by the MCWD. At the time the Project will seek a stormwater permit from MCWD, the permit will note the necessary capacity required for the station relative to the available capacity.

Louisiana Station

Summary of Comments: Commenters included the City of St. Louis Park, the MCWD, and the general public. One commenter raised concerns about incompatible land uses near the proposed Louisiana Station and noise impacts to Park Nicollet Methodist Hospital. The City of St. Louis Park asked that an alternative alignment for light rail and an alternative location for Louisiana Station be evaluated. The MCWD provided information about a separate project to realign Minnehaha Creek, which could include stormwater management for the Louisiana Station area and pedestrian and bicycle improvements. MCWD stated interest in collaborating to explore the interaction between the creek realignment with the Project

Response: *Since publication of the Draft EIS, the Council worked with the City of St. Louis Park and adjacent businesses to refine the location of the station, minimize impacts, and improve pedestrian access to Park Nicollet Methodist Hospital. The Council has also worked with Hennepin County, the city and the business community through the Southwest LRT Community Works program and joint advisory committees to coordinate station area planning efforts with the development of the Project's infrastructure and station plans. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

The Project has advanced the design of Louisiana Station to be compatible with the surrounding communities. Table 3.1-4 in the Final EIS summarized the Project's compatibility with adopted land use plans and policies. The City of St. Louis Park Comprehensive Plan; Elmwood Area Land Use, Transit, and Transportation Study; and Connect the Park! Plan are each compatible with the Project. Section 2.2 of the Final EIS summarizes the alternatives considered; Section 2.2.4 summarizes changes made in St. Louis Park and Minneapolis related to freight rail location that impacted the light rail design and station locations. Louisiana Station has been moved southward with the park-and-ride moved south of the station. Appendix E of the Final EIS illustrates the location of the freight rail tracks, light rail tracks, station, park-and-ride and pedestrian improvements that will occur as part of the Project.

The Council conducted a detailed noise analysis since publication of the Draft EIS. No noise impacts were identified to Park Nicollet Methodist Hospital. Section 3.12 of the Final EIS provides a summary of the noise analysis, identified impacts and mitigation strategies; Appendix K of the Final EIS provides details and supporting documentation.

The Council also worked closely with the cities and watershed districts to identify necessary permits. Section 9.3.2 of the Final EIS describes coordination with other jurisdictions and agencies including watershed districts. Table 9.5-1 of the Final EIS provides a list of required permits, approvals and reviews, including stormwater permits needed by the MCWD. At the time the Project will seek a stormwater permit from MCWD, the permit will note the necessary capacity required for the station relative to the available capacity.

Wooddale Station

Summary of Comments: Commenters stated concerns about safety and traffic impacts focused on the intersection of the tracks, trail, and roadway.

Response: *Since publication of the Draft EIS, the Council worked with the City of St. Louis Park and Hennepin County to minimize impacts and improve pedestrian access in station areas. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

Wooddale Station will be located south of the freight rail tracks and east of Wooddale Avenue and the Project includes pedestrian improvements that will provide access to the residential and mixed use development in this area. The park-and-ride lot, as proposed in the Draft EIS, has been removed. The Project includes a trail underpass under Wooddale Avenue, which will allow trail users to cross the intersection without having to cross vehicular traffic. LRT and freight rail alignments will cross Wooddale Avenue at-grade. Section 4.2 of the Final EIS summarizes the planned roadway improvements and traffic analysis. Section 4.5 of the Final EIS includes information regarding the pedestrian and bicycle system. A complete list of roadway, pedestrian and bicycle improvements that will be implemented with the Project is included in in Appendix E.

Beltline Station

Summary of Comments: Commenters stated concerns about incompatible land uses and traffic impacts around Beltline Station. The City of St Louis Park suggested that the station should be moved south to be more convenient to nearby development and potential transit users.

Response: *Since publication of the Draft EIS, the Council worked with the City of St. Louis Park to adjust the design of the station, minimize impacts and improve pedestrian access to adjacent businesses and destinations. The Council has also worked with Hennepin County, the city and the business community through the Southwest LRT Community Works program and joint advisory committees to coordinate the station area planning efforts with the development of the Project's infrastructure and station plans. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

While the proposed Beltline Station remains in approximately the same location as evaluated in the Draft EIS, modifications have been made to the supporting facilities. The park-and-ride location has moved from the south side of the freight rail tracks to the north side, and new Project elements have been added, including: a new grade-separated trail bridge at Beltline Boulevard; bike lanes and sidewalks to the west side of Beltline Boulevard; and access improvements for motor vehicles, pedestrians, and bicyclists.

Table 3.1-4 in the Final EIS summarizes the Project's compatibility with adopted land use plans and policies. The City of St. Louis Park Comprehensive Plan; Elmwood Area Land Use, Transit, and Transportation Study; and Connect the Park! Plan are each compatible with the Project.

Section 4.2 of the Final EIS includes a detailed traffic analysis. Subsection 4.2.2.2 evaluates impacts to the local roadway network. A complete list of roadway and intersection modifications that will be implemented with the Project is included in the Roadway Improvements Table and the Preliminary Engineering Plans, found in Appendix E. Chapter 10 of the Final EIS also describes the potential Beltline Station joint development project.

West Lake Station

Summary of Comments: Commenters expressed a variety of concerns about traffic congestion, parking, bike and pedestrian access, availability of a passenger drop-off area, multimodal connections, noise, light pollution, community character, loss of vegetation, visual impacts, and business impacts. A commenter suggested putting the station below grade. Several comments were received on the park-and-ride facility at this station both in support and in opposition. Several commenters expressed concerns about construction impacts. In addition to the above concerns, a number of community groups stated opposition to the acquisition of property with existing multifamily housing to accommodate the Project.

The MPRB commented on the need for the Project to complete a comprehensive multi-modal circulation analysis, including impacts to Grand Rounds parkways and trails. The City of Minneapolis expressed support for vertical circulation between the station and the Lake Street Bridge, and for pedestrian improvements connected to the station. Minneapolis also suggested that development potential at West Lake Street should be considered when determining the exact location of the West Lake Station.

Response: *Since publication of the Draft EIS, the Council worked with Hennepin County, the City of Minneapolis, the MPRB, adjacent neighborhoods, property owners and residents to minimize impacts, address concerns and provide pedestrian and bike access to the station. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

The design of West Lake Station has advanced in coordination with agency and public input. The station will be at grade, approximately 25 feet below and immediately south of the bridge carrying West Lake Street, with stairs and an elevator connecting the station and West Lake Street. Freight rail modifications under LRT 3A-1 (co-location) have been adjusted since publication of the Draft EIS, including minor changes to the location of the freight rail tracks in the Kenilworth Corridor to accommodate the proposed light rail tunnel and at-grade alignment. Section 2.2 of the Final EIS summarizes the alternatives considered and Section 2.2.4 summarizes changes made in St. Louis Park and Minneapolis related to freight rail that impacted the light rail design and station locations. Appendix E in the Final EIS illustrates freight rail modifications. The proposed park-and-ride lot

at West Lake Street Station has been removed from the Project in response to comments received (see theme I.1 for additional information).

Roadway and pedestrian improvements will provide access to the station via Chowen Avenue South and Abbott Avenue South, which will accommodate passenger drop-offs and bus transfers, as well as via West Lake Street. The Project also includes a variety of bicycle and pedestrian safety and access improvements associated with, and in the vicinity of, West Lake Station. Section 4.5 of the Final EIS summarizes pedestrian and bicycle improvements and a complete list of pedestrian and bicycle improvements that will be implemented with the Project is also included in in Appendix E.

The Council also worked closely with MnDOT, Hennepin County, and the City of Minneapolis to design roadway modifications, add pedestrian improvements and accommodate passenger drop-offs or transfers from buses. Section 4.2 of the Final EIS includes detailed traffic analysis; Section 4.2.2.2 discusses impacts to local roadway networks. The Project is not expected to change the LOS at the intersections of West Lake Street/Drew Avenue or West Lake Street/Market Plaza. Appendix E of the Final EIS illustrates the roadway improvements that will occur as part of the Project. Further, the Council, City of Minneapolis, MPRB, and Hennepin County participated in the West Lake Multimodal Transportation Study, completed in February 2016. The goal of the study was to identify opportunities to address non-motorized and motorized travel within the West Lake LRT Station area with projects that can be implemented as a part of the construction of the Southwest LRT or as part of other capital initiatives. The study report includes Green Line Design Recommendations that have been incorporated into the Project, including enhanced crosswalk markings at specific intersections, and wayfinding signage. See Theme E.1 for additional information about the West Lake Multimodal Study. See Themes E.2 and E.7 for responses to comments in regard to concerns about pedestrian and bicycle within the Kenilworth Corridor.

The Council continued the noise analysis since publication of the Draft EIS and incorporated measures to avoid, minimize or mitigate most of the impacts. Section 3.12 of the Final EIS provides a summary of the noise analysis, identified impacts and mitigation strategies; Appendix K of the Final EIS provides details and supporting documentation. See Theme E.2 in this appendix for the response to comments about noise impacts in the Kenilworth Corridor.

The Council worked with Hennepin County and the City of Minneapolis through the Southwest LRT Community Works program and joint advisory committees to coordinate the station area planning efforts with the development of the Project's infrastructure and station plans. According to the Transitional Station Area Action Plans for the Southwest LRT Corridor, the West Lake Station area has strong redevelopment potential due to its favorable demographics, sense of place, and nearby amenities like the Midtown Greenway, Kenilworth Trail, Lake Calhoun, and Lake of the Isles. The station area has a high population base and high household incomes, both factors that favor development.

The Council worked with the City of Minneapolis and adjacent neighborhoods to address concerns about loss of vegetation, community character, light pollution and visual impacts. Section 3.7 of the Final EIS includes an analysis of visual impacts both north and south of West Lake Station. Details and renderings showing the anticipated changes are included in Appendix J of the Final EIS and continue to be advanced as part of the ongoing design of the Project. Since the Draft EIS was published, modifications to the Project and the advancement of station designs have reduced the potential for light impacts.

In the areas along the Kenilworth Corridor where the LRT will be at-grade, the proposed measures to mitigate light pollution impacts include screening views to and from sensitive viewpoints (e.g. adjacent residential areas). At West Lake Station the impacts of the new lighting areas will be attenuated by use of lighting fixtures with full shielding that direct the light only to the areas where it is required, and which prevent light spill and glare effects. The headlights on the fronts of the LRT vehicles have highly focused beams that direct the light downward onto the track straight ahead and do not project light out into the surrounding environment. See Section 3.7.4 in the Final EIS for visual quality mitigation measures. Within the Kenilworth Corridor, including the West Lake Station area, the Council developed a landscape design that preserves and builds upon the natural character of the corridor, where applicable and appropriate.

The Project will result in short-term impacts to some existing businesses. Short-term impacts include potential increases in noise levels, dust, traffic congestion, visual changes, and increased difficulty accessing commercial and other uses, and some businesses may experience economic hardship during the construction period. Potential mitigation measures for visual quality, noise, vibration, and traffic impacts are discussed in Sections 3.7, 3.12, 3.13, and 4.2, respectively. In order to minimize short-term impacts to businesses, the Council has developed a Construction Communication Plan. The purposes of the Construction Communication Plan are to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. See Section 3.2.4 for more information on the Construction Communication Plan and mitigation measures for short-term impacts. Table 3.3-16 in the Final EIS describes impacts to community facilities, community character, and community cohesion around station areas within Minneapolis. Residential property acquisitions have been minimized from the Draft EIS, which included acquisition of 57 townhome parcels and three single family homes within the Kenilworth Corridor. The Project has minimized these impacts to include partial acquisition of 11 commercial and railroad parcels (1.0 acre) within the West Lake Station area. These acquisitions are not anticipated to change the overall land use of the surrounding areas. The proposed light rail stations have the potential to support development or redevelopment that will likely change the existing land use patterns within approximately one-half mile of station areas under current plans and policies. Within the West Lake Station area there will be a net loss of 80 on-street parking spaces (loss of 97 at one location and addition of 17 at another location). Loss of parking will not adversely affect surrounding neighborhoods because there will be adequate parking supply to meet the needs of the existing land uses (see Section 4.3.3 for more information on parking impacts).See Section 4.3 of the Final EIS for discussion of impacts and mitigation to address parking concerns.

21st Street Station

Summary of Comments: Commenters expressed a variety of concerns about traffic congestion, parking, bicycle and pedestrian access, passenger drop-off areas, noise, vibration, visual impacts, and property values. Comments on the park-and-ride facility proposed in the Draft EIS included two in support and more than 20 in opposition. One commenter suggested putting the station below grade. Several comments raised concerns over impacts to wildlife, natural areas, historic features and the tranquil character of the Kenilworth Corridor. Comments dealt with concerns about safety and security, including concerns over increased crime between the station and the beach and increased emergency response times.

The MPRB commented on park ownership of property on the west side of the track at 21st Street and noted that the station would provide access to Cedar Lake East Beach and trails or footpaths.

A number of comments questioned whether the station was needed or whether a sufficient number of people would use this station to justify its construction. The City of Minneapolis commented that the 21st Street Station is in a stable, predominately single-family neighborhood adjacent to East Cedar Beach on Cedar Lake; Minneapolis views this station as a walk-up station that provides residents with access to the regional transit system and enables people from all over the region to access the nearby regional park and trails.

Response: *See Subtheme I.1 for response to comments related to opposition to park-and-rides in Minneapolis. See Master Response 16 in Appendix M for response to comments about 21st Street Station.*

Penn Station

Summary of Comments: Commenters gave support for Penn Station and requested that pedestrian, transit, and bicycle connections to the station from north Minneapolis and from the park and trail system be incorporated into the design, as well as stated concerns related to passenger drop-off areas and the design of the vertical circulation and pedestrian bridge connecting the station to Penn Avenue. Comments were also received about the potential for development around the station.

The City of Minneapolis stated that it views Penn Station as primarily a walk-up and bus transfer station, and that it supported vertical circulation and sidewalk network connections to the station. Community groups and non-profit organizations expressed their support for Penn Station.

Response: *Since publication of the Draft EIS, the Council worked with Hennepin County, the City of Minneapolis, the MPRB, adjacent neighborhoods, and residents to minimize impacts, address concerns and provide pedestrian and bike connections to the station from neighborhoods to the north of the station as well as from trails. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

Based on strong public support, Penn Station is included as part of the Project. Penn Station will be located immediately south of the I-394/Penn Avenue South interchange; this site has not changed substantially since the Draft EIS. However, improvements have been incorporated, including the addition of pedestrian connections and passenger drop-off. Since publication of the Draft EIS, the proposed park-and-ride lot at Penn Avenue Station was removed from the Project. In response to public concerns, the Council completed a park-and-ride study, which determined that there was not demand for a park-and-ride at this station because it will be used primarily by neighborhood residents, transit riders transferring between bus and LRT, and people using nearby trails. Section 4.3 of the Final EIS summarizes the parking analysis including park-and-rides. See Subtheme I.1 for response to comments related to opposition to park-and-rides in Minneapolis.

The proposed Penn Station will provide access to, and a connection between, neighborhoods on either side of the LRT alignment. Improvements that will be made as part of the project to provide connections to neighborhoods to the north include a bus transfer location and sidewalk improvements on both sides of Penn Avenue to a block north of I-394 and on the south side of Wayzata Boulevard. The Cedar Lake Trail will be at-grade where it crosses over the existing freight rail tracks in the Kenilworth Corridor and the light rail tracks immediately to the east of the freight rail tracks near Penn Station. A grade-separated pedestrian connection over the existing freight rail tracks in the Kenilworth Corridor and the Wayzata Subdivision will connect the proposed station to a passenger drop-off facility on South Wayzata Boulevard. Sections 4.1 and 4.5 of the Final EIS include information regarding the transit, pedestrian and bicycle improvements that will be implemented with the Project, and a complete list of these improvements is also included in Appendix E. Exhibit 4.1-5 of the Final EIS shows the planned bus connections, including Routes 19 and 26 that would provide connections to Penn Station from neighborhoods north on Penn Avenue.

Section 3.1 of the Final EIS includes a summary of the existing and planned land uses along the alignment. While development and redevelopment in the land use study area is regulated by the affected local jurisdictions and is driven by regional and local economic conditions, light rail lines can accelerate and intensify development, within the limits allowed by local comprehensive plans, particularly in areas surrounding proposed stations. To fully leverage this development potential and to support local land use goals, Hennepin County, in partnership with the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis, undertook a station area planning effort. The resulting Southwest Corridor Investment Framework (Hennepin County, 2013) identifies short-term and long- term infrastructure needs and land use plans for the Project station areas. These station area plans are intended to help coordinate the Project design with the plans and decisions of local jurisdictions and adjacent property owners. The Framework identifies potential redevelopment plans for all of the stations along the line including Penn Station.

Van White Station

Summary of Comments: Comments included requests for vertical circulation connection to the Van White Memorial Boulevard Bridge; pedestrian, transit and bike connections to the station from north Minneapolis; and connections to the park and trail system. Comments supported keeping the station in the Project because it would provide improved transit connections for Minneapolis residents, especially to jobs in the southwest part of the region. Several comments were made about the potential for development, including encouraging implementation of the Bassett Creek Valley Redevelopment Plan and suggesting that the ridership forecasts should take the planned redevelopment into account. A few commenters raised concerns related to the potential for incompatible land uses surrounding the station. Multiple commenters raised concerns about the potential for a commuter rail maintenance facility (which planning documents not related to the Project have shown to the east of the proposed light rail station site) and the need for an environmental assessment.

The City of Minneapolis supported vertical circulation and sidewalk network connections and suggested that the station location and design support mixed use development in accordance with the Bassett Creek Valley Master Plan.

One commenter stated that it supported Van White Station due to improvements to mobility and opportunities for reverse commute, efficiency, quality of life, environmental preservation, and economic development.

Response: *Since publication of the Draft EIS, the Council worked with Hennepin County, the City of Minneapolis, the MPRB, the Bryn Mawr and Harrison neighborhoods, and residents to address concerns and to provide pedestrian and bike connections to the station from the adjacent neighborhoods, from the Van White Memorial Boulevard Bridge, and from trails. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes.*

Based on strong public support, Van White Station remains in the Project and the station design has advanced as part of the Project. Van White Station will be located north of I-394, under the Van White Memorial Boulevard Bridge, with bus and vehicle access from Linden Avenue and a vertical circulation tower connecting the station and the Van White Memorial Bridge.

The proposed Van White Station will provide access to neighborhoods north of the station area. Improvements that will be made as part of the Project include sidewalk connections to the trails near the station and a pedestrian bridge connection to the Luce Line Regional Trail. Sections 4.1 and 4.5 of the Final EIS present information about transit, pedestrian and bicycle improvements. Exhibit 4.1-5 of the Final EIS shows the planned Route 26, which would provide circulator connections between Penn and Van White stations and neighborhoods north along on Penn Avenue and Van White Boulevard. A complete list of bus transit, pedestrian and bicycle improvements that will be implemented with the Project is included in in Appendix E.

Since publication of the Draft EIS, the Project advanced the design of Van White Station to be compatible with the surrounding communities and with existing and planned land uses. The Council has worked with Hennepin County, the City of Minneapolis, adjacent neighborhoods, and the public through the Southwest LRT Community Works program and joint advisory committees to coordinate the station location and design with station area planning efforts, including the Bassett Creek Valley Master Plan.

The proposed light rail alignment and Van White Station will be northwest of Linden Yards and will not preclude the use of portions of the Linden Yards site for a rail storage or maintenance facility, nor will it preclude other development from occurring on that site. Conversely, development of Linden Yards (or lack of development of Linden Yards) will not preclude the proposed light rail alignment and station, nor would that development cut off access to the proposed station. The current design for the Van White Station was included in Appendix G of the Supplemental Draft EIS and will be included in Appendix E of the Final EIS.

Regarding a high speed rail layover facility, or a diesel rail storage facility, at Linden Yards, there are no adopted plans or funding for either of these facilities. The Council has confirmed with the MnDOT, the authority for passenger rail in the state, that there are no adopted plans for a rail storage facility at Linden Yards. Therefore, these facilities will not be evaluated in the cumulative impact assessment within the Final EIS, consistent with Considering Cumulative Effects Under the National Environmental Policy Act (Council on Environmental Quality [CEQ], 1997). Specifically, a potential high speed rail layover or maintenance facility is not included in the Cumulative Effects section of the Final EIS as a reasonably foreseeable action because it is not included within any adopted plans nor is it funded; therefore, the use of the land as a potential rail storage yard facility is not noted as a "reasonably foreseeable" use. The MnDOT's draft Minnesota GO State Rail Plan, which would note all rail and storage facilities within the state of Minnesota, does not include any future rail facility in Linden Yards. The City of Minneapolis has no current adopted plans for the Linden Yards facility. The city noted to the Council that any future high speed or commuter rail layover facility will be many years in the future, and due to very poor soils and complexities of phasing, any future rail layover facility can only occur on distinct land parcel east of the two office towers closest to the Van White station on Linden Yards East, and a future rail facility cannot support vertical development. As such, the Final EIS's land use and other analyses are based on the city's applicable adopted land use plans, including the Bassett Creek Valley Master Plan (2007). That plan designates much of the Linden Yards

site as mixed-use, commercial and other development, with some park land; the plan recognizes that the site's current use is industrial.

Additionally, a potential high speed rail layover facility or a storage yard at Linden Yards is not included in the No Build Alternative because it is not included within an adopted plan nor is it a funded project.

Royalston Station

Summary of Comments: Commenters stated concerns about traffic congestion, impacts to roads, driveways and access to area businesses; and requests for pedestrian connections to area destinations such as the Farmers Market and Target Field. The primary road concerns related to truck access and impacts to Holden Street, Bolder Avenue, and Royalston Avenue as well as closure of intersections. Several commenters noted the potential for development around the station. Seven comments raised concerns about business impacts and access during construction. Four comments supported moving the station to Border Avenue so that it would be closer to the Farmers Market, and one commenter opposed locating the station on Border Avenue.

The City of Minneapolis supported keeping the station in the Project to serve the Farmers Market and asked that the road impacts, including road closures, be mitigated and requested pedestrian improvements between the station and the Farmers Market.

Response: *Since publication of the Draft EIS, the Council worked with Hennepin County, the City of Minneapolis, the business community and adjacent property owners to address concerns related to traffic and road impacts and to design pedestrian improvements that will provide access to area destinations. Chapter 9 of the Final EIS summarizes the process used to engage the County, cities and adjacent neighborhoods in the planning and design processes. Based on strong public support, the Royalston Station remains in the project and design has advanced as part of the project. Royalston Station will be located on the east side of Royalston Avenue between Holden Street and 5th Avenue.*

The Project includes changes to area roads to accommodate the light rail track and station and maintain access to existing businesses. No intersections that would operate at LOS A to D under the No Build Alternative will operate at LOS E or F under the Project. The Project will include a new LRT crossing on Glenwood Avenue which will operate at LOS A. Section 4.2 of the Final EIS includes detailed information regarding changes to roadways and traffic; Table 4.2-2 summarizes the existing conditions and anticipated traffic conditions with the Project. Appendix E of the Final EIS illustrates the roadway improvements that will occur as part of the Project.

Table 3.3-16 in the Final EIS describes impacts to community facilities, community character, and community cohesion around station areas within Minneapolis. On-street parking will be removed from Royalston Avenue but added to Border Avenue. Changes to on-street parking in the Royalston Station area result in the net loss of 33 on-street parking spaces (gain of 45 new spaces and loss of 78 spaces). Loss of parking will not adversely affect surrounding neighborhoods because there will be adequate parking supply to meet the needs of the existing land uses (see Section 4.3.3 for more information on parking impacts). Section 4.3 of the Final EIS discusses impacts to parking, and Exhibit 4.3-2 illustrates the long-term direct effect on the supply of on-street parking in the vicinity of the proposed light rail alignment, including the Royalston Station area.

In response to comments regarding need for improvements to provide access from the station to area destinations, changes that will be made as part of the Project include sidewalks on both sides of Royalston Avenue, Holden Street, and Border Avenue and the block of 5th Avenue between Royalston and 7th Street. Section 4.5 of the Final EIS includes information regarding pedestrian improvements. A complete list of pedestrian improvements that will be implemented with the Project is also included in in Appendix E.

The Project has advanced the station design to be compatible with the surrounding communities and with existing and planned land uses. The Council worked with Hennepin County, the City of Minneapolis, and adjacent businesses through the Southwest LRT Community Works program and joint advisory committees to coordinate the station location and design with the station area planning efforts. Section 3.1.2.2 of the Final EIS incudes an updated Land Use evaluation, including a review of adopted land use plans and policies.

The proposed Royalston Station location minimizes property acquisitions; no business displacements in the Royalston Station Area are anticipated. Section 3.4 of the Final EIS includes information about property

acquisition. Appendix E of the Final EIS includes the Preliminary Engineering plans, which show the current design and anticipated property acquisitions.

Section 3.2 of the Final EIS discusses long-term and short-term (construction) impacts on economic activity, including local businesses. The proposed light rail stations have the potential to support development or redevelopment that will likely change the existing land use patterns within approximately one-half mile of station areas under current plans and policies. See Sections 4.2 and 4.3 of the Final EIS for discussion of impacts and mitigation to address traffic congestion and parking concerns, respectively. The Project will result in short-term impacts to some existing businesses. Short-term impacts include potential increases in noise levels, dust, traffic congestion, visual changes, and increased difficulty accessing commercial and other uses, and some businesses may experience economic hardship during the construction period. Potential mitigation measures for visual quality, noise, vibration, and traffic impacts are discussed in Sections 3.7, 3.12, 3.13, and 4.2, respectively. In order to minimize short-term impacts to business, the Council has developed a Construction Communication Plan. The purposes of the Construction Communication Plan are to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. See Section 3.2.4 for more information on the Construction Communication Plan and mitigation measures for short-term impacts.

Target Field Station

Summary of Comments: FTA and the Council received comments in support of the Interchange station, citing reasons such as its multi-modal connections, supporting the economy, reducing greenhouse gas emissions and increasing mobility.

Response: *Target Field Station was previously known as the Interchange, due to the multi-modal connections provided (it was identified as Target Field Station in the Draft EIS). Target Field Station opened for service on May 17, 2014. Target Field Station includes a variety of public space, environment, and transportation features, including light rail and commuter rail connections, public parking, and bicycle amenities. The Project's light rail alignment will connect to and serve Target Field Station.*

J. Other specific design concerns

Summary of Comments: The Council and FTA received approximately 10 comments on the Draft EIS concerning the design of the Project at specific locations not covered elsewhere under this appendix. These comments covered areas such as LRT crossings of roadways, or redesign of existing intersections. Those commenters included the City of Minnetonka, businesses, community groups, non-profit organizations, and the general public.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Council developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. These comments were taken into consideration by FTA and the Council as the design of the Project progressed. The preliminary design plans for the Project are included in Appendix E of the Final EIS.*

As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process. See below for information on how individual topics were addressed.

J.1 Roadway design outside Project area

Summary of Comments: FTA and the Council received comments recommending specific improvements to City of Minneapolis and Hennepin County roadways outside the West Lake Station area aimed at improving overall pedestrian and bicycle circulation. These recommendations were for locations including the intersection of Lake Street and Excelsior Boulevard, Lake Street east of Dean Parkway, Market Plaza, and the Calhoun Commons shopping center driveways.

Response: *The recommendations suggested are generally outside the limits of the Southwest LRT project and therefore were not incorporated into the design of the Project. However, the Project does include sidewalk improvements on each side of West Lake Street from Drew Avenue South, across the West Lake Street bridge to Market Plaza, as well as along W 32nd Street, Chowen Avenue South, W 31st Street and Abbott Avenue South. Pedestrian intersection improvements (e.g., ADA curb ramps, cross walks, countdown timers and push buttons) are included at the intersections of West Lake Street and Drew Avenue South and Market Plaza and at the intersections of Excelsior Boulevard and W 32nd Street, List Place, Abbott Avenue South, Market Plaza, and at one of the two driveways for the Calhoun Commons shopping center. See Responses I and P for information regarding traffic operations and pedestrian and bicycle accommodations in the West Lake Station area.*

J.2 Highway 62 crossing

Summary of Comments: The City of Minnetonka expressed a preference for an LRT tunnel under Highway 62, rather than the bridge over Highway 62 that was shown in the Draft EIS.

Response: *The Project implemented the alternative proposed by the City of Minnetonka. The design of the Project has been adjusted to include a shallow tunnel under Highway 62, just south of the proposed Opus Station. To the west of City West Station, the light rail alignment will extend north within a proposed cut-and-cover tunnel under Highway 62. The tunnel will end at the intersection of Red Circle Drive and Yellow Circle Drive, where the alignment will continue north at grade. See Appendix E of the Final EIS for the preliminary engineering plans.*

J.3 West 70th Street

Summary of Comments: The Council and FTA received comments from businesses expressing concern about the design of the LRT crossing of West 70th Street near Golden Triangle Station. The comments noted that the design shown in the Draft EIS appeared to require significant amounts of fill, which could have impacts on wetlands and access to private property.

Response: *The Council incorporated a portion of the City of Eden Prairie's West 70th Street extension project into the design of the Project at the LRT crossing, which is illustrated in the preliminary engineering plans and reflected in the Project's traffic analysis (see Appendix E and Section 4.2 of the Final EIS, respectively). The permanent and temporary project limits have been revised since publication of the Draft EIS, reflecting both design adjustments and additional design detail. The City of Eden Prairie's West 70th Street Extension project was constructed in 2015, and any wetland mitigation necessary as part of that project was the responsibility of the City of Eden Prairie. At West 70th Street, the Project will not result in temporary or permanent impact on wetlands. Wetland impacts and mitigation related to the Golden Triangle station are discussed in Section 3.9 of the Final EIS and in Theme N.*

The Project's limits of disturbance are illustrated in the Preliminary Engineering Plans (Appendix E) and are reflected in the updated property acquisition analysis in Section 3.4 of the Final EIS. In general, the Project will maintain access to businesses during construction and operation of the Project, unless that property or portion of the property is acquired by the Project. See Theme M.4 for details on business impacts and compensation for any long-term loss in property access.

J.4 Smetana Road and Feltl Road

Summary of Comments: The Council and FTA received several comments, including from the City of Minnetonka, expressing concern about the design of the intersection of Smetana Road and Feltl Road in Minnetonka, as included in the Draft EIS. Concerns included property access impacts, the at-grade LRT crossing, and LRT noise (e.g. horns and bells). Some commenters requested that the crossing of Smetana Road be included in a train horn quiet zone.

Response: *Since publication of the Draft EIS, design of the Project advanced and the Project no longer includes an at-grade intersection at the Feltl Road and Smetana Road Intersection. The light rail alignment will be grade separated such that the light rail tracks will go under Feltl Road and Smetana Road with the roadways maintained on their existing alignments. Existing property access points/driveways on Feltl Road and Smetana Road will not change. With the LRT alignment going under Feltl Road and Smetana Road, the Project will avoid a conflict between the light rail and traffic on those roads. This design will also eliminate the need for train bells or horns and noise from an at-grade gate crossing.*

The design for this area is shown in Appendix E. A description of the process used by the Council to develop and evaluate design adjustments since completion of the Draft EIS in December 2012, is included in Section 2.2 and Appendix F.

J.5 Opus Development Area roadways and trails

Summary of Comments: FTA and the Council received several comments regarding proposed changes to the roadway system in the Opus Development area, including from businesses and the City of Minnetonka. The Opus roadway system includes a set of one-way loops, and commenters provided suggestions on how to change them. There were also comments about the proposed design of the trail system in the Opus area.

Response: *As shown in Appendix E of the Final EIS, roadway configurations for the Opus Station area assume that the one-way traffic flow on Red Circle Drive will be reversed from its current direction under a City of Minnetonka-led construction contract to be constructed concurrent with the Southwest LRT Project. The Project includes access to the Opus Station park-and-ride lot from Bren Road West.*

The preliminary engineering plans in Appendix E also show that all trail connectivity in the Opus area will be retained, including the grade separated trail underpasses under roadways. The existing pedestrian underpass at Bren Road West (just east of the LRT crossing) will remain and provide direct grade separated connectivity to Opus Station for areas north of Bren Road West, as it does in the existing condition.

J.6 Alignment near Opus Station

Summary of Comments: FTA and the Council received comments suggesting an alternative alignment for the Project between Smetana Road and the Opus Station, which the commenters believed would reduce impacts to the Claremont Apartments.

Response: *The Council evaluated two alternative LRT alignments along Feltl Road, west of the Claremont Apartments, similar to that proposed in the comment. The alternative alignments would generally follow Feltl Road, with one being on the west side of the road and one on the east side of the road. The Council's evaluation found that approximately 74 and 113 (for the west side of the road and east side of the road, respectively) parking spaces would be eliminated from businesses. Feltl Road would need to be completely reconstructed, and a segment of the road would have a steep grade (of up to 8 percent). Two additional at-grade crossings would be required, and vehicles entering and leaving parking lots that serve adjacent businesses would be required to cross the LRT alignment at-grade. LRT travel times would also be increased by approximately 1.5 minutes because of additional curves in the LRT alignment. Based on these factors, these proposed alignments were dropped from consideration.*

J.7 Shady Oak Station area

Summary of Comments: The City of Minnetonka expressed concern about lack of automobile access to the Shady Oak Station area and suggested that 17th Avenue may need to be extended.

Response: *The design of the Project in the area surrounding the proposed Shady Oak Station has been adjusted in order to minimize property impacts. Access to the Shady Oak Station will be provided via an extension of 17th Avenue South at the intersection with Excelsior Boulevard as suggested, and the proposed 700 stall park-and-ride lot at Shady Oak Station will have two entrances and exits from the 17th Street extension.*

J.8 Downtown Hopkins Station area

Summary of Comments: FTA and the Council received comments suggesting that the Project alignment between the Shady Oak station and the Downtown Hopkins station is unnecessarily curved, resulting in slow speeds for the LRT. It was recommended that the curves be elevated (banked) or removed to improve travel times.

Response: *The LRT alignment has been modified since the Draft EIS to minimize the number and extent of curves while also minimizing impacts to optimize operations. This includes minimizing the curve in the alignment west and south of Shady Oak Station to improve LRT operations and minimize potential property impacts (see Appendix E). The Project's design criteria are used to design the track alignment and that document defines curvature and super-elevation requirements to be consistent with LRT speeds at various locations on the alignment. See Appendix E in the Final EIS for Preliminary Engineering Plans.*

J.9 Intersection of Excelsior Boulevard, Jackson Avenue, and Milwaukee Street

Summary of Comments: FTA and the Council received comments expressing concern about how the Project would impact bicycle and pedestrian movements around the intersection of Excelsior Boulevard, Jackson Avenue and Milwaukee Street. Under existing conditions, the intersection is large and challenging to cross by bicycle or on foot, due to long crossing distances.

Response: *LRT will cross over this intersection on a bridge, while the freight rail crossing remains at grade. The freight rail crossing will be realigned approximately 15 feet south of its current location, resulting in modifications to curbs within the intersection. The sidewalk on the northeast side of the intersection will be reconstructed at its existing width. Since the Draft EIS was published, the Cedar Lake LRT Regional Trail in this area has been re-aligned to the north of the Excelsior Boulevard intersection by the TRPD (trail operator). The Project will not result in a change in intersection operations for any existing mode and pedestrian crossing distances will all remain as they are today.*

J.10 Location of at-grade LRT within Kenilworth Corridor

Summary of Comments: FTA and the Council received a comment suggesting that the at-grade LRT be centered in the Kenilworth Corridor to allow space for the implementation of mitigation measures between the LRT and residences on both sides. The comment was specific to the area between Franklin Avenue West and West Lake Street.

Response: *The Project will be within a shallow tunnel between West Lake Street and the Kenilworth Lagoon, which will minimize long-term impacts to the Kenilworth Corridor, including visual, noise and vibration impacts for residences. North of the lagoon, the Project is at grade and the LRT is approximately in the center of the corridor, located between the Kenilworth Trail and the freight rail. See Theme E for further discussion of design adjustments and additional analysis for the LRT alignment in the Kenilworth corridor.*

J.11 7th Street North

Summary of Comments: FTA and the Council received several comments, including one from the City of Minneapolis, stating a preference for the Project to cross 7th Street northeast of Royalston Station at-grade, rather than the tunnel shown in the Draft EIS or a bridge.

Response: *The existing Target Field Station was still under development during the preparation of the Draft EIS and Conceptual Engineering plans in 2012. Since then, the Council modified the LRT alignment near the Target Field Station to incorporate future extensions of the Project and Blue Line Extension (Bottineau LRT), with one at-grade and the other elevated. As a result, the tunnel under 7th Street North shown in the Draft EIS was no longer feasible. Based on further analysis, including consideration of traffic operations, it was determined that Southwest LRT would be elevated over 7th Street and Bottineau LRT would be added later at-grade.*

K. Concerns about Purpose and Need for the Project

Summary of Comments: FTA and the Council received approximately 15 comments related to the Project's Purpose and Need Statement and the Project's Goals and Objectives. Those commenters included EPA, STB, and the City of Minneapolis. The EPA and STB noted that the Purpose and Need Statement in the Draft EIS was not a concise statement of the intended purpose and needs leading to the Project. Further, the EPA requested that Project Needs be addressed in Chapter 1, before the Project Purpose. The City of Minneapolis commented that they felt the Draft EIS accurately describes why the Project is needed. Some commenters supported specific elements of the Purpose and Need Statement or suggested that specific Goals and Objectives be modified or deleted. Commenters suggested using 2010 U.S. census data, instead of 2000 U.S. census data, in the Purpose and Need chapter, where possible. Other proposed changes to the chapter included adding a reference to the proposed Bottineau Line (METRO Blue Line Extension) as a related transportation project.

Response: *In response to these comments, FTA and the Council edited the Project's Purpose and Need Statement to be more concise, which is reflected in Chapter 1 of the Final EIS. In response to the EPA's restructuring request, the edited Purpose and Need Statement first lays out the four Need Statements, followed by the three elements of the Project's Purpose. The Need Statement related to freight rail was clarified, and now states that there is a "need to maintain a balanced and economically competitive multimodal freight system," which recognizes that any modifications to the freight rail system need to be done in a way that helps maintain the economic competitiveness of the region's freight rail system.*

Chapter 1 of the Final EIS notes that a discussion of goals and objectives that was included in the Draft EIS is not included in Chapter 1 of the Final EIS. The purpose of this discussion, in the context of the Alternatives Analysis and Draft EIS, had been to support the identification of the Locally Preferred Alternative (LPA) and to compare the LPA with other alternatives. In the Final EIS, however, this discussion has been superseded by a comparative evaluation of the Project and the No Build Alternative based on metrics addressing three key components of the Purpose Statement (see Chapter 8). A variety of other changes have been made within Chapter 1 of the Final EIS, including adding a reference to the proposed METRO Blue Line Extension from Minneapolis (Target Field Station) to Brooklyn Park within the list of related transit projects. Further, analyses cited in Chapter 1 of the Final EIS have been updated to use the most current available data, including 2010 U.S. Census data. Additionally, forecasts in Chapter 1 are now based on year 2040 projections, where such data are available and applicable. The 2010 and 2040 No Build Alternative transportation networks referenced in Chapter 1 are described in Sections 4.1 and 4.2.

K.1 Suggest a broader overall purpose for Clean Water Act compliance

Summary of Comments: The U.S. Army Corps of Engineers (USACE) suggested that the Purpose and Need Statement in Chapter 1 of the Draft EIS should be broadened to be more appropriate for implementation of their Clean Water Act Review.

Response: *Identification of the USACE's overall project purpose has been incorporated into Chapter 1 of the Final EIS. It states that, "The United States Army Corps of Engineers has adopted the following overall project purpose for the Southwest LRT Project that it will use to direct the range of reasonable alternatives to be considered in the Clean Water Act Section 404 permit application process: The overall project purpose is to provide high-capacity transit service in the Southwest LRT Project study area."*

K.2 Goals and objectives fall short of advancing Environmental Justice principles

Summary of Comments: A neighborhood association suggested that the goals and objectives are not specific enough to advance Environmental Justice principles and to address barriers that may limit the Project from achieving a fair distribution of benefits and adverse impacts. The commenter indicated that their concern stemmed from the fact that there had been no decision about a rail layover facility in Linden Yards.

Response: *By complying with the Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994) and related rules, FTA and the*

Council have determined that the Project as a whole will not result in disproportionately high and adverse impacts to Environmental Justice populations (see Chapter 5 of the Final EIS). Regarding the potential rail layover facility in Linden Yards, see Theme H.4, Commuter rail storage yard at Linden Yards. As noted in that Theme and in the Final EIS land use and environmental justice analyses (i.e., Chapter 5), land use designations in the Van White station area used for the Finale EIS analyses are consistent with adopted land use plans, including the Bassett Creek Valley Master Plan. Section 3.1 includes additional information on the Project's land use analysis, including how related station area planning efforts are assessed for consistency.

K.3 Goal 6 in the Draft EIS was not part of planning process

Summary of Comments: The City of St. Louis Park commented that inclusion of Goal 6 ("Support economically competitive freight rail system"), in the Project's list of Goals and Objectives was inappropriate, because the goal was not adopted through any public process, and that the linkage of that goal to the *Comprehensive Statewide Freight and Passenger Rail Plan* ("State Rail Plan") was also not appropriate. Other commenters raised similar concerns about Goal 6 and the related Need Statement. These comments were raised within general concerns about potential relocation of freight rail (LRT 3A) and the use of specific goals as evaluation metrics in Chapter 11, Evaluation of Alternatives, of the Draft EIS.

Response: *As noted in Section 1.3 of the Draft EIS, the Project's Purpose and Need statement was developed through an interagency process. In 2012, HCRRA amended the Project's Scoping Summary Report to include freight rail relocation and co-location as part of the build alternatives to be evaluated in the Project's EIS, based on direction from the FTA. As a result, Goal 6, "Support an economically competitive freight rail system," and related objectives were added to the Project's Goals and Objectives. At the time freight rail relocation was considered for the Project, Goal 6 was a significant evaluation criteria for each alignment and the Draft EIS summarizes how the alignments were evaluated under this criteria in Chapter 11. Goal 6 was a significant evaluation measure because of the potential effect that some alignments could have had on freight rail operations and economics.*

After publication of the Draft EIS, the Council developed and evaluated a range of design adjustments and freight rail modifications through a multi-step process that involved public and agency review and comment opportunities (see Appendix M, Master Response 10 Rationale for incorporating freight rail co-location into the Project), including the publication of a Supplemental Draft EIS. As a result of the design adjustment process (see Section 2.2 and Appendix F of the Final EIS), the Project will result in the co-location of freight rail and light rail in Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of freight rail. As described in Section 3.1 of the Final EIS, the Project will not result in any long-term adverse economic impacts to freight rail owners and operators (see Section 2.1 for a description of proposed freight rail modifications) or have the potential to alter freight rail operations and markets served by TC&W and CP. As a result, Goal 6 is no longer a significant metric for evaluating the alternatives, or a key element of the Project's Purpose (see Chapter 8 of the Final EIS for an evaluation of the Project).

The 2015 update to the State Rail Plan is cited in Chapter 1 of the Final EIS to provide background on the existing freight rail system and on the state's freight rail goals. Further, Chapter 1 of the Final EIS notes that the State Rail Plan acknowledges the light rail design adjustments and freight rail modifications identified by the Council in 2014. The State Rail Plan is also described in Section 3.1, Land Use, of the Final EIS, where it is noted that the Project would be compatible with and is referenced in the State Rail Plan.

K.4 An alternative or option would not meet Purpose and Need

Summary of Comments: Several commenters expressed a belief that one or more alternatives, options, or components of alternatives or options, would not meet the Project's Purpose and Need or would not meet the purpose and/or need of that specific option or component. For example, "Placing the SWLRT Alignment and the Town Center transit station on Technology Drive is simply too far from Town Center and Eden Prairie Center to meet the purpose and need of the project."

Response: *Comments related to whether or not an alternative or an option would meet the Project's Purpose and Need are responded to in Sections A through J of this appendix, depending on the specific alternative or option*

mentioned in the comment. For example, concerns about the Eden Prairie Town Center Station not meeting the purpose of or need for that particular station are addressed under Themes I, Concerns about Stations and Park and Ride Lots, and Theme F, Concerns about Eden Prairie LRT Alignment; and concerns about the Project not meeting the Purpose and Need in Chapter 1 are addressed under Theme B, Opposition to the Project.

L. Concerns about public involvement, agency coordination, and NEPA process

Summary of Comments: The Council and FTA received approximately 170 comments on the Draft EIS concerning the public involvement or NEPA processes or the Council's coordination with local, state and federal agencies, and freight railroads. Those commenters included the Cities of Minneapolis, St. Louis Park, Hopkins, Minnetonka, and Eden Prairie; MPRB, TRPD, MCWD, NMCWD, MnDOT, MDOH, MPCA, USACE, DOI, EPA, STB, CP, and TC&W, as well as businesses, community groups, non-profit organizations, and the general public.

The comments received covered the following general areas of concern, which are addressed within this Theme: a range of comments on the Project's public involvement process; omission of freight rail relocation and co-location from the Southwest Transitway Scoping Process; the process by which freight rail relocation entered the NEPA process and was subsequently selected as the part of the preferred alternative in the Draft EIS; expressions of interest from agencies, jurisdictions, and freight rail owner in working with the Council in subsequent design and analysis work; and a range of comments related to the Project's NEPA process.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. Based on the comments received on the Draft EIS and through meetings with the public, businesses, municipalities, and other groups, the Council initiated a process to develop adjustments to the Project's design, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through implementation of that process and through incorporation of the adjustments made during the process. The Council has coordinated extensively with the cities that the Project will pass through, as well as watershed districts, MPRB, Hennepin County, Hennepin County Regional Railroad Authority (HCRRA), and state and federal agencies throughout this process. A description of that process and the design adjustment developed and evaluated is included in Section 2.2 and Appendix F of the Final EIS.*

The Project has an extensive history of outreach and collaboration with the affected public throughout the Southwest Corridor. Ongoing engagement and communication has been a fundamental element of the Project since its initiation. Maintaining an open dialogue and offering opportunities for input and discussion—especially related to the identified technical issues and items of concern to the affected public—will continue to be a key component of Project implementation. Outreach activities, agency coordination, and committee structure have evolved as Project Development activities have progressed. Public and agency coordination activities have been consistent with the National Environmental Policy Act (NEPA) and the Minnesota Environmental Policy Act (MEPA), Chapter 4410 Environmental quality Board (EQB) Environmental Review Program. Information on notices of intent, document availability, public comment periods, and public open houses and hearings have been published in the Federal Register and the EQB Monitor. The Project has also adhered to NEPA and MEPA requirements regarding the timing and length of public comment periods and the scheduling of public open houses and hearings relative to publication of environmental documents. Public involvement opportunities for the Project are documented in Chapter 9 of the Final EIS. Chapter 9 also documents agency coordination and lists the local, state and federal permits needed for the Project.

The remainder of this section summarizes and responds to the following categories of comments concerning public involvement, agency coordination, and NEPA: comments concerning public involvement; comments concerning the Project's Scoping Process relative to freight rail relocation and co-location; comments concerning coordination with agency, jurisdiction, and freight railroad owners; and concerns related to the Project's NEPA process.

L.1 Public involvement

Summary of Comments: Individuals, businesses, and community groups commented on several aspects of the Project's public involvement process, including:

- Emphasizing the importance of building relationships with community members by continuing individual and small group meetings;
- Requesting coordination between the Project and local governments;
- Requesting to be involved in assessing impacts, planning for mitigation and designing stations;
- Expressing concerns about the composition of the Project's Community Advisory Committee;
- Requesting that the Council engage various organizations in the public involvement process;
- Asking questions or expressing concerns about the accessibility of Draft EIS public hearings; and
- Stating that the commenter's voice was not heard during public involvement activities during the Draft EIS process.

The City of Minneapolis commended Hennepin County and the Council for making the Draft EIS widely available and providing adequate opportunity to comment.

Response: *HCRRA sponsored nearly 80 public meetings while serving as the lead agency for the Project through the end of the Draft EIS public comment period. As noted in Sections 9.1 and 9.2 of the Final EIS, public involvement efforts continued and evolved as local lead agency responsibility shifted from HCRRA to the Council in January 2013. Since early 2013, the Council held over 600 Project events including: public hearings that accepted comments on the Supplemental Draft EIS; open house meetings, including those conducted prior to the public hearings; town hall meetings; design workshops; presentations at community and neighborhood association meetings; advisory committee meetings; and presentations at the request of various groups and individuals. The* Public Involvement Summary Report *provides a more detailed description of these meetings and the Project's public involvement process (see Appendix C of the Final EIS for instructions on how to access that report).*

Meetings with the public have been tailored to present information and solicit feedback on specific project issues. Individuals, businesses and neighborhood groups have been engaged to develop a detailed assessment of impacts, design changes, mitigation measures, and development opportunities. As requested, the Council coordinated extensively with cities and other local jurisdictions along the proposed light rail alignment (described in more detail in Theme L.3 and in Section 9.3 of the Final EIS). The Community Advisory Committee, established during preparation of the Draft EIS, includes members appointed by cities along the proposed light rail alignment, as well as representatives of neighborhood organizations. At the public hearings on the Draft EIS and Supplemental Draft EIS, Americans with Disabilities Act compliant accommodations were provided upon request. Public input received during and after the Draft EIS public comment period were considered in the development and evaluation of design adjustments for the Project.

In addition, the Council used several avenues of communication and outreach to engage minority and low-income communities affected by the Project throughout Project Development and the NEPA process. These public engagement activities have been designed to incorporate environmental justice (EJ) principles and have included efforts to effectively engage minority and low-income populations by eliminating barriers to active participation. Throughout the NEPA process, Project staff have met with members of EJ communities to resolve concerns of individual property owners or businesses. Chapter 5 of the Final EIS documents the Project's compliance with environmental justice requirements and summarizes major concerns of environmental justice communities in each proposed station area, and the actions the Southwest LRT Project has taken to address these concerns. Also see Theme M.5, Environmental Justice. As part of its EJ effort, the Council has also participated in events (such as meetings and tours) led by Corridors of Opportunity grantee organizations, and Council staff have continued to attend meetings of neighborhood associations (including the Harrison Neighborhood Association Transit Equity Committee, Waite House Community Latino Workers Forum, Heritage Park Neighborhood Association, Redeemer

Church Block Park, Meadowbrook Collaborative National Night Out, and Bassett Creek Valley Redevelopment Oversight Committee) to provide information and updates.

Chapter 9 of the Final EIS provides information on the Project's public involvement efforts.

L.2 Omission of freight rail from original NEPA/MEPA Scoping process

Summary of Comments: Several commenters, primarily St. Louis Park residents, stated that the Project's Scoping Process for the EIS did not consider freight rail issues related to the Project. In particular, commenters stated that they were not allowed to provide public testimony about concerns over freight rail at various meetings in 2008, including the public Scoping meetings. Several commenters also stated that St. Louis Park resolutions and a study of freight rail relocation were not considered during Scoping.

Response: *The Southwest Transitway Scoping Process did not initially include the analysis of freight rail changes (either relocation of freight rail to the MN&S Spur or co-location of freight rail and light rail in the Kenilworth Corridor), because at that time potential freight rail modifications were not considered part of the Project. Prior to 2011, freight rail relocation out of the Kenilworth Corridor was the subject of a separate action being undertaken by Hennepin County and MnDOT.*

The Project's Scoping Process began with a notice published in a local newspaper on August 23, 2008, and publication of a notice of intent in the EQB Monitor *on September 8, 2008, and the* Federal Register *in September 23, 2008. The Scoping comment period ended on November 7, 2008. The Project conducted three formal public hearings and one agency meeting (all in October 2008) where written comments were received and where verbal comments were recorded. A Scoping Booklet was published that explained the EIS process (including the Scoping Process, how to comment, which agencies were involved, and how to stay involved after the Scoping Process). Exhibits at the scoping meetings explained the Scoping Process in more detail, the alternatives that were under consideration, and the upcoming EIS process. Approximately 250 people attended the three Scoping public hearings and comments were received from 295 individuals, groups, and agencies during the Scoping period.*

During the Project's Scoping comment period, the City of St. Louis Park requested, in their October 14, 2008, letter that HCRRA ensure that issues associated with the potentially rerouted freight rail through the City of St. Louis Park, including identification of funded mitigation measures to address associated adverse impacts, be included within the Project's EIS. At that time, the potential freight rail relocation was considered a separate, disconnected action from the Southwest Transitway project due to its history. As such, HCRRA responded to the City of St. Louis Park and stated that impacts and mitigation associated with the relocation of the freight rail line in St. Louis Park were part of an independent study being undertaken by MnDOT and Hennepin County (see Appendix J(2) and Appendix K of the Scoping Summary Report *for the City's comment letter and HCRRA's response, respectively). In response to similar comments from other jurisdictions and individuals, the* Scoping Summary Report *similarly noted that the potential relocation of the freight line St. Louis Park was outside the scope of the Southwest Transitway Draft EIS. The documentation of the Project's Scoping Process, including comments received and responses to those comments, was published in the* Southwest Transitway Scoping Summary Report *in January 2009 (see Appendix C of the Final EIS for instruction on how to access that report).*

While the relocation of freight trains onto the MN&S Spur and Wayzata Subdivision was considered to be a separate action not connected to the Southwest Transitway Project and would, therefore, be outside the scope of the Southwest Transitway EIS (see Section 5.3 of the Southwest Transitway Scoping Summary Report*), comments on freight rail relocation and co-location were received from agencies and the public and are documented in Appendix J of the* Southwest Transitway Scoping Summary Report*. As previously noted, HCRRA responded to those comments (Appendix K) by stating freight rail relocation was considered part of an independent study by MnDOT and Hennepin County.*

*During and prior to the Scoping Process for the Southwest Transitway, HCRRA and MnDOT, in cooperation with the City of St. Louis Park, were conducting an evaluation to determine the preferred permanent home for freight rail operations using the Kenilworth Corridor. In addition, HCRRA, in cooperation with MnDOT and the City of St. Louis Park, also conducted an analysis of seven alternatives for co-location of freight rail and light rail operations in the Kenilworth Corridor (*Kenilworth Corridor – Analysis of Freight Rail/Light Rail Transit Co-Existence*; HCRRA, December 2010).*

In June 2010, the St. Louis Park City Council passed Resolution 10-071, which requested that the HCRRA reanalyze the potential routes in the TCWR Freight Rail Realignment Study*, 2009 in greater detail. The St. Louis Park City Council also requested that the HCRRA conduct an analysis of routing both freight rail and light rail in the Kenilworth Corridor. In response to this request, the HCRRA, in partnership with MnDOT, the City of St. Louis Park, and the affected private freight railroads, began an Environmental Assessment Worksheet (EAW) on the MN&S freight rail study. The purpose of the EAW was to provide an analysis and overview of the potential environmental impacts for the proposed freight rail project and to assist MnDOT (the RGU) in determining if there would be any significant impacts from the proposed freight rail project that would require the preparation of an Environmental Impact Statement. In May 2011, MnDOT and HCRRA issued notice of availability for the* Environmental Assessment Worksheet for the MN&S Freight Rail Study in St. Louis Park and Minneapolis*, and they conducted a public open house on the EAW on June 8, 2011. The comment period on the EAW concluded on June 15, 2011. MnDOT published an Environmental Assessment Worksheet (EAW) in May 2011, and issued a Negative Declaration regarding the need for an Environmental Impact Statement for the project on June 30, 2011. On December 19, 2011, MnDOT was notified by HCRRA that it passed a resolution determining that the Project no longer warrants separate environmental analysis under state law as a standalone project and is no longer being pursued as a standalone project (see following paragraph for additional detail). In light of HCRRA's resolution, MnDOT issued a resolution on December 20, 2011, vacating the EAW and Negative Declaration for the Project.*

In its September 2, 2011 letter to the Council approving the entry into Preliminary Engineering, FTA directed the Council to analyze impacts of relocating freight rail as part of the Project's EIS. Additionally, in response to public comments received on the Scoping Process for the Southwest Transitway, FTA requested that the EIS also include an alternative that would co-locate freight rail and light rail in the Kenilworth Corridor to meet the requirement under 40 C.F.R. 1502.14(a). In response, on September 25, 2012, HCRRA amended the Southwest Transitway Scoping Summary Report *(which serves as the Scoping Decision Document under MEPA) to include the impacts of relocating freight rail for each of the build alternatives, and for a co-location alternative in which freight rail, light rail and the commuter bike trail would be co-located between Louisiana Avenue and Penn Avenue. The amendment was authorized with approval of Board Action Request 12-HCRRA-0049. Notice of the amendment to the scoping report was issued in the EQB Monitor on October 15, 2012.*

At the Scoping hearings in 2008 for this Project, several comments were received on freight rail relocation (see comments categorized as #6.3/b in Appendix J(2) of the Scoping Report*, pages 200 to 262), and HCRRA responded to those comments by stating that the freight rail relocation effort was part of an independent study not connected to the Southwest Transitway project (see responses to comment #6.3/b in Appendix K of the* Scoping Report). *Additionally, HCRRA received written comments during the Scoping period concerning freight rail relocation and responded similarly (see Appendix I and J of the* Scoping Report*).*

Between the close of the Scoping period and publication of the Draft EIS, HCRRA conducted approximately 40 presentations at neighborhood, community, and business group meetings and three public open houses (in May 2010, attended by approximately 225 people) where public feedback was received. See Section 12.1 of the Draft EIS for additional information on the Project's public involvement activities between Scoping and publication of the Draft EIS. As a result of the Scoping process, the Draft EIS included alternatives that included the relocation of freight rail from a portion of the Bass Lake Spur and the Kenilworth Corridor and alternatives that would retain freight rail within the Kenilworth Corridor (see Chapter 2 of the Draft EIS). FTA and Hennepin County invited and received comments on the Draft EIS, including the range of alternatives evaluated within it. After the close of the Draft EIS public comment period in December 2012, the Council assumed local lead agency responsibility for the Project from Hennepin County. As previously noted and described in Section 2.2 and Appendix F of the Final EIS, the Council developed and evaluated a range of design adjustments as a result of comments received on the Draft EIS, including those related to freight rail relocation and co-location. The design adjustment process included a four-step process to develop and evaluate adjustments to LRT 3A and LRT 3A-1 directly related to the following: (1) whether TC&W freight trains currently operating along the Kenilworth Corridor should be rerouted to sections of the MN&S Spur and Wayzata Subdivision; or (2) whether the TC&W freight trains should continue to operate along the Bass Lake Spur and Kenilworth Corridor as they currently do. As part of the design adjustment process, the Council held four workshops in June and July 2013 addressing the location of freight rail as part of

the Southwest LRT Project. The Council received over 400 comments during and after these workshops. Based on the analysis, committee recommendations, and public comments received during the design adjustment process, the Council identified in April 2014 the design adjustments to be incorporated into the Project, which would allow for the co-location of light rail and freight rail in the Kenilworth Corridor. The Council found, that relative to the other options considered, the Shallow LRT Tunnel – Over Kenilworth Lagoon (i.e., LRT 3A-1 – co-location) design adjustment would best balance costs, benefits, and environmental impacts, and best meet the Project's Purpose and Need. The Council and FTA published a Supplemental Draft EIS in May 2015 that documented the design adjustments to the Project, with the co-location of freight rail and light rail in the Kenilworth Corridor. Three public hearings on the Supplemental Draft EIS in June 2015 provided additional opportunity for public input. Appendix M of the Final EIS documents the comments received on the Supplemental Draft EIS and responses to those comments.

L.3 Coordination with Agencies and Railroads

Summary of Comments: Agencies that submitted comments in response to the Draft EIS were the USACE, DOI, STB, MnDOT, MPCA, MPRB, TRPD, MCWD, NMCWD, and the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis.

Agencies and local jurisdictions stressed the importance of their continued involvement in the planning and permitting process for the Project, including the following:

- USACE stated that Alternative 3A as proposed would not be considered the least environmentally damaging practicable alternative (LEDPA) and that a Section 404 permit would be needed if fill were to be discharged into waters of the US.
- The DOI noted its continuing interest and involvement in the Project's Section 4(f) process.
- STB stated that coordination would be needed if any rail lines were to be abandoned as part of the Project, and asked to be a consulting party under the Section 106 process and a signatory to the Section 106 Memorandum of Agreement. STB also asked to be included in the list of federal approvals, because (depending on the alternative selected) the Project may need a license from STB.
- MnDOT noted the need to work with cities along the proposed LRT route to address roadway impacts and identified MnDOT permits that would be needed to construct the Project. MnDOT also noted that its review and approval was required for all trunk highway impacts, and that coordination between the project team and MPCA was required regarding Minnesota's noise rule, which is administered by MPCA.
- MPCA noted various resource specific topics (responded to elsewhere in this Appendix) and stated that their comment letter did not constitute approval of the Project for future permitting and that the Project proposer is responsible for securing any required permits.
- MPRB commented on potential impacts to park resources under its jurisdiction in the Kenilworth Corridor and noted that coordination with MPRB would be needed and that MPRB expected to have a role in the design of the Project in Minneapolis.
- TRPD stated that it would welcome the opportunity to participate in the design process, and requested representation on technical advisory committees related to trail crossings and the integration of trails with stations.
- MCWD recommended early and ongoing coordination related to an LRT crossing of Minnehaha Creek, stormwater management at stations, as well as water resource and ecological improvements generated by the Project.
- NMCWD requested to be listed as a regulatory agency and stated its willingness to coordinate during the wetland permitting process.
- The Cities of Minneapolis, St. Louis Park, Hopkins, Minnetonka, and Eden Prairie expressed willingness to work collaboratively in order to find solutions that would minimize negative impacts and to develop effective mitigation measures. The cities also provided information on city permits that would be needed to build the

Project, projects being developed by the cities, including roadway improvements adjacent to the LRT alignment, requests to review mitigation plans, and information on land that may be affected, such as restrictive covenants.

- Several federal agencies, including DOI, noted the need for additional coordination.

The owners and operators of the freight rail companies that use the rail corridor, TC&W and CP, expressed opposition to relocating freight rail to the MN&S spur due to major safety concerns and noted their willingness to work collaboratively to address the engineering and design issues.

Response: *Since the Draft EIS was published the Council has undertaken an extensive agency coordination effort. The* Southwest LRT Agency Coordination Plan *(Council and FTA, 2014) helps guide the Project's agency coordination efforts. The Project's public and agency coordination activities were developed and implemented in accordance with NEPA (42 U.S.C. Section 4332 et seq.), MEPA, and other applicable laws, such as the Clean Water Act and Chapter 4410 Environmental Quality Board (EQB) Environmental Review Program. For a more detailed description of coordination activities with each municipality to support the Project's environmental planning activities, please see Chapter 9 of the Final EIS. The Project will be required to obtain federal, state, and local permits and/or approvals for proposed construction activities. As part of the process of securing required permits/approvals, the Council has coordinated with USACE and other local, state, and federal water resource agencies to determine mitigation requirements. The list of required permits and approvals is included in Chapter 9 and applicable mitigation measures that will be incorporated into the Project are summarized in Tables 3.0-1 and 4.0-1 of the Final EIS.*

Following are responses to specific comments from federal and state agencies and local jurisdictions related to their involvement in the Project:

- *The USACE agreed to become a Cooperating Agency in July 2013. (See Appendix E, Agency Coordination Letters, of the Supplemental Draft EIS for documentation related to the two agencies' current status.) To streamline environmental permitting, FTA and USACE are implementing a merger process between the NEPA and Clean Water Act (CWA) Section 404 permitting processes (referred to as the "NEPA/404 merger process" or "merger process"). This merger process enables coordination between FTA and USACE during preparation of the EIS, which allows the USACE to satisfy the requirements of NEPA and the CWA concurrently. The NEPA/404 merger process is structured around four sequential concurrence points at key milestones during Project development: (1) Project Purpose and Need, (2) Array of Alternatives and Alternatives Carried Forward, (3) Identification of the Selected Alternative, and (4) Engineering Phase Impact Mitigation. As described in Section 2.2 of the Final EIS, the USACE has concurred with the Project's four milestones, including the preliminary determination that LRT 3A-1 remains the Project's LPA.*
- *The DOI reviewed and commented on the Project's Draft Section 4(f) Evaluation Update (as part of the Supplemental Draft EIS) and Amended Draft Section 4(f) Evaluation, including its preliminary concurrence with the FTA's preliminary determination of a Section 4(f) non-*de *minimis use of the Kenilworth Lagoon and GRHD, pending review of the Project's executed Section 106 MOA (Section 3.5, Chapter 6, Appendix I, and Appendix H of the Final EIS).*
- *As documented in the Draft EIS, the STB agreed to become a Cooperating Agency in August 2012 because several alternatives under evaluation at the time would have required STB approval to be implemented. Subsequent to the publication of the Draft EIS, the freight rail modifications to be incorporated into the proposed action can be implemented without the need for NEPA review by STB. As such, FTA and the STB agreed that STB would participate in the Project's NEPA process as a Participating Agency and STB is not a consulting party to the Section 106 process. Section 2.1.1.3 of the Final EIS describes freight rail modifications under the Project. The purchase of approximately 3.8 miles of existing track in the Bass Lake Spur will require completion of an administrative process with the STB, which will entail three filings with STB as summarized in Table 2.1-3.*
- *FTA and the Council have coordinated with the MPRB on both Section 4(f) and Section 106 properties and processes. Specifically, FTA and the Council have engaged MRPB in the Project's Section 4(f) process as the official with jurisdiction for Park Siding Park, Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park), Cedar Lake Park, and Bryn Mawr Park. FTA received written letters of*

concurrence related to its Section 4(f) determinations for Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park), Cedar Lake Park, and Bryn Mawr Park (see Chapter 6 and Appendix I of the Final EIS for additional information on those coordination activities and determinations). FTA and the Council have also coordinated with the MPRB on Section 106, with MPRD acting as one of the Project's Section 106 consulting parties (see Section 3.5 and Appendix H of the Final EIS for additional information on the Section 106 process). Within both of those processes, MRPB played an active role in helping determine important elements of the Project's design, including the design of new bridges that will cross the Kenilworth Channel/Lagoon. The Council has coordinated extensively with MnDOT on roadway improvements related to the Project and regarding permits to construct in MnDOT right-of-way.

- *The Council has coordinated with MPCA regarding Minnesota's noise rule, as well as Section 401 water quality certification and hazardous and contaminated materials. The Council will coordinate with MPCA and local jurisdictions on the Noise Control Plan, and if required, for construction noise variance(s).*
- *Since publication of the Draft EIS, the Council has coordinated with the MCWD, and NMCWD related to their permitting requirements. Chapter 9 of the Final EIS summarizes the related permits and approvals that will be required by MCWD, and NMCWD. The Council has also coordinated with the TRPD on Project designs that will affect trails under their jurisdiction (see Section 4.5 of the Final EIS for additional information on pedestrian and bicycle facilities).*
- *The Project's agency and public coordination activities have included meetings with the Technical Project Advisory Committee (TPAC), which is composed of staff from the Council's Southwest LRT Project Office, Hennepin County, MnDOT, the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park and Minneapolis, TRPD, and the Council's Metro Transit Rail Operations division. In addition, those jurisdictions participated in the design adjustment and other processes that occurred after publication of the Draft EIS, including the Section 4(f), Section 106, and Minnesota WCA process, as applicable.*
- *As part of the design adjustment process that occurred after publication of the Draft EIS, the Council coordinated with the affected freight railroad owners and operators, which include BNSF, CP, and TC&W. Since publication of the Draft EIS, the Project has been modified through a design adjustment process and will not result in the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (see Section 2.2 and Appendix F for a description of the design adjustment process). The design of the freight rail facilities affected by the Project has and will continue to be developed based on standards and guidelines from CP and BNSF, as applicable, as well as American Railway Engineering and Maintenance-of-way Association (AREMA) recommended practice. Further, the design of freight rail modifications affecting TC&W freight operations is being prepared in coordination with TC&W. See Chapter 4 of the Final EIS for additional information on freight rail coordination activities, including details of the proposed changes to freight rail infrastructure as a result of the Project.*

L.4 NEPA process

Summary of Comments: A number of commenters stated that the evaluation of alternatives in the Draft EIS was "inaccurate", "flawed", or "biased" and that identification of mitigation measures was not adequate.

EPA rated the Draft EIS as "Environmental Concerns – Insufficient Information" and provided detailed comments. EPA stated that the alternatives analysis in the Draft EIS was unclear as to how early alternatives did or did not meet the criteria used to dismiss or retain those alternatives for further study.

Comments related to the NEPA process and freight or light rail included the following (see also Section L.2):

- The City of St. Louis Park commented that the Draft EIS does not accurately compare freight rail relocation alternatives and it does not accurately capture the history of the freight rail relocation issue. Related, the City of St. Louis Park commented that the Draft EIS relied too much on the environmental assessment worksheet (EAW) prepared by MnDOT for the analysis of freight rail relocation (May 2011). A community group asserted that the analysis of the freight rail relocation alternative violated NEPA, because it did not assess the impacts of freight rail relocation as thoroughly as it assessed the impacts of other alternatives.

- TC&W and other commenters stated that the impacts of freight rail co-location were not adequately assessed in the Draft EIS or in the Draft Section 4(f) Evaluation's assessment of alternatives for the proposed light rail crossing of Cedar Lake Parkway in the Kenilworth Corridor.
- Two community groups in Minneapolis stated that the Project was potentially improperly segmented, because a proposed rail layover/maintenance facility in Linden Yards was not included in the Draft EIS.

A variety of other comments were received related to the NEPA process:

- Commenters expressed a belief that the identification of the LPA may have been predetermined by political rather than standard/accepted NEPA means.
- Commenters stated that the studies of the impacts of the Project used incorrect data, were too general, or omitted information. Some commenters, including the City of St. Louis Park, stated that mitigation measures should be further developed.
- A community group expressed concern over lack of minority or low income people involved in preparing the Draft EIS.
- A neighborhood group asserted that the Project had violated NEPA by publishing the Draft EIS before completing Section 106 consultation and assessment of effects. Commenters stated that the limits of construction shown in the Draft EIS may not fully capture the extent of construction activities.

Comments that focused on the adequacy of the Purpose and Need Statement are addressed in Theme K.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the propose light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.*

Regarding EPA's comment on the evaluation alternatives and their dismissal or retention, please see Appendix N, Agency Coordination Letters, of the Final EIS. NEPA requires that actions undertaken by federal agencies evaluated in an EIS must have independent utility and logical termini, and must not restrict consideration of alternatives for other foreseeable actions (23 CFR 771.111(f)). The Project has logical termini and independent utility, which means no other projects must be implemented in order for the Project to enter service. Regarding a high speed rail layover facility, or a diesel rail storage facility, at Linden Yards, there are no adopted plans or funding for either of these facilities. The Council has confirmed with the Minnesota Department of Transportation, the authority for passenger rail in the state, that there are no plans for a rail storage facility at Linden Yards. Therefore, these facilities are not evaluated in the cumulative impact assessment within the Final EIS, consistent with Considering Cumulative Effects Under the National Environmental Policy Act (Council on Environmental Quality [CEQ], 1997). See also Themes H2 and N12.

The Project's LPA identification process, including a description of the alternatives evaluated and the evaluation metrics used, is summarized in Section 2.2 of the Final EIS. Section 2.2 also describes the design adjustment process used by the Council to develop, evaluate, and identify design adjustments made after publication of the Draft EIS, including the co-location of freight rail and light rail in the Kenilworth Corridor. Section 8.1 of the Final EIS describes how the Project best meets the three key component of the Project's Purpose Statement and Section

8.2 describes FTA and the Council's determination that the Project is the environmentally preferred alternative. See also Theme A, Support for the Project, and Theme B, Opposition to the Project.

The Council sets goals for minority or woman-owned business participation in its contracts, including preparation of the Supplemental Draft EIS and the Final EIS and related documentation. The environmental justice analysis for the Final EIS was prepared in part by a minority owned firm. The Council's outreach to EJ populations is described in Chapter 5 of the Final EIS and summarized in Theme L.1.

Section 106 of the National Historic Preservation Act and NEPA are separate federal laws, which are often streamlined to occur concurrently so that the environmental review process can occur efficiently. The Section 106 consultation process has continued since publication of the Draft EIS. Steps include defining the area of potential effect, completing surveys, and making preliminary and final determinations of effect based on current Project design. The Section 106 Memorandum of Agreement describes measures to avoid, minimize, and mitigate adverse effects and is also included in Appendix H of the Final EIS. See Theme S.1.

Regarding impacts and mitigation measures, Tables 3.0-1 and 4.0-1 of the Final EIS summarize the impacts of the project and related avoidance, minimization, and mitigation measures that will be incorporated into the Project, by the applicable environmental and transportation categories. See also the corresponding sections of Chapters 3 and 4 of the Final EIS for additional information. The identification of unavoidable impacts of the Project are based on the Project's current design, as described and illustrated in Section 2.1 and Appendix F of the Final EIS, and the additional and updated analyses described in Chapters 3 and 4 of the Final EIS.

Regarding the comment that the limits of disturbance evaluated in the Draft EIS may not capture the full extent of the Project's construction footprint, the Draft EIS included an assessment of temporary impacts resulting from the alternatives considered, including potential construction easements, except for LRT 3A-1 in the Kenilworth Corridor. The environmental analysis in the Final EIS includes an analysis of temporary (construction) impacts resulting from the Project, reflecting a higher level of design and design adjustments and freight rail modifications identified since publication of the Draft EIS. Appendix E illustrates the Project's anticipated limits of disturbance, which were used in the Final EIS short-term (construction) impacts analyses.

M. Concerns about social and economic impacts

Summary of Comments: The Council and FTA received approximately 330 comments on the Draft EIS concerning social and economic impacts. Those commenters included the cities of Minnetonka, Hopkins, St. Louis Park, and Minneapolis, MPRB, Minnehaha Creek Watershed District, EPA, businesses, community groups, non-profit organizations, and the general public. Comments included concerns over land use, economic activity, neighborhood and community, property acquisitions and displacements, and environmental justice.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, the Presidential Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [February 11, 1994]), the U.S. Department of Transportation (USDOT) Order to Address Environmental Justice in Minority Populations and Low-Income Populations (USDOT Order 5610.2(a), May 2, 2012), FTA's Circular FTA C4703.1 (Environmental Justice Policy Guidance for Federal Transit Administration Recipients [FTA, August 15, 2012]), as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (alternative LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (alternative LRT 3A). The final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.*

Refer to Sections 3.1, 3.2, 3.3, 3.4, and 5.0 of the Final EIS for land use, economic activity, neighborhood and community, property acquisitions and displacements, and environmental justice analyses, respectively. These analyses include a description of the relevant regulatory context and methodology, affected environment, long- and short-term impacts, and mitigation measures that will be implemented with the Project. Information from the Final EIS is summarized in the responses to comments below.

M.1 Land use

Summary of Comments: The FTA and the Council received approximately 50 comments on the Draft EIS concerning land use. Those commenters included the cities of Minneapolis, Minnetonka, Hopkins, and St. Louis Park, MPRB, businesses groups, community groups, and the general public. Comments included concerns about general land use impacts and mitigation, compliance with local land use/zoning controls, the evaluation of locally approved plans and polices, and support for or concern about development and redevelopment. The City of Minnetonka noted the need for an administrative edit (incorrect labeling) to the land use analysis presented in the Draft EIS.

Response: *Changes to the Project since the Draft EIS was published have avoided many of the land use concerns commenters raised, such as land use changes due to property acquisitions. As described in Section 3.1 of the Final EIS, the land use evaluation includes a description of the affected environment, an evaluation of the Project's compatibility with approved plans and policies, a description of the Project's long-term and short-term land use impacts, and mitigation measures that will be implemented with the Project. Information from the Final EIS is summarized in the responses to comments below.*

Changes in land use under the Project will primarily be limited to station areas and to access, circulation improvements to those stations, and to sections of the proposed light rail alignment where there is currently no publicly owned right-of-way. The Project's effect on land use will be limited because the proposed light rail

alignment will be located primarily within existing public rights-of-way, such as the property currently owned by the Hennepin County Regional Railroad Authority (HCRRA) and reserved for light rail and other transportation uses.

Short-term land use impacts resulting from the Project will include temporary changes to property access during construction or temporary conversion of land to a transportation use for construction staging and other construction activities throughout all or part of the construction period.

Mitigation is not warranted for long-term land use impacts because there will be no long-term adverse impacts. The potential land use changes resulting from implementation of the Project, including intensification of land uses near proposed light rail stations, will be consistent with existing plans and policies.

Specific mitigation measures for short-term impacts to land use related to temporary construction easements and other construction activities will be identified in the Construction Mitigation Plan and Construction Communication Plan, which will be implemented by the Council prior to and during construction. The purposes of the Construction Communication Plan are: to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. Specific mitigation measures included in the Construction Communication Plan will be site-specific and may include:

- *Publishing construction updates and posting on the Project website;*
- *Providing advance notice of roadway closures, driveway closures, and utility shutoffs;*
- *Conducting public meetings;*
- *Establishing a 24-hour construction hotline;*
- *Preparing materials with applicable construction information;*
- *Addressing property access issues; and,*
- *Assigning staff to serve as liaisons between the public and contractors during construction.*

In addition, the Council will develop and implement a construction staging plan (staging plan), which will be reviewed with the appropriate jurisdictions and railroads, and the contractor will be required to secure the necessary permits and follow the staging plan, unless otherwise approved. Components of a staging plan include traffic management plans and a detailed construction timeline. The updated land use evaluation reflects corrections for typographical errors, as appropriate. Refer to Section 3.1 of the Final EIS for an updated land use evaluation, based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS.

Land Use Plan and Zoning Compliance

Summary of Comments: Multiple commenters, including the City of Minneapolis and MPRB, expressed concern over the Project's compliance with local land use plans and zoning regulations. Compliance with Minneapolis Shoreland Overlay District zoning regulations was an issue of particular concern to commenters. The City of Minnetonka suggested noting the date of the land use plans used in the general land use descriptions.

Response: *As shown in Section 3.1.2.1, the evaluation of existing and planned land uses in the Final EIS is based on based on generalized land use data, which are aggregated by the Metropolitan Council at a regional level. Existing land uses are based on year 2010 data (MetroGIS Datafinder, Generalized Land Use, 2010) and planned land uses are based on 2040 data (MetroGIS Datafinder, Planned Land Use, 2014). The description of planned land uses in the Final EIS includes a general, corridor-wide description and does not include specific description of land use or zoning for each city.*

Regarding compliance with the Minneapolis Shoreland Overlay District zoning requirements (Chapter 551, Article VI of the City of the Minneapolis Code of Ordinances), Section 3.9.1.1 of the Final EIS notes that some local jurisdictions (such as the City of Minneapolis) maintain unique wetland buffer ordinances that become active upon the submittal of a local permit application associated with a construction activity. Table 3.9-1 of the Final EIS lists regulatory agencies with jurisdiction over surface water resources and related requirements, including City of Minneapolis Code of Ordinances. In particular, the Project will comply with Chapter 551, Article VI, "SH

Shoreland Overlay District," including meeting requirements for impervious surfaces and stormwater management.

Compatibility with Adopted Plans and Policies

Summary of Comments: Multiple commenters, including the cities of Minneapolis and St. Louis Park, expressed concern over the evaluation of the Project's compatibility with locally adopted plans and policies. Specifically, commenters noted that the following plans should be considered in the evaluation: North Loop Small Area Plan, Bassett Creek Valley Master Plan, Bryn Mawr Neighborhood Land Use Plan, Regional Parks Policy Plan, Regional Development Framework (now called Thrive MSP 2040), and the Minnesota GO State Rail Plan.

Response: *Since publication of the Draft EIS, an updated and more detailed review of planning documents from state, regional, and local agencies with jurisdiction over the land use study area has been completed. This includes a review of adopted comprehensive land use plans, transportation system plans, small area plans, and specific planning studies from the Minnesota Department of Transportation (MnDOT), the Metropolitan Council, Hennepin County, and the five cities through which the Project will pass, including an assessment of the Project's compatibility with each of the documents specifically referenced in the summary of comments above.*

As shown in Section 3.1.2.3 of the Final EIS, the Project is compatible with all identified adopted plans and policies. This finding reflects the advanced planning completed over the past several years at the regional and local levels in anticipation of the proposed Southwest LRT Project. As noted in Table 3.1-4, many of the applicable adopted land use plans and policies have been developed or amended to specifically include or reflect the Southwest LRT Project rather than the No Build Alternative. Others have goals and policies that are supportive of transit improvements, multimodal transportation, and/or transit-oriented development. At the regional level, Metropolitan Council and Hennepin County plans support the proposed Southwest LRT Project. At the local level, all of the affected municipalities have plans and policies that support transit improvements and many have plans that specifically support the proposed Project, including several station area plans that identify future transit-supportive land uses surrounding proposed stations.

Development and Redevelopment

Summary of Comments: Multiple comments expressed either support for or opposition to land use development and redevelopment along the corridor. Commenters, including the cities of Minnetonka, St. Louis Park, and Minneapolis, were largely supportive of encouraging transit oriented development/redevelopment within the vicinity of proposed light rail stations.

Many commenters were strongly in favor of encouraging development within the area of the proposed Van White Station, because it would support economic development in the larger Linden Yards and Bass Lake Valley area, in accordance with the Bassett Creek Valley Master Plan. Some commenters, including the EPA, also expressed concern over the potential siting of a passenger rail storage facility in the Linden Yards area because it would limit economic development opportunities in the area.

Multiple commenters opposed development/redevelopment within the Kenilworth Corridor, particularly near 21st Street Station. Some commenters, including the City of Minneapolis, expressed concern over the inclusion of park-and-ride lots within the Project, especially within the City of Minneapolis, as they could detract from the amount of land available for development/redevelopment. The City of Minneapolis also commented that the inclusion of park-and-rides lots in the Project could exacerbate suburban sprawl by making it easy for commuters to drive to a suburban park-and-ride from a developing exurban location while not taking advantage of the land around the suburban stations for development to reduce the need for driving.

Response: *Development and redevelopment is regulated by cities and is predominantly driven by regional and local economic conditions. However, light rail lines can advance the timing and increase the intensity of development within the limits allowed by local comprehensive plans, especially in areas near proposed stations. To fully leverage this development potential and to support local land use goals, Hennepin County, in partnership with the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis, undertook a station*

area planning effort. The resulting Southwest Corridor Investment Framework (Hennepin County, 2013) identifies short-term and long- term infrastructure needs and land use plans for the Project's station areas.

Development and/or redevelopment is anticipated in all of the Project's station areas except 21st Street Station, which is currently fully developed with existing residential uses (see Section 3.1.3.2). All other proposed light rail stations are expected to experience additional mixed-use development that would be supportive of and compatible with light rail. The Southwest Corridor Investment Framework anticipates future changes in land use policies and zoning that would support opportunities for redevelopment and transit-oriented development, emphasizing a pedestrian-friendly, mixed-use environment with a multimodal transit network.

The land use and other analyses in the Final EIS are based on the applicable land use plans adopted by the City of Minneapolis, including the Bassett Creek Valley Master Plan (2007). That plan designates much of the Linden Yards site as suitable for mixed-use, commercial and other development, with some park land; the plan recognizes that the site's current use is industrial. Areas north and south of Linden Yards are similarly planned, with additional residential and some industrial areas planned north of Linden Yards. The proposed light rail alignment and Van White Station will be northwest of Linden Yards and will not use any portion of the Linden Yards site. As such, the proposed light rail alignment and station will not preclude the use of the Linden Yards site for a rail storage or maintenance facility, nor will the Project preclude other development from occurring on that site. Conversely, development of Linden Yards (or lack of development of Linden Yards) will not preclude the proposed light rail alignment and station, nor would that development cut off access to the proposed station.

Since publication of the Draft EIS, design of the Project has advanced and the proposed park-and-ride lots within the City of Minneapolis (at Wooddale, West Lake, 21st Street, and Penn Stations) have been removed from the Project. Park-and-ride lots will be included at nine stations within the Cities of Eden Prairie, Minnetonka, Hopkins, and St. Louis Park. Although the availability of park-and-ride lots may encourage riders to drive to suburban stations, they will also increase the Project's ridership and thereby eliminate some trips that may have been made in single occupancy vehicles. While park-and-ride lots could limit the amount of developable land in station areas, they do not preclude station area development. As described above, the Southwest Corridor Investment Framework (Hennepin County, 2013) envisions some level of station area development/redevelopment around all Project light rail station areas except 21st Street Station. For more information on impacts related to station areas and park-and-ride lots, refer to Theme I.

M.2 Economic activity

Summary of Comments: The FTA and the Council received approximately 60 comments on the Draft EIS concerning economic activity. Those commenters included the following: City of Hopkins, businesses, community groups, and the general public. These comments generally expressed concern over potential impacts to property values, concern over potential impacts to businesses, and support for potential economic gains or increased economic activity related to the Project.

Response: *Since publication of the Draft EIS, the Council has advanced the economic analysis based on Project adjustments. This evaluation includes a description of the affected environment (including employment trends, property tax revenues, and the existing businesses and development), an evaluation of the Project's environmental consequences related to economic activity (regional employment, property tax revenue, business impacts, and impacts to freight rail), a description of the Project's short-term economic impacts, and mitigation measures that will be implemented with the Project. Refer to Section 3.2 of the Final EIS for an evaluation of economic activity, based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. Information from the Final EIS is summarized in the responses to comments below.*

Property Values

Summary of Comments: FTA and the Council received comments expressing concern that the Project would decrease the value of nearby properties. The most common areas of concern were the Kenilworth Corridor in Minneapolis and the area around SouthWest Station in Eden Prairie, but there were also other locations of concern. Many commenters expressed concern over the potential for decreases in property value related to the relocation of freight trains out of the Kenilworth Corridor; these concerns are addressed in Theme C, opposition to relocation of freight rail out of the Kenilworth Corridor.

Response: *As discussed in Section 3.2.3.2 of the Final EIS, research has shown that major transit investments such as light rail generally increase property values in nearby areas, even in affluent, upper middle class neighborhoods. There is the potential for an increase in property values in the areas surrounding proposed light rail stations, as light rail access can increase the convenience and desirability of nearby residential, commercial, and office properties. Light rail transit can also contribute to existing market forces that can increase the potential for transit-oriented development or redevelopment. Development and redevelopment is regulated by the cities and is predominantly driven by regional and local economic conditions and allowable land uses as defined in locally adopted comprehensive plans. However, light rail lines can advance the timing and increase the intensity of development, especially in areas near proposed stations, within the limits allowed by local comprehensive plans.*

As an example, in 1996, New Jersey Transit introduced "Midtown Direct" service, a one-seat ride to New York Penn Station on the Morris & Essex Lines. The expanded service led directly to an increase in property values of homes within walking distance of stations on the Morris & Essex line by $90,000 more than homes farther away, after direct service to Midtown Manhattan was inaugurated in 1996 (Michaelson, 2004). Houses immediately adjacent to San Francisco's BART (south and northeast of San Francisco) sold for nearly 38 percent more than identical houses in areas not served by BART (Landis and Cervero, 1995). Residential rents decreased by 2.4 percent for every one-tenth mile further from Washington DC Metro stations (Benjamin and Sirmans, 1996). Single-family homes in communities served by Boston's commuter rail were worth 6.7 percent more than similar homes in other communities (Armstrong, 1994). In Chicago, the prices of single-family houses located within 1,000 feet of stations were 20 percent higher than comparable houses located a mile away (Gruen, 1997). Median home prices in the Philadelphia region were 10 percent higher in census tracts served by a PATCO rail line, and 4% higher in tracts served by a SEPTA rail line (Voith, 1991).

Light rail can have a positive impact on nearby business communities as transitways can provide a new way for people to access these businesses, and because pedestrian and vehicular traffic around stations and park-and-ride lots can increase. As an example, since 2009, the year before construction of the METRO Green Line LRT (Central Corridor) started, the neighborhoods between Downtown East Station in Minneapolis and Union Depot Station in Saint Paul have experienced more than $3 billion in commercial and residential development – including new construction, redevelopment, and expansion.

Light rail also has the potential to cause environmental impacts ("nuisance effects") that could reduce the value of properties (including business and residential properties). For residential properties, the potential nuisance effects primarily occur in locations in close proximity to the light rail alignment and include: disruptive noise levels; visual impacts; and reductions in vehicular access and parking. For businesses, factors influencing the potential loss of business revenue include effects associated with changes in temporary changes in access and noise and dust during construction activity. Long-term business revenue loss for business property value are not anticipated with the Project.

Business Effects

Summary of Comments: Several commenters, including business owners/organizations and the City of Hopkins, provided comments regarding how the Project would affect business operations and revenue, both during construction and after the Project begins operating. Common themes regarding business impacts included construction-related impacts, changes in traffic flow and customer/supplier/employee access, and parking changes. The most common locations of concern were the areas surrounding the proposed Royalston and SouthWest Stations. Many commenters expressed concern over the potential business effects related to the relocation of freight trains out of the Kenilworth Corridor; these concerns are addressed in Theme C, opposition to relocation of freight rail out of the Kenilworth Corridor.

Response: *The following are responses to concerns regarding construction impacts, changes in traffic flow and access, and changes in parking. Refer to Theme I, concerns about park-and-ride lots and stations, for responses to specific concerns regarding Royalston and SouthWest Stations.*

Construction-Related Impacts*: As previously described, the Project has the potential to cause environmental impacts ("nuisance effects") related to construction and operations, which could impact some businesses. These*

potential nuisance effects include: disruptive noise levels; visual impacts; and reductions in vehicular access and parking. The timing of such impacts would depend on the location of the business relative to the new station, changes in business activity during construction and operation of the system, business visibility, and local land use plans and development standards. For the Project, the potential nuisance effects are expected to be minimal, as detailed below.

In order to minimize potential impacts to businesses, the Council will develop a Construction Mitigation Plan (which includes a Noise Control Plan) and Construction Communication Plan which will be implemented by the Council prior to and during construction. The purposes of the Construction Communication Plan are: to prepare project-area residents, businesses, and commuters for construction; to listen to their concerns; and to develop plans to minimize harmful or disruptive effects. Specific mitigation measures included in the Construction Communication Plan will be site-specific and may include:

- *Issuing construction updates and posting on the Project website;*
- *Providing advance notice of roadway closures, driveway closures, and utility shutoffs;*
- *Conducting public meetings;*
- *Establishing a 24-hour construction hotline;*
- *Preparing communication materials with applicable construction information;*
- *Addressing property access issues; and,*
- *Assigning staff to serve as liaisons between the public and contractors during construction.*

In addition, the Council will develop and implement a Construction Staging Plan, which will be reviewed with the appropriate jurisdictions and railroads. The contractor will be required to secure the necessary permits and follow the Staging Plan, unless otherwise approved. Components of a Staging Plan include traffic management plans and a detailed construction timeline.

***Traffic and Access Changes**: The Project may affect local businesses as local traffic patterns are changed and the number of available off-street and on-street parking spots in the corridor is reduced. In addition, pedestrian and vehicular traffic around stations and park-and-ride lots is likely to increase. While there is a potential for loss of business revenue due to changes in vehicular patterns and parking, the net revenue loss may be minimal due to greater pedestrian presence and vehicular traffic associated with access to the stations.*

The Project will maintain access to businesses during construction and operation of the Project, unless that property or portion of the property is acquired by the Project. Property owners will be compensated for any long-term loss in property access based on the terms of the purchase agreement between the Council and property owner in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Refer to Section 3.4.1 of the Final EIS for additional information on the Uniform Act.

Project construction may result in lost revenues for businesses and affect the quality of life of residences on or near affected properties. Those effects would be caused by construction-related activities, such as temporary elimination of parking stalls; construction related traffic congestion; short-term changes in access or detours and reduced visibility from the street (e.g., establishing a detour that requires customers to take longer or less familiar routes to a business, removing a left-hand turn lane into a shopping center, or eliminating the "street appeal" from a business that depends on drive-by or walk-up sales); and increased noise, dust, and perceived changes in visual quality (e.g., glare from nighttime construction lighting). Retail and personal services businesses that depend on good access and an aesthetically pleasing experience for customers are most likely to experience short-term impacts during construction.

In order to minimize short-term impacts to businesses related to vehicle traffic and roadway access, the Council or its contractors will develop a construction mitigation plan, construction staging plans, and traffic control plans that will include strategies to maintain traffic flow, existing transit services, and pedestrian access along each disrupted roadway. The traffic control plans will also include the identification of construction vehicle routes and provisions requiring the contractor to maintain corridor access points and haul routes and clean them at least once per day.

MnDOT, Hennepin County, and all municipalities affected by construction activities related to the Project will require compliance with applicable state and local regulations related to the closing of roadways and the effects

of construction activities, and traffic control plans will be reviewed by appropriate jurisdictions and the Council prior to the initiation of construction activities. Additionally, contractors will be required to comply with all guidelines established in the Minnesota Manual on Uniform Traffic Control Devices (2015).

***Changes in Parking**: Under the Project, there will be some changes to on-street and off-street parking. Changes to off-street parking will be related to land acquisitions, and changes to on-street parking will occur in some areas where changes to existing roadways are needed to accommodate the Project. Overall, the Project will reduce the supply of off-street parking (i.e., off-street parking lots, typically associated with privately owned businesses) by eliminating 692 spaces and will reduce the supply of on-street parking by eliminating 57 spaces. Refer to Section 4.3 of the Final EIS for more information on impacts to parking. In addition, temporary removal of on-street parking spaces may occur at locations to facilitate construction of the Project (e.g., to facilitate truck movement or to provide a temporary truck loading zone). These potential temporary removals of on-street parking spaces will be identified prior to the start of construction as part of the Construction Staging Plan.*

The Council will compensate business owners for the loss of off-street parking spaces. Property owners will be compensated based on the terms of the purchase agreement between the Council and property owner, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). Refer to Section 3.4.1 for additional information on the Uniform Act. The Council will develop a Construction Mitigation Plan that will address temporary parking loss during the construction of the Project. The Council will phase construction activities; therefore, many of the spaces lost during construction will only be unavailable for a portion of the Project's construction period.

Economic Opportunity

Summary of Comments: Several commenters noted that the Project has the potential to increase economic opportunity and activity by increasing transportation options for residents, customers, and employees, as well as through the possibility of increased development and redevelopment within the vicinity of proposed light rail stations. In particular, several comments expressed support for potential positive economic effects in the Bassett Valley Creek area east of the proposed Van White Station.

***Response**: The Project will result in positive economic gains in the form of increased wages and spending, creating long-term jobs and additional earnings as a result of Operations and Maintenance (O&M) expenditures. The Project is expected to add a total of 160 full-time equivalent jobs associated with operations of facilities and light rail vehicles. The Project will also increase O&M spending by $39.5 million (2016) annually over the No Build alternative. For the Minneapolis-St. Paul-Bloomington MSA, the effect of local O&M spending for the Project will result in an estimated $34.5 million in local annual wages and salaries, compared to the No Build Alternative (in 2040). Based on the economic analysis documented in Section 3.2 of the Final EIS, the local wages and salaries will support 172 jobs in the local economy.*

The short-term effect of construction spending associated with the Project will result in an estimated $1.3 billion in overall economic activity (in year-of-expenditure dollars) for the Minneapolis-St. Paul-Bloomington MSA over the construction period. It is estimated that construction-related spending will provide regional economic benefits by generating approximately $475 million in additional wages and salaries for households and by creating approximately 10,600 person-year jobs for all industries in the Minneapolis-St. Paul-Bloomington MSA during the construction phase of the Project. A person-year job is defined as a job for one person for one year; if a job employs a single person for three years, it would equal three person-year jobs.

In addition, the Project is likely to contribute to a range of factors that could lead to increased development around proposed stations. This development could result in positive economic gains in the form of wages and spending. For additional information on wages and spending, refer to Theme M.1, land use. For responses to specific concerns about the proposed Van White Station, refer to Theme I, concerns about park-and-ride lots and stations.

M.3 Neighborhood and community

Summary of Comments: The Council and FTA received approximately 40 comments on the Draft EIS concerning neighborhood and community. Those commenters included the cities of Hopkins, St. Louis Park,

and Minneapolis, community groups, and the general public. Comments included general concerns over potential impacts to community facilities, community character, and community cohesion. Commenters stated that community facilities and neighborhood boundaries should be clearly described. Others expressed concern over potential impacts on specific community facilities, such as the Minneapolis Farmers Market, the Chain of Lakes Regional Park, and Bryn Mawr Meadows Park. Multiple commenters expressed concern over potential community cohesion impacts related to the introduction of light rail trains into existing Bass Lake Spur, Kenilworth, and Wayzata Subdivision freight rail corridors, including concern over the elimination of roadway, pedestrian, and bicycle crossings (both "official" and "unofficial" crossings). Some commenters expressed concern over short-term impacts to neighborhoods related to construction of the Project.

The City of St. Louis Park asked for a more detailed description of its neighborhoods. The City of Minneapolis noted that the co-location of LRT and freight rail within the Kenilworth Corridor would maintain the existing barrier to community cohesion created by the existing freight rail corridor. The City of Hopkins expressed concern over potential impacts to the downtown Hopkins area and suggested that mitigation measures to ensure strong pedestrian and bicycle connectivity be included in the Project.

Response: *The Final EIS includes an updated evaluation of neighborhood and community impacts based on the Project definition. Many of the concerns commenters raised have been avoided, minimized, or mitigated. As described in Section 3.3 of the Final EIS, the neighborhood and community evaluation includes a description of the regulatory context and methodology, affected environment, an evaluation of the Project's long-term and short-term environmental consequences related to neighborhood and community (community facilities, community character, and community cohesion), and mitigation measures that will be implemented with the Project. Information from the Final EIS is summarized in the responses to comments below. Refer to Section 3.3 of the Final EIS for an updated neighborhood and community evaluation, based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS.*

Identification of Community Facilities and Neighborhoods

Section 3.3.2 of the Final EIS identifies existing community facilities and neighborhoods within the study area, by municipality. Community facilities are defined as land uses that are frequently used by the public, such as schools, colleges, libraries, community centers, parks/recreation areas/open spaces, medical facilities, places of worship, funeral chapels, and police and fire departments.

The Cities of St. Louis Park and Minneapolis have defined the geographic boundaries of neighborhoods within their respective jurisdictions, and those boundaries are used in the Final EIS analysis. Neighborhoods with formally defined geographic boundaries have not been identified for the Cities of Eden Prairie, Minnetonka, and Hopkins. For the purpose of this analysis, "neighborhoods" within cities where neighborhoods have not been formally defined are identified using a proposed light rail station area (i.e., half-mile radius around a station site) as a geographic reference. The Final EIS includes a detailed description of the existing community character of each neighborhood and station area affected by the Project. See Section 3.3.2 for more information.

The evaluation of community facilities in the Final EIS included the Minneapolis Farmers Market, Chain of Lakes Regional Park, and Bryn Mawr Meadows Park. The evaluation concluded that none of these facilities would be adversely affected by the Project. See Section 3.3.3 for more information.

Community Cohesion in Existing Freight Rail Corridors

In evaluating the Project's impact on community cohesion, the Council considered the potential of the Project to introduce new physical barriers to connectivity, changes in the local roadway network, and changes to the pedestrian and bicycle networks. In areas where the Project will include LRT operations adjacent to existing freight rail corridors (i.e., Bass Lake Spur, Kenilworth Corridor, and the Wayzata Subdivision), the Project will maintain all existing roadway, sidewalk, and trail connections along and across existing freight rail corridors. The existing freight rail alignments are physical barriers that reduce community cohesion; therefore, the implementation of the proposed light rail alignment within existing freight rail corridors will not create a new physical barrier and the Project will not adversely impact community cohesion.

The Project includes new sidewalks and trails or continuation of existing sidewalks and trails around proposed light rail stations, which will improve pedestrian connectivity between neighborhoods and help to overcome the existing barrier to community cohesion created by the existing freight rail corridors. Refer to Section 3.3.3 of the Final EIS for an evaluation of potential community cohesion impacts related to the Project.

"Unofficial crossings" of the freight rail tracks are routes across the freight rail corridors that are not legally permitted because of safety concerns related to freight rail operations. Where fencing will be installed under the Project, the Project will not include gaps in that fencing at existing "unofficial crossings" due to safety concerns (see Section 4.6 for more information on where fences will be installed under the Project). All official at-grade and grade separated crossings (e.g., marked roadway/trail intersections and bridges) will continue to allow pedestrians and bicyclists to cross the rail tracks.

Construction Impacts to Neighborhoods

As described in Section 3.3.3.3 of the Final EIS, Project construction activities will result in short-term impacts to neighborhoods and communities. The Project will result in short-term changes to access to community facilities during construction. Short-term impacts include changes to roadways alignments, intersection modifications, and trail and sidewalk detours for routes that provide access to community facilities (see Sections 4.2.3.3 and 4.5.3.3 for more information on temporary construction impacts to roadways and pedestrian/bicycle facilities, respectively). Depending on conditions (e.g., levels of vehicular traffic), at times these construction activities will likely result in delays and longer travel times/distances for people using the facilities. In addition, the creation of temporary construction easements on the property of community facilities will be required in cases where short-term excavation and construction disturbance are anticipated. Construction activities within temporary easements on community facility properties may cause temporary inconvenience to users of these facilities as a result of construction-generated noise, dust, and congestion. Access to community facilities will be maintained during construction.

Construction impacts, such as increased levels of noise and dust, may temporarily affect neighborhood character during periods of heavy construction, primarily in areas that are relatively quiet under normal, pre-construction conditions. In addition, the presence of large construction equipment may be perceived as visually disruptive, resulting in temporary effects to community character, particularly for residential neighborhoods adjacent to the limits of disturbance for the Project (see Appendix E).

Construction activities may temporarily affect community cohesion, resulting in increased roadway congestion, temporary closures of roadways, and roadway detours, all of which may increase both automobile and truck traffic through residential neighborhoods. Construction activities could also result in temporary increases in vehicle traffic on local roadways where relatively little vehicle traffic exists today.

Specific mitigation measures for short-term neighborhood and community impacts are identified in the Construction Mitigation Plan and Construction Communication Plan, which will be implemented by the Council prior to and during construction. The purposes of the Construction Communication Plan are: to prepare project-area residents, businesses, and commuters for construction; listen to their concerns; and develop plans to minimize harmful or disruptive effects. Specific mitigation measures included in the Construction Communication Plan will be site-specific and may include the following:

- *Issue construction updates and post them on the Project website.*
- *Publishing construction updates and posting on the Project website;*
- *Providing advance notice of roadway closures, driveway closures, and utility shutoffs;*
- *Conducting public meetings;*
- *Establishing a 24-hour construction hotline;*
- *Preparing materials with applicable construction information;*
- *Addressing property access issues; and,*
- *Assigning staff to serve as liaisons between the public and contractors during construction.*

In addition, the Council will develop and implement a construction staging plan (staging plan), which will be reviewed with the appropriate jurisdictions and railroads; the construction contractor will be required to secure necessary permits and follow the staging plan, unless otherwise approved. Components of a staging plan include

traffic management plans and a detailed construction timeline. Construction vehicle routes will be determined prior to construction and the contractor will be required to maintain corridor access points and haul routes and to clean them at least once per day. Cleaning shall consist of removal and disposal of dust, dirt, mud, snow, and other material associated with construction activities. Accumulated snow and ice will be removed within 24 hours of the snowfall from access areas and any areas under the control of the contractor that are subject to use by pedestrian and vehicular traffic by the public.

M.4 Property acquisitions and displacements

Summary of Comments: The FTA and the Council received approximately 40 comments on the Draft EIS concerning property acquisitions and displacements. Those commenters included businesses, community groups, and the general public. Commenters expressed concern about right-of-way impacts on private property and associated mitigation measures, particularly: the co-location of freight rail and LRT in the Kenilworth Corridor; the potential for residential and business displacements; the need to clearly identify which properties will be acquired for the Project; and, concern over potential impacts related to construction easements. Specific locations of concern include, but are not limited to: the City of Eden Prairie, the area surrounding Blake Station (including 43 Hoops), the Kenilworth Corridor (i.e., Burnham Road, Cedar Lake Parkway, and the areas surrounding the proposed West Lake and 21st Street Stations), and the proposed Royalston Station area (including the Minneapolis Farmers Market).

Response: *Since publication of the Draft EIS, project adjustments have avoided and minimized acquisitions. As described in Section 3.4 of the Final EIS, the evaluation of property acquisitions and displacements includes a description of the affected environment, an evaluation of the long-term and short-term impacts related to property acquisitions and displacements, and a description of the mitigation measures that will be implemented with the Project. Information from the Final EIS is summarized in the responses below.*

The Project has been developed to minimize to the acquisition of private property and the displacement of businesses, residences, and other uses; however, some acquisitions and displacements will be necessary as part of the Project. As shown in Section 3.4.3, the Project will result in the partial acquisition of 159 parcels (totaling approximately 135 acres) and full acquisition of 36 parcels (totaling approximately 64 acres). Of these, 145 parcels (totaling approximately 126 acres) are private property and 50 parcels (totaling approximately 73 acres) are currently under public ownership. Property acquisitions are illustrated in Final EIS Exhibits 3.4-1 and 3.4-2.

The full or partial acquisition of property with industrial and/or commercial uses will result in the relocation of up to 72 businesses that currently operate on or use 20 of the parcels to be acquired by the Project. The Project will not displace any residences; however, small areas (generally less than 0.5 acres, but up to 2.5 acres) will be acquired from some residential properties.

In addition, the Project will result in some short-term acquisitions related to temporary property easements to accommodate construction activities outside of the permanent right-of-way for the Project. Temporary property acquisitions could include short-term changes to property access or temporary conversion of land use to transportation use for construction staging and other construction activities throughout all or part of the construction period. Temporary property acquisitions (e.g., construction easements) will be needed on 178 parcels, affecting approximately 134 acres. Refer to Appendix E of the Final EIS for a series of maps showing the Project's temporary easements. Although some businesses may experience hardship during construction (e.g., road detours near the business, temporary on-street parking reductions), no business displacements related to construction easements are anticipated. Refer to Theme M.2, economic activity, for more information on potential impacts to businesses.

Federal and state laws require that, when property is acquired for a public project, property owners be paid fair market value for their land and buildings and, where applicable, be assisted in finding replacement sites for businesses or residences. In addition, any tenant of the property to be acquired is entitled to receive relocation assistance, if desired. As part of the Project, the Metropolitan Council will identify and compensate affected property owners for long-term and short-term (construction) acquisitions according to the provisions of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Code of Federal

Regulations [CFR] Title 49, Part 24), as amended (49 CFR, Part 24), and MN Stat. 117 which sets forth requirements for acquisition of land, compensation, and uniform relocation benefits. Refer to Section 3.4.4 for more information on mitigation measures for acquisitions and displacements.

As previously described, the design of the Project has been adjusted since the publication of the Draft EIS. These design adjustments affected acquisitions and displacements in the following ways:

- ***Within the City of Eden Prairie**, the light rail alignment has been adjusted to minimize acquisitions and displacements, as follows:*
  - *The location of the proposed Eden Prairie Town Center Station and the light rail alignment have been shifted south of the location proposed in the Draft EIS (i.e., along Technology Drive). The adjusted light rail alignment will run parallel to and north of Eden Road, heading east and then turning north at Flying Cloud Drive to cross Technology Drive at grade. The adjusted light rail alignment will avoid property acquisitions and the displacement of businesses along the south side of Technology Drive (including Bachman's, Costco, Gander Mountain, etc.).*
  - *The westernmost terminus of the Project will be the proposed SouthWest Station; the previously proposed Mitchell Station evaluated in the Draft EIS will not be included in the Project. Therefore, the Project will not continue along Technology Drive west of SouthWest Station and will not result in direct impacts to private property east of the proposed SouthWest Station (including the Eaton and AGNL Health campuses).*
- ***The location of Blake Station** has been adjusted since publication of the Draft EIS, and the station is now proposed to be located on the south side of the existing Bass Lake Spur freight rail corridor, rather than on the north side as evaluated in the Draft EIS. This adjustment was made based on the public and agency comments received in an effort to provide better connectivity to existing activity centers and to minimize impacts associated with Project right-of-way needs.*
- ***Within the Kenilworth Corridor**, the Project has been adjusted since publication of the Draft EIS to include co-location of LRT and freight rail in the Kenilworth Corridor, with the proposed light rail alignment to be located within a shallow tunnel generally between West Lake Street and just south of the Kenilworth Lagoon (see Section 2.1 and Appendix E of the Final EIS for a more detailed description and illustration of the Project's design within the Kenilworth Corridor). As a result, Project right-of-way acquisition needs within the Kenilworth Corridor have been minimized and the Project will not result in any residential displacements within the Kenilworth Corridor.*
- ***Within the area of the proposed Royalston Station**, the design of the Project has been adjusted since publication of the Draft EIS to minimize property acquisitions and avoid business displacements. As a result, no businesses displacements (including the Minneapolis Farmers Market) in the Royalston Station Area are anticipated under the Project. Alternative station locations were considered and dismissed from further study for the following reasons: moving the proposed Royalston Station onto Border Avenue would have involved the acquisition of additional right-of-way, because of the narrowness of the existing right-of-way on Border Avenue; and moving Royalston Station onto 6th Avenue North would not serve additional areas of downtown Minneapolis and would have overlapping ridership with the existing Target Field Station. Additional issues associated with moving Royalston Station include increased length of the proposed light rail alignment, tighter curves, and functional difficulty interfacing with Target Field Station. Target Field Station cannot be moved because it is an existing station and the Project is intended to directly connect with the existing METRO Green and Blue Line LRT routes. See Appendix E of the Final EIS for the preliminary engineering plans which show the current design.*

M.5 Environmental Justice

Summary of Comments: FTA and the Council received approximately 100 comments on the Draft EIS concerning environmental justice. Of these, approximately 70 were written comments received during a public hearing on the Draft EIS submitted by commenters associated with New American Academy who

expressed general concern over jobs, housing, and economic development for minority communities within the City of Eden Prairie. Other commenters included the following: City of Hopkins, City of Minneapolis, EPA, community groups, non-profit organizations, and the general public. These comments generally focused on: concern over the need to clearly identify and describe environmental justice (minority and low-income) populations using the appropriate data sources; the need to provide high quality transit service to environmental justice populations; public outreach to environmental justice populations; affordable housing and gentrification; and, potential impacts to environmental justice populations in the area of the proposed Van White Station related to the potential for a future passenger rail storage facility at the Linden Yards site.

The City of Hopkins noted that there is an environmental justice population in the Blake Road area of Hopkins. The City of Minneapolis commented that it is critical that the Project benefit residents of both North Minneapolis and South Minneapolis, and acknowledged that the proposed stations included in the Project ensure that people of all income levels and demographic backgrounds will realize the long-term benefits of light rail in their neighborhood. The EPA expressed concern over gentrification and the need to map environmental justice populations.

Response: *As described in Chapter 5.0 of the Final EIS, the environmental justice analysis was completed in compliance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," USDOT Order 5610.2 (a), "Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (May 2012), and Federal Transit Administration Circular 4703.1, "Environmental Justice Policy Guidance for Federal Transit Administration Recipients" (August 2012).*

Responses to concerns over environmental justice issues in Eden Prairie are captured in the general responses below, including responses to the comments associated with New American Academy. Section 5.2.2 of the Final EIS includes a description of existing affordable housing within the study area (including Eden Prairie) and Section 5.4.1 describes measures that the Council will undertake in order to minimize the displacement of existing affordable housing options. As described in Section 3.2, the Project will create approximately 10,600 construction jobs and support a projected 172 new long-term jobs, which would be accessible to residents of Eden Prairie. As described in Section 3.1.3 and in Theme M.1, land use, of this response, light rail lines can advance the timing and increase the intensity of development within the limits allowed by local comprehensive plans, especially in areas near proposed stations (including those within the City of Eden Prairie). To fully leverage this development potential and to support local land use goals, Hennepin County, in partnership with the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, Edina and Minneapolis, undertook a station area planning effort (Southwest Corridor Investment Framework. Hennepin County, 2013) which identifies station area development potential.

Refer to Chapter 5 of the Final EIS for the Project's environmental justice analysis, which was completed based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. This analysis includes a description of environmental justice populations within the study area, a summary of public engagement efforts for environmental justice populations, an evaluation of potential disproportionately high and adverse effects on environmental justice populations, and a project-wide environmental justice finding.

As shown in Section 5.2, the description of environmental justice populations within the study area was completed based on data from the American Community Survey (ACS) 2009-2013, which was the most recent data source available at the time of the analysis. The analysis includes a description of minority and low-income populations by census block for the Project area. Minority populations are shown (in tabular form and on maps) in aggregate (i.e., combined minority populations) and by individual minority group. Low-income populations within the study area are shown by census block group.

The Council developed a public outreach strategy for the Project that created meaningful opportunities for public engagement for all members of the community, including members of environmental justice communities. Throughout Project Development and the NEPA process, the Project team used several avenues of communication and outreach to engage minority and low-income communities affected by the Project. Project staff reached out to established neighborhood groups, community leaders, and private organizations composed of and connected to minority and low-income communities in the study area. Refer to Section 5.3 for more information on outreach to environmental justice populations.

As described in Section 5.4 of the Final EIS, the evaluation of potential disproportionately high and adverse effects on environmental justice populations included a review of all environmental categories in making determinations regarding disproportionately high and adverse effects on minority and low-income populations, mitigation measures that will be implemented, and all offsetting benefits to the affected minority and low-income populations.

As shown in Section 5.5 of the Final EIS, the project-wide environmental justice analysis concludes that, when adverse impacts on environmental justice populations, committed mitigation measures, and benefits to environmental justice populations are taken into account, the Project as a whole will not result in disproportionately high and adverse impacts on environmental justice populations. Additional information from the Final EIS is summarized in the responses to comments below.

Transit Service for Environmental Justice Populations

Section 1.6 of the Final EIS documents the need to provide competitive, reliable transit options for transit dependent populations (including environmental justice populations). The Project will assist in creating more efficient links between the proposed light rail alignment and neighborhoods with environmental justice populations than currently exist (see Section 5.2 of the Final EIS describes the locations of minority and low-income populations along the proposed light rail alignment). In addition, the Council, Metro Transit, and SouthWest Transit have collaborated to develop the 2040 bus operations plan associated with the Project. The plan, which includes new or restructured local bus routes connecting stations to regional and local destinations, will increase the hours and miles of bus service provided (see Section 2.1.1.3 of the Final EIS for more information). The increased transit service will improve access between neighborhoods with environmental justice populations along the proposed light rail alignment. The Project will also include bicycle and pedestrian improvements that provide comfortable connections to and from proposed LRT stations, which will enhance access to transit for low-income and minority populations by creating more efficient links between the proposed light rail alignment and environmental justice populations.

Affordable Housing and Gentrification

As the region makes significant investments in transit, The Council and its partners have taken steps to minimize and mitigate the impacts of neighborhood change along transitways that can displace existing low-income residents through increases in rent and housing costs (known as gentrification), and which could lead to a decrease in racial and financial diversity if unaddressed. This effort includes the development of plans and policies intended to preserve a mix of housing affordability and to protect housing options for existing low-income residents alongside the newer higher-income residents in areas where transit investments lead to higher housing costs. In particular, the 2040 Housing Policy Plan adopted by the Council in 2014 contains a policy to "Create or preserve a mix of housing affordability around emerging transit investments."

Southwest Corridor Community Works and its funding partners have been working together since 2012 to inventory existing housing options in the corridor, understand what the future housing demand may be, and identify the likely demographics of people interested in living along the corridor. In addition, the organization's work includes developing a deep understanding of the current and potential local, county, state and federal technical and financial resources to support a full range of housing choices. The Council is working in partnership with Hennepin County and the cities along the proposed Southwest LRT route to implement the Southwest LRT Community Works Investment Framework, which will serve as a guide for short-term and long-term transit related policy and investments. Implementation of this framework could entail the establishment of policies to ensure new developments surrounding station areas include affordable housing options. The Council has also been involved in the Southwest LRT Community Works housing inventory that assesses existing housing and housing gaps in the corridor as a whole and around stations (http://www.swlrtcommunityworks.org/beyond-rails/planning-information/housing-inventory). Some of the Southwest-specific studies and resources that inform this work include:

- ***Southwest Corridor- wide Housing Inventory (2013),*** *which chronicles existing housing and demographics along the corridor*

- ***Southwest LRT New Starts Affordable Housing Rating Evaluation Summary****, MZ Strategies (2013), which outlines existing Southwest Corridor Cities plans and programs that support affordable and workforce housing that can be applied to the LRT Corridor*
- ***Southwest Corridor Investment Framework (2013)****, which provides Transitional Station Area Action Plans (TSAAPs) for each of the 17 station areas, including recommendations on likely sites for housing development*
- ***Southwest Corridor Housing Gaps Analysis (2014),*** *which projects future housing demand, provides market analysis and outlines recommendations and tools to achieve a full range of housing choices*
- ***Southwest LRT New Starts Submittal (2014),*** *which provides updated information on costs, ridership and land use/economic development both presently and looking into the future, as part of the Federal LRT Funding process*
- ***Corridor-wide Housing Strategy (2015)****, which documents a plan to support and encourage a full range of housing choices along the Southwest corridor station areas.*

Additionally, cities have undertaken housing studies, outlined tools and strategies in comprehensive plans and set individual housing goals. Further, in 2015, the U.S. Department of Housing and Urban Development (HUD) released a Final Rule titled Affirmatively Furthering Fair Housing *(AFFH), which is intended to help communities that receive HUD funding to meet long-standing fair housing obligations in their use of HUD funds. The rule responds to recommendations of the Government Accountability Office and stakeholders for HUD to enhance its fair housing planning obligations by providing greater clarity and support to jurisdictions receiving HUD funding, and facilitating local decision-making on fair housing priorities and goals. As recipients of HUD funding, the Council and the affected cities will be required to comply with this final rule which will help to ensure affordable housing goals are met. These efforts, along with other resources and technical assistance, have been compiled and taken into consideration to inform the Southwest Community Works Corridor-wide Housing Strategy along the Green Line Extension.*

Linden Yards Passenger Rail Storage Facility

Response: *A proposed high speed rail layover or maintenance facility at Linden Yards is not evaluated in the Final EIS for the Project because it is not included within an adopted plan, nor is it a funded project. The land use and other analyses (including the environmental justice analysis) in the Final EIS are based on the City of Minneapolis' applicable adopted land use plans, including the Bassett Creek Valley Master Plan (2007). That plan designates much of the Linden Yards site as mixed-use, commercial and other development, with some park land; the plan recognizes that the site's current use is industrial. The proposed light rail alignment and Van White Station will be northwest of Linden Yards and will not use any portion of the Linden Yards site. As such, the proposed light rail alignment and station will not preclude the use of the Linden Yards site for a rail storage or maintenance facility, nor will it preclude other development from occurring on that site. Conversely, development of Linden Yards (or lack of development of Linden Yards) will not preclude the proposed light rail alignment and station, nor would that development cut off access to the proposed station.*

N. Concerns about Environmental Impacts

Summary of Comments: The Council and FTA received approximately 150 comments on the Draft EIS concerning potential environmental effects of the project. Commenters included the City of Eden Prairie, City of Hopkins, City of Minneapolis, City of Minnetonka, City of St. Louis Park, EPA, MCWD, MnDOH, MnDOT, MPCA, MPRB, NMCWD, USACE, businesses, community groups, non-profit organizations, and the general public. The comments are addressed below and are organized into the following categories:

- Parks, recreation areas, and open spaces;
- Visual quality and aesthetics;
- Geologic resources;
- Groundwater resources;
- Wetlands;
- Public waters and surface water quality;
- Floodplains;
- Threatened and endangered species, habitat and migratory birds;
- Air quality and greenhouse gases;
- Hazardous and contaminated materials;
- Electromagnetic fields, electromagnetic interference, and utilities; and
- Cumulative impacts.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments and freight rail modifications into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts.*

The design adjustments also reflect additional analyses and evaluations conducted in compliance with Section 4(f) of the Department of Transportation Act; Section 106 of the National Historic Preservation Act; Section 404 of the Clean Water Act; Order DOT 5650.2; Executive Order 11988, as amended by Executive Order 13690; Section 7 of the Endangered Species Act; Minnesota Statute 84.0895 and Minnesota Rules 6212.1800-2300; Clean Air Act and National Ambient Air Quality Standards; Recovery Act and Comprehensive Environmental Response, Compensation and Liability Act; Considering Cumulative Effects Under the National Environmental Policy Act; and incorporate various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments and freight rail modifications incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Final EIS analysis is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS, which incorporates design adjustments and freight rail modifications made since publication of the Draft EIS. The alternative selection process and design adjustment process are documented in Chapter 2 and Appendix F in the Final EIS.

Refer to Chapter 3 of the Final EIS for an analyses of impacts in the categories listed above. These analyses include descriptions of the relevant regulatory context and methodology, affected environment, long-term and short-term impacts, and mitigation measures that will be implemented with the Project. Information from the Final EIS is summarized in the responses to comments below.

N.1 Parks, recreation areas, and open spaces

Summary of Comments: The Council and FTA received approximately 60 comments on the Draft EIS concerning parks, recreation areas, and open spaces. Those commenters included the cities of Minneapolis, Minnetonka, and St. Louis Park, MPRB, businesses, community groups, and the general public.

FTA and the Council received specific and general comments related to parklands, recreation areas, and open spaces. Several of these comments are also related to compliance with Section 4(f) and are addressed in Theme S and Chapter 6 of the Final EIS. The City of Minnetonka commented that there is a restrictive covenant on parcel PID 3611722210002 (Open Space B) and a conservation easement at parcel PID 2611722440106. The City of St. Louis Park commented that access between the Cedar Lake LRT Regional Trail and Lilac Park should be maintained. The City of Minneapolis raised concerns about the acquisition of 0.81 acres of Cedar Lake Park. The MPRB commented that parklands along the Project are preserved in the same or better than existing condition; that natural wildlife habitat and parkland are maintained; that parklands retain their natural character; that Cedar Lake Park users have safe and pleasant access to and from the park; and that the Kenilworth Channel retains its natural beauty and serenity. Concerns from other commenters generally focused on parklands in the Kenilworth Corridor and on impacts to parks, including access, safety, noise, and visual quality.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of impacts to parks, recreation areas, and open spaces. The Council also continued coordination with property owners during Project design. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

Section 3.6 of the Final EIS provides an analysis of parks, recreation areas, and open spaces. Table 3.6-2 in Section 3.6 of the Final EIS provides a summary of impacts to parks, recreation areas, and open spaces. Section 3.6.4 of the Final EIS describes measures to mitigate impacts to parks, recreation areas, and open spaces. Theme E in this appendix includes responses to comments specific to parks, recreational areas, and open spaces in the Kenilworth Corridor.

Parcel PID 3611722210002 (Open Space B) was evaluated as an open space in Section 3.6, Parks, Recreation Areas, and Open Spaces, of the Final EIS. The analysis notes the restrictive covenant.

As stated in Final EIS Section 3.4, Acquisitions and Displacements, the Project will require the partial acquisition of Parcel PID 2611722440106. When acquiring property, the Council will provide property owners with monetary compensation in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Relocation Act), FTA's Circular 5010.1D "Grants Management," and Minn Stat. 117. Any businesses or persons displaced from the property will be compensated in accordance with provisions of the Uniform Relocation Act and Minn Stat. 117. FTA and the Council are aware of the conservation easement on PID 2611722440106, and during the acquisition process for PID 2611722440106 the conservation easement will be evaluated against the Project's use of the parcel.

Access to and from parks will be maintained during operation of the Project. During construction, some trails and sidewalks may be detoured either on a signed route on other trails/roadways or on a temporary facility built to re-route pedestrian and bicycle traffic around an obstruction, in order to maintain the safety of park and trail users. Areas and features of parks and recreation areas that are altered or disturbed due to construction activities will be restored to their original conditions or better in coordination with the jurisdictional owner. This mitigation measure applies to potential short-term direct impacts associated with construction-related disturbances at Purgatory Creek Park, Nine Mile Creek Conservation Area, Minnehaha Creek Open Space, Kenilworth Channel/Lagoon, Cedar Lake Park, and Bryn Mawr Meadows Park, as well as regional and local trails.

Landscaping with native plant species will be incorporated into the Project's design during Engineering, where applicable and appropriate. Habitat that is temporarily disturbed during construction will be re-seeded and restored, where appropriate, upon completion of construction.

Additional information about visual quality, noise, access and safety, and Section 4(f) properties is located in Section 3.7, Section 3.12, Chapter 4, and Chapter 6 of the Final EIS, respectively. Additional response to comments about visual quality, noise, access, safety, and Section 4(f) are located in Themes N2, O, P, R, and S of this appendix, respectively. Appendix E, Preliminary Engineering Plans, in the Final EIS, illustrates the Project's design including access points to parks.

N.2 Visual quality and aesthetics

Summary of Comments: The Council and FTA received approximately 70 comments on the Draft EIS concerning visual quality and aesthetics. Those commenters included the cities of Minneapolis, Hopkins, Minnetonka, and St. Louis Park, MPRB, businesses, community groups, and the general public.

MPRB and other commenters expressed concerns about visual impacts of the elevated rail structure proposed for construction over Cedar Lake Parkway. Topics of concern included the aesthetic integrity of the Grand Rounds Historic District and impacts on views from the Parkway, from nearby homes, from the adjacent trail segments, and from nearby areas of Cedar Lake used for boating.

Other concerns about visual quality that generated comments, including from MPRB, included impacts in the Kenilworth Corridor, and the need for landscaping and careful design to mitigate visual effects.

The City of Minnetonka stated that the introduction of the light rail line, including the installation of catenary poles and wires and the removal of trees along south side of the Claremont Apartments, would create visual impacts to some additional residential areas and trail users, and were not identified in the Draft EIS. The City asked that the Project mitigate potential visual impacts to affected residential properties. The City also expressed concern that LRT Alternative 1A would have negative visual impacts on existing single family residential neighborhoods and the Minnesota River Bluffs LRT Regional Trail.

The cities of Minnetonka and Minneapolis, as well as some individual commenters, expressed concerns about the location, design, and screening of traction power substations (TPSS); the City of Minnetonka also expressed concerns about the design of signal bungalows. The primary request was that the precise locations of these facilities should be coordinated with the cities and that they be screened with landscaping.

The City of Hopkins commented that the Project should minimize impacts on sight lines to the Minneapolis & St. Louis Railway Depot adjacent to the LRT alignment.

The City Minneapolis expressed concerns about the impacts of locating the operation and maintenance facility on the site designated as "OMF Minneapolis 4" and indicated that the mitigation measures identified for it in the Draft EIS were insufficient to "minimize the impacts from tall buildings."

Responses*: Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of visual quality impacts. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts. The Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1), and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). Within the City of Minnetonka the Project will not follow alternative LRT 1A, avoiding the visual impacts specific to alternative LRT 1A. As noted below, since the Draft EIS the Council and FTA performed a Visual Quality and Aesthetics analysis of the entire corridor, along alternative 3A-1, including in Minnetonka and where the Project is adjacent to the Minnesota River Bluffs LRT Regional Trail. See Theme C for responses to comments regarding opposition to freight rail out of the Kenilworth Corridor. Additionally, within the Kenilworth Corridor, a shallow light rail tunnel will be constructed between West Lake Street and just south of the Kenilworth Lagoon. With the shallow tunnel, light rail vehicles will go under Cedar Lake Parkway; therefore, a light rail bridge over Cedar Lake Parkway is not needed. Since the Draft EIS, the locations of TPSS and signal bungalow sites were determined through consultation with applicable local jurisdictions and were included in the Visual Quality and Aesthetics analysis in Section 3.7 of the Final EIS.*

After publication of the Draft EIS and the advancement of the design for the Project, the Council and FTA performed a systematic and detailed Visual Quality and Aesthetics analysis of the entire corridor. See Section 3.7, Visual Quality and Aesthetics, and Appendix J, of the Final EIS for the analysis. These findings are based on FHWA's Visual Impact Assessment of Highway Projects (FHWA, 1988). The method was designed to provide a systematic and objective approach to evaluation of the visual changes. The FHWA methodology is well established and widely accepted for the assessment of visual impacts and is well suited to assess the visual impacts of linear transportation facilities in urban areas. The assessment for the Project was based on visual assessment of the Project corridor, completed through site visits, analysis of existing conditions, and an evaluation of visual change.

All viewpoint sites were visited and the corresponding views were photographed to document the existing views. This field work, review of the photographs, and the subsequent coordination/consultation process with the Project team provided a basis for understanding the typical visual issues for each visual assessment area. Computer modeling and rendering techniques were then used to produce simulated images of the with-Project conditions for the viewpoints evaluation (see Appendix J). These visual simulations provided the bases for the assessment of visual change. This methodology is different than that used in the Draft EIS. Visual simulations of 18 representative viewpoints along the proposed light rail alignment were also prepared (Appendix J, Exhibits J-1 through J-25). These simulations provide a representative view of the appearance of the LRT facility after implementation, including design details of supporting features. Section 3.7.4 of the Final EIS describes measures to mitigate visual quality impacts.

Viewpoint 6 in Appendix J of the Final EIS, which is located between the proposed light rail alignment and the Claremont Apartments, was included in the analysis and impact assessment process. A comparison of the existing conditions and simulation of the view as it would appear after implementation of the Project demonstrated that the visual impacts in this area would be Substantial. The impacts are related to removal of vegetation, introduction of the light rail alignment into the area, and the construction of a high retaining wall. The Council prepared design guidelines for key structures throughout the proposed light rail alignment, focusing on bridges and retaining walls. Those guidelines are included within the Visual Quality Guidelines for Key Structures (Council, 2015 – refer to Appendix C for information on how to access the Guidelines). The following measures will be implemented to mitigate the removal of existing vegetation:

- *Design and implement landscaping into the Project design at appropriate locations to address identified visual impacts, within available landscape budget and balancing other priorities for landscaping (e.g., surface water quality, habitat preservation, species of concern), which could include the following:*
- *Retain as much of existing vegetation as appropriate to provide shielding for sensitive viewpoints, including techniques such as chaining and mowing without removal of the root systems, and/or tying back large shrubs and trees to provide adequate areas for construction activities.*
- *Restore and replant cleared areas in a timely manner, where appropriate, considering such factors as species type, seasonal growing conditions, and other construction-related activities.*
- *Place new and replacement trees based on such factors as helping to provide the maximum screening of views to and from sensitive viewpoints (e.g., adjacent residential areas) or providing street ornamentation, where appropriate.*
- *Develop landscape plans for areas adjacent to elevated structures, retaining walls, noise walls, and TPSS sites3 to achieve such effects as providing partial screening from sensitive viewpoints.*
- *Incorporate visual mitigation measures for Section 106-protected resources and Section 4(f)-protected properties as specified in the Section 106 Memorandum of Agreement and the Final Section 4(f) Evaluation, respectively (see Appendix H and Appendix I, respectively).*

After publication of the Draft EIS, a comprehensive analysis was conducted for siting of the proposed OMF, and OMF Minneapolis 4 was dropped from consideration and is no longer a part of the Project.

The sightlines to and from the Minneapolis & St. Louis Railway Depot were considered in the cultural resources analysis completed for the Final EIS. See Table 3.5-3 in Section 3.5, Cultural Resources, of the Final EIS for the consideration of visual resources within the evaluation of historic properties. See Theme S of this appendix for response to comments concerning historic properties, including those associated with visual resources.

<u>Visual Impacts in the Kenilworth Corridor</u>

[3] A traction power substation (TPSS) is an electrical substation that converts electric power from the form provided by the electrical power industry for public utility service to an appropriate voltage, current type, and frequency to supply railways, trams (streetcars), or trolleybuses with traction current.

Summary of Comments: Several commenters raised concerns about the Project's potential visual impacts and mitigation measures in the Kenilworth Corridor.

Responses: See Theme E4 of this appendix for response to comments about visual quality impacts specific to the Kenilworth Corridor.

Landscaping

Summary of Comments: Several commenters raised concerns about landscaping and Project design details throughout the Project. Some of the concerns suggested that the visual impact of the proposed light rail alignment should be balanced with well-designed landscape and hardscape elements to reflect the natural beauty of the area and that more attention should be paid to visual and aesthetic character and materials selection.

Responses: *The Final EIS Visual Quality and Aesthetics analysis included a detailed assessment of potential visual impacts (see Section 3.7 and Appendix J). The assessment included defining the setting of the project, identifying views from and of the project, identifying representative key viewpoints, documenting existing visual quality and resources, assessing changes to those visual resources, determining the level of visual impact (Low, Moderate, or Substantial), and the identifying and development of mitigation measures. The Council prepared design guidelines for key structures throughout the proposed light rail alignment, focusing on bridges and retaining walls. Those guidelines are included within the Visual Quality Guidelines for Key Structures (Council, 2015 – refer to Appendix C for instructions on how to access the Guidelines). Additional measures will be implemented to mitigate the removal of existing vegetation (See Section 3.7.4), including landscaping, as applicable. The Council will also develop a Project-wide landscape plan during Engineering.*

See Theme E4 of this appendix for response to comments about visual quality impacts specific to the Kenilworth Corridor.

N.3 Geologic resources

Summary of Comments: The Council and FTA received approximately 10 comments on the Draft EIS concerning geologic resources. Those commenters included the cities of Minneapolis and Minnetonka, MPCA, businesses, community groups, and the general public. Commenters were concerned about areas of compressible soils (i.e., peat, organic silts, and fat clays) along the proposed light rail alignment that may settle unevenly under the weight of light rail stations and parking structures, possibly resulting in structural damage to adjacent residences and businesses. The area surrounding the proposed SouthWest Station was identified as an area of particular concern. Commenters were concerned that engineering measures taken to ensure the structural integrity of their buildings would be compromised during construction and operation of the Project, specifically due to groundwater pumping and the operation of light rail vehicles. In a related concern, the City of Minneapolis requested that the geology discussion include consideration of the layers of highly variable urban fill located along some sections in Minneapolis. Other concerns included a comment that construction over the Kenilworth Channel may further deteriorate the wooden retaining walls along the Channel and accelerate erosion behind the walls, and that construction activities alongside slopes for major excavations may degrade soils through compaction and erosion. Regulatory issues were raised by the City of Minnetonka, noting a grading and erosion control permit from the City is required for land disturbance activities greater than 5,000 square feet or 50 cubic yards.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of soil conditions. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

Areas of compressible soils along the Project, including those around SouthWest Station, will be addressed with appropriate design and construction techniques including removing the soft soils and replacing them with suitable fill, deep foundations, driven piles, drilled shaft-supported foundations, or lightweight fill. The Council will continue to evaluate compressible soils during the Engineering phase and will obtain additional soil data where necessary to assist in determining where to excavate and replace soft soils. See Final EIS Section 3.8.3.1 and the Southwest LRT Project Geology and Groundwater Evaluation Supporting Documentation (see Appendix C for instructions on how to access supporting documentation) for more information. The evaluation in the Final

EIS determined that the risk of buildings settling due to groundwater removal during construction is low; to minimize that risk further, groundwater removal BMPs will be employed during construction. For construction activities at- or above-grade, wildlife-friendly BMPs for controlling soil erosion (e.g. using natural materials, avoiding the use of welded webbing) will be used.

The wooden retaining WPA walls were evaluated as an element of the Kenilworth Lagoon. The Section 106 evaluation of the Kenilworth Lagoon is located in Section 3.5, Cultural Resources, and Appendix H, of the Final EIS.

Final EIS Table 9.5-1 provides a preliminary list of required permits, approvals, and reviews by agency jurisdiction, including an Erosion and Sedimentation Control Plan from the City of Minnetonka. The Council will develop a stormwater pollution prevention plan (SWPPP) as a part of the permitting process.

N.4 Groundwater resources

Summary of Comments: The Council and FTA received approximately 10 comments on the Draft EIS concerning groundwater resources. Those commenters included the cities of Eden Prairie, Minnetonka, and Minneapolis, MPCA, MPRB, NMCWD, businesses, community groups, and the general public. Beyond general concern about the need to protect groundwater and conduct additional groundwater investigations, commenters were concerned about groundwater sensitivity and groundwater pumping. The City of Eden Prairie stated that its groundwater system is vulnerable and highly sensitive and that the Emergency Management Zone has been mapped for its Wellhead Protection Plan and should be evaluated, as the zone extends beyond the areas referenced in the Draft EIS. The City also stated that the Draft EIS groundwater section should be updated to reflect the City's local information on groundwater sensitivity. Other concerns about groundwater sensitivity centered on the Project's potential to adversely affect groundwater quality through construction-related spills.

Those that commented on the potential adverse impacts of groundwater pumping, including the City of Minnetonka, MPRB, and NMCWD, were concerned that groundwater pumping could adversely affect groundwater flow and water levels in parks, wetlands and surface waters, and wells; NMCWD also noted that the Project will need to acquire a water appropriations permit. The City of Minneapolis asked for additional analysis of the location and impacts on local wells and stated that appropriate approvals would be needed for temporary or permanent groundwater pumping. The MPCA stated that areas beneath the landfill and around the landfill may contain contaminated groundwater. The MPCA also stated concerns about the proximity of the LRT construction to the landfill and if groundwater pumping is anticipated for LRT construction, contaminated groundwater may be encountered, depending on depth. The MDOH stated that the Project overlaps with Drinking Water Supply Management Areas and Emergency Response Areas and requested that additional information attached to their comment be considered. NMCWD had similar concerns about existing soil conditions and requested further evaluation of soils to determine suitability for stormwater retention.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of groundwater impacts. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

In regard to the concerns about existing groundwater sensitivity, Final EIS Section 3.8.2.2, Groundwater Resources, the evaluation covers groundwater sensitivity for the water table, as well as drinking water supply vulnerability to pollution. Exhibit 3.8-5 in the Final EIS illustrates water-table susceptibility to pollution within the vicinity of the Project. The design of the Project, including in Eden Prairie, includes measures which account for areas of high susceptibility to water table pollution.

The cities of Eden Prairie, Minnetonka, Hopkins, and St. Louis Park use groundwater found in the deeper bedrock aquifers as drinking water. Exhibit 3.8-6 in the Final EIS illustrates the vulnerability to pollution of the Drinking Water Supply Management Areas within the vicinity of the Project.

The evaluation of groundwater resources documented in Section 3.8 of the Final EIS was developed based on the most recent Wellhead Protection Plan for the City of Eden Prairie. Before beginning construction of the Project, the Council will coordinate with the host cities, including Eden Prairie, to confirm that constructing and

operating the Project will meet the provisions of the individual Wellhead Protection Plans and the Source Water Protection Plan.

In regard to comments about identifying local wells and drinking water management, Exhibit 3.8-1 illustrates the locations of Drinking Water Management Areas, Wellhead Protection Areas, and known private wells along the Project alignment. The Project design accounted for the presence of the Drinking Water Supply Management Areas and Emergency Response Areas and the Council is working with appropriate jurisdictions on BMPs and permitting for storm water retention sites, which will be located outside of any High Vulnerability Drinking Water Supply Management Areas. The Project used the Source Water Protection Issues Related to Stormwater document that MDOH provided as guidance as well as Minnesota Stormwater Manual for BMP design.

In regard to the Project's impact on groundwater flow and water levels, the construction of foundations for the Project's light rail stations and park-and-ride facilities, or cut-and-fill features will result in relatively minor localized changes in groundwater flow. In areas where the Project could prevent the movement of shallow groundwater, drainage features such as French drains will be installed to allow normal groundwater flow and prevent ponding. Within the Kenilworth Corridor, groundwater modeling studies to evaluate the impacts of the Kenilworth Tunnel on water levels in the vicinity of the tunnel show that because of the sandy soil conditions and lack of groundwater flow in the vicinity of the tunnel, groundwater will rise and fall equally around the tunnel. The Project will not adversely affect groundwater flow in the groundwater study area.

The operation of the light rail system is not expected to affect the quality of shallow groundwater because the trains will be electric, and, generally, there are no activities associated with train operation that generate pollutants. The Project is not expected to adversely affect the groundwater quality in the aquifers used for public drinking water. The depths of proposed cuts and the piles that will be used along the proposed light rail alignment will be above the depths of the municipal wells used in the cities of Eden Prairie, Minnetonka, Hopkins, and St. Louis Park. Because the Project will be constructed with engineering controls to limit and contain releases and spills, the likelihood of soil and groundwater contamination during construction will be minimized.

To mitigate the risk of groundwater contamination, a groundwater management plan will be prepared by the Council, and approved by MnDNR and applicable local jurisdictions before construction. That plan will address long-term and short-term collection, storage, and disposal of surface water runoff and pumped groundwater. The groundwater management plan will include monitoring, which will be used to assess groundwater infiltration and to prioritize any potential repairs to the waterproofing systems. The Project's plan will be based on an appropriate safety factor, to be determined in consultation with the City of Minneapolis, MCWD, and the MnDNR, which will be applied to pumping rates and yearly pumping volumes in calculating maximum inflow amounts. In developing the groundwater management plan, the Council will consider MDOH's concerns about the placement of stormwater handling facilities in or near wellhead protection areas. Where temporary groundwater pumping may be needed during construction, the Project will minimize the potential for adverse groundwater quality impacts by adhering to permit requirements related to groundwater pumping and discharge from groundwater pumping, including a water use (appropriation) permit from MnDNR during construction.

In regard to concerns about groundwater pollution under and around the landfill, the Project does not include substantial long-term groundwater pumping at the proposed Hopkins OMF site. During construction, temporary groundwater pumping will be required in the area of the proposed Hopkins OMF. Appropriate remediation for pumping of groundwater in areas with contaminated groundwater will be determined in response action plans (RAPs) which will be developed by the Project and approved by MPCA prior to construction. See Final EIS Section 3.14.3 for more information about potential long-term pumping at the proposed OMF and RAPs.

N.5 Wetlands

Summary of Comments: The Council and FTA received approximately 30 comments on the Draft EIS concerning wetlands. Those commenters included the cities of Eden Prairie, Minnetonka, and St. Louis Park, MPCA, USACE, NMCWD, MCWD, EPA, businesses, community groups, and the general public. The cities of Eden Prairie and Minnetonka, MPCA, NMCWD, EPA, and USACE commented on source information and methodology for identifying existing wetlands and the need for field-verified wetland delineations along with additional analysis. These comments also covered regulatory requirements regarding impacts to wetlands and

wetland buffers and measures to mitigate impacts. The City of St. Louis Park stated that mandatory environmental requirements are not mitigation. MCWD stated that it was interested in agency coordination during the Project. In addition, the EPA provided comments on several wetland-related topics. The response to the EPA comments is located in Appendix N of the Final EIS.

The USACE also provided comments related to the following topics:

1) Project purpose and need and applicability to CWA Section 404 review
2) USACE concurrence with the array of alternatives considered for Project and those carried forward in the Draft EIS
3) Selection of the least environmentally damaging practicable alternative (LEDPA)

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of wetland impacts, completion of wetland delineations for the Project, and coordination with applicable jurisdictions. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

To facilitate agency coordination, as prescribed under the Minnesota Wetland Conservation Act of 1991, a Technical Evaluation Panel (TEP) was established in July 2013 to institute coordination procedures as wetlands are delineated throughout the corridor, wetlands qualities are assessed, and mitigation options are considered. Chaired by the Assistant Director of Environmental and Agreements, the Project's TEP has members representing the USACE, BWSR, MnDNR, MnDOT, City of Eden Prairie, City of Minneapolis, City of Minnetonka, City of St. Louis Park, BCWD, MCWD, MWMO, and NMCWD. Representatives from Hennepin County and Riley Purgatory Bluff Creek Watershed District also participate in the TEP. See Chapter 9 of the Final EIS for additional information about agency coordination

The Project completed in-field wetland boundary and type delineations for the entire alignment according to methodology specified by the applicable regulatory agencies. The boundary and types of the wetlands were subsequently reviewed in the field and approved by the regulatory agencies, as discussed in Section 3.9.2 of the Final EIS.

The design of the Project has advanced since the publication of the Draft EIS, and wetland impacts have been avoided or minimized to the maximum extent practicable. Additional details regarding wetland regulatory requirements, impact avoidance and minimization, impact quantities, and mitigation measures are provided in Section 3.9 of the Final EIS, including maps that depict wetland and impact locations (Exhibits 3.9-2 and 3.9-3). The Project will comply with requirements for impacts to created wetland and/or buffer areas that are protected under easement. Table 3.9-1 of the Final EIS provides a list of regulatory agencies and the associated regulated resource(s), and Table 9.5-1 of the Final EIS provides a comprehensive list of permits and approvals required for the Project.

The following is a summary of corresponding responses to the USACE's comments listed above:

The Council participated in a NEPA/404 Merger Process to gain preliminary concurrence from the USACE that the Project met the major requirements specified under Section 404 of the CWA, as discussed in detail in Section 3.9.3 of the Final EIS.

1) *The broad purpose and need suggested by the USACE for CWA Section 404 review was incorporated into Chapter 1 of the Final EIS, as well as the CWA Section 404 permit application that was submitted to the USACE in November 2015 (see Appendix D of the Final EIS).*
2) *The USACE concurrence with the range of alternatives considered for the Project has been incorporated into Section 3.9 of the Final EIS and into the CWA Section 404 permit application (see Appendix D of the Final EIS).*
3) *Since the publication of the Draft EIS, the USACE provided preliminary concurrence that the current design alternative is the LEDPA, as documented in the Project's NEPA/404 Merger Process documents that are discussed in Section 3.9.3 of the Final EIS.*

N.6 Public waters and surface water quality

Summary of Comments: The Council and FTA received approximately 40 comments on the Draft EIS concerning public waters and surface water quality. Those commenters included the cities of Eden Prairie, Minnetonka, St. Louis Park, and Minneapolis, MPRB, MPCA, MnDOT, NMCWD, MCWD, EPA, businesses, community groups, and the general public. MnDOT, NMCWD, MCWD, and the cities of St. Louis Park, Minnetonka, and Minneapolis stated that the project should coordinate with applicable regulatory agencies to identify and incorporate all state and local public/surface water rules and regulations into the Project, including mitigation, and to integrate and implement ongoing local stormwater management projects when possible. Commenters, including the EPA and MPCA, requested that the Final EIS include additional information regarding the location, number, and quality of streams in the Project area, and the BMPs that will be utilized during design and construction.

The cities of Minneapolis and Minnetonka, MPRB, NMCWD, and MCWD also requested that the Council complete additional analysis of impacts on public/surface waters to ensure they will be protected during and after construction of the Project. Concerns regarding impacts generally involved pollutant loading in public waters, an increase in stormwater runoff, changes in drainage patterns, loss of existing stormwater detention areas, and construction phase dewatering methodologies. One commenter requested that the Project consider daylighting a portion of Bassett Creek in the area that would be affected by the Project.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of public waters and surface quality impacts. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

The Council continues to coordinate with applicable regulatory agencies to discuss permitting requirements and expectations related to public/surface water impacts and mitigation, as well as the potential to partner on ongoing local stormwater management projects. Table 9.5-1 of the Final EIS provides a comprehensive list of permits and approvals required for the Project. Section 3.9 includes details regarding stream crossings that will be affected by the Project, and the CWA Section 404 permit application (see Final EIS Appendix D) includes information regarding BMPs that will be utilized in order to obtain CWA Section 401 certification from the MPCA.

The Project also completed a more thorough analysis on the potential public/surface water impacts since the publication of the Draft EIS, as described in Final EIS Section 3.9 and the Project's Water Quality Technical Report (see Final EIS Appendix C). The Project performed impervious surface calculations and will develop a SWPPP to meet state and local public/surface water quality requirements, as discussed in Section 3.9 of the Final EIS. The Project will mitigate impacts appropriately, often by creating stormwater management facilities that meet National Pollution Discharge Elimination System (NPDES) requirements and will be approved by local permitting authorities. Where temporary groundwater pumping may be needed during construction, the Project will minimize potential for impacts on surface water quality by adhering permit requirements related to groundwater pumping and discharge, thereby minimizing the potential of adverse surface water quality impacts. See Theme N4 for responses to comments about groundwater resources.

The Project will cross over Bassett Creek where the creek is in a tunnel. The crossing will not alter the cross-sections or hydrological characteristics, or obstruct flow patterns of Bassett Creek. Basset Creek will not be removed from the tunnel at this location as a result of the Project.

N.7 Floodplains

Summary of Comments: The Council and FTA received approximately 10 comments from the Draft EIS concerning floodplains. Commenters, including the EPA, cities of Minnetonka and Eden Prairie, and NMCWD, noted that the various local permitting authorities have unique requirements related to floodplain impacts and mitigation, and that the Final EIS should include a detailed discussion and more thorough analysis of floodplain impacts and required mitigation.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of floodplain impacts. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

The Council continues to coordinate with applicable regulatory agencies regarding permitting requirements and expectations related to floodplain impacts and mitigation, and subsequently analyzed and quantified the anticipated impacts and mitigation. Additional details regarding floodplain regulatory requirements, impacts, and mitigation measures are provided in Section 3.9 of the Final EIS, including maps that illustrate the locations of regulated floodplains and potential impacts to floodplains (Exhibits 3.9-4 and 3.9-5). Mitigation sites summarized in Table 3.9-8 in the Final EIS will be located within or adjacent to applicable floodplains. Table 9.5-1 of the Final EIS provides a comprehensive list of permits and approvals required for the Project.

N.8 Threatened and endangered species, habitat, and migratory birds

Summary of Comments: The Council and FTA received approximately 40 comments on the Draft EIS concerning threatened and endangered species, habitat, and migratory birds. Those commenters included the City of Minnetonka, MPRB, MCWD, EPA, businesses, community groups, and the general public. MCWD and other commenters expressed concerns about the Project's long-term effects on wildlife and habitat and requested that the Council complete a more detailed analysis of existing conditions in order to properly evaluate potential impacts to habitat and wildlife, including impacts to federal and state listed threatened and endangered species and their associated habitat. The concerns about long-term effects were generally related to an increase in light, noise, and activity, and to the potential for wildlife to be struck by light rail vehicles. Some commenters specifically requested that the Council complete additional analysis of the existing habitat within the Kenilworth Corridor.

MPRB and other commenters also requested that the Council consider preserving or enhancing existing habitat. The City of Minnetonka stated that the city has tree ordinance requirements. Commenters stated that the design of the Project should include measures that will allow for movement of terrestrial species if the Project results in habitat fragmentation. The EPA suggested that the Project implement BMPs to minimize unavoidable construction impacts on sensitive aquatic habitats (wetlands).

Commenters also stated that the Draft EIS did not contain adequate information and analysis regarding the occurrence of regulated bird species and the Project's effect on them. Some commenters expressed concern over the effects of high voltage electricity on birds and flyways, stating that additional studies should be completed to ensure that the catenary wires system do not cause avian electrocution.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of impacts to threatened and endangered species, habitat, and migratory birds. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

The Council utilized multiple MnDNR data sources to perform a thorough analysis on the existing conditions related to the presence of habitat and wildlife within the Project area. See Section 3.10, Ecosystems, of the Final EIS for the analysis. The Council also coordinated with the U.S. Fish and Wildlife Service and MnDNR to determine: 1) the presence of federal and state listed threatened and endangered species and associated habitat within the Project area, 2) the Project's likelihood to affect those species and habitat, and 3) the mitigation/commitments that will be required in order for the Project to remain in compliance with the applicable rules and regulations. The Council determined that the Project will not result in impacts to wildlife and/or habitat that are regulated at the federal or state level because appropriate avoidance measures will be implemented where needed (see Section 3.10 of the Final EIS for additional details). The Project will result in short-term and long-term impacts to habitat that is regulated by local tree ordinances. The Council performed tree surveys in select areas and will continue to coordinate with local permitting authorities to meet the ordinance requirements when feasible.

Regarding concerns over the Project's increases in in light, noise, and human activity due to implementation of the Project, and the associated effects on wildlife species that occur in this area, Section 3.10.3 of the Final EIS concludes that wildlife in the Project area are not expected to be affected by the Project on a long-term basis.

The response to comments regarding threatened and endangered species, habitat, and migratory birds specific to the Kenilworth Corridor is located in Theme E of this appendix.

Requests to preserve or enhance existing habitat, native landscaping are incorporated into the design along the entire alignment, where applicable and appropriate. The Council will establish native vegetated wetland buffers, where feasible, within the Project's permanently acquired right-of-way, as required by local permitting authorities and discussed in Section 3.9 of the Final EIS. Where wetland buffers are not feasible, the Project will request a variance.

The Project avoided habitat fragmentation at identified Regionally Significant Ecological Corridors, except for one located near the proposed Penn Station. The Project's design at that location will incorporate appropriately sized and spaced openings in the permanent safety/security barriers to maintain habitat connectivity and allow for movement of terrestrial species, as discussed in Section 3.10.3 of the Final EIS.

Regarding requests for additional analysis on regulated bird species, a thorough analysis was completed since the publication of the Draft EIS. As discussed in Section 3.10.1 of the Final EIS, the Council identified the regulated species that have been observed and confirmed to nest in Hennepin County. In addition, the Council utilized MnDNR data sources to identify occurrences of bald eagle and golden eagle nesting sites as well as Migratory and Waterfowl Feeding and Resting Areas. The Project will not have a long-term direct impact on migratory birds. It is likely that the regulated migratory bird species present in the migratory bird study area have adapted to survive in urban areas and tolerate high levels of human activity given the limited forest or woodland areas present. The Project will implement measures to avoid short-term impacts. See Subtheme N11 below for a response to comments about birds being electrocuted by the Project's catenary system.

Regarding construction impacts to sensitive aquatic habitats, the Project minimized short-term impacts on wetlands to the maximum extent practicable. See Section 3.9.5 of the Final EIS for examples of BMPs that will be implemented during construction, where applicable and appropriate, and see Appendix D in the Final EIS for the location of the Section 404 Clean Water Act permit application that includes details regarding wetland impact avoidance and minimization.

N.9 Air quality and greenhouse gases

Summary of Comments: The Council and FTA received approximately 20 comments concerning air quality and greenhouse gases. Those commenters included the City of Minneapolis, MPRB, EPA, businesses, community groups, and the general public. The City of Minneapolis recommended alternative methodology be used for the greenhouse gas analysis in the Draft EIS and also stated that additional efforts to diminish the need for commuters to use cars to travel to the stations will better achieve the goal of reducing greenhouse gases. The MPRB and other commenters expressed concerns about potential air quality impacts from traffic congestion and traffic delays around the West Lake Station and that this would be the case if Cedar Lake Parkway were to remain an at-grade crossing. The EPA commented that the Project should commit to recommended short-term construction mitigation measures in the Record of Decision.

Commenters expressed concerns about the impacts of a potential diesel rail storage facility at Linden on air quality and its effect on the nearby environmental justice communities. One commenter noted the need to reduce air pollution and that the Project would be important in that effort. One commenter also suggested that vegetation should be planted as part of the Project to help counteract global warming.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work continued evaluation of impacts to air quality and greenhouse gases. Additionally, the Council advanced the design of the Project, and identified approaches to avoid and minimize impacts.*

While the Final EIS does include an evaluation of GHG emissions related to the Project (see Section 3.11), it does not evaluate potential changes in GHG emissions related to indirect changes in land use patterns. The Council on Environmental Quality (CEQ) released revised draft guidance on the consideration of GHG in NEPA documents for all federal actions on December 18, 2014, which formed the basis of the methodology for the GHG analysis completed in the Final EIS. Based on this methodology, the evaluation of GHG impacts in the Final EIS includes a review of the emissions changes from vehicles (i.e., personal automobile, trucks, transit buses, and rail vehicles) at

a regional level. As described in Final EIS Section 3.11.3.3, operation of the Project will result in a net GHG emissions reduction in the region and beneficial GHG as a proxy for climate change impacts.

In regard to construction-related greenhouse gases, Section 3.11.3.3.C concludes that the Project's construction emissions will be temporary, and that the Project will make an effort to minimize the amount of emissions generated during construction. If amortized over the life of the Project, the GHG emission from construction of the Project is minimal. In addition, the Project is included in the Regional Transportation Plans and Transportation Improvement Program, which consider climate change mitigation, adaptation and resilience for sustainable development of the region. Therefore, long-term and short-term GHG emissions from the proposed Project will not hinder the region's GHG emission reduction efforts.

Additionally, Final EIS Section 3.11.3.1, Transportation Conformity, includes an analysis of Regional and Project-level conformity. The project-level conformity analysis comprised two parts: a carbon monoxide hot spot analysis and a mobile source air toxics (MSATs) analysis. The carbon monoxide (CO) hot spot analysis concluded that the Project is not be expected to cause localized CO concentrations that violate the National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50), and a detailed CO "hot spot" modeling analysis is not required. The MSATSs analysis concluded that the Project in the design year is expected to be associated with lower levels of MSAT emissions in the region, relative to the No Build Alternative, along with benefit from improvements in speed and reductions in region-wide vehicle traffic. There could be slightly higher MSAT levels in localized areas where Project-related activities (e.g. automobile trips to park-and-ride lots) will occur closer to homes, schools, and businesses (MSAT levels are likely to decrease over time due to nationally mandated cleaner vehicles and fuels).

The measures recommended by EPA to reduce short-term construction impacts to air quality are listed in Final EIS Section 3.11.3.5, Short-term Impacts on Air Quality.

Landscaping with native plant species will be incorporated into the Project's design during Engineering, where applicable and appropriate.

N.10 Hazardous and contaminated materials

Summary of Comments: The Council and FTA received approximately 10 comments on the Draft EIS concerning hazardous and contaminated materials. Those commenters included the cities of Minnetonka and Minneapolis, MPCA, CP, TC&W, community groups, and the general public. Comments expressed general concern over the cleanup of hazardous and contaminated material. Areas of particular concern included the vicinity of the proposed 21st Street Station, the Golden Auto/National Lead Superfund site, and the Hopkins Landfill.

The City of Minneapolis commented that any contaminated sites discovered during project construction must be remediated. CP and TC&W expressed concern over potential impacts to the Golden Auto/National Lead Superfund site. The MPCA commented that the Project must consider potential impacts, including methane gas generation, related to the Hopkins Landfill site. The City of Minnetonka asked if the Project would use salt during winter snow removal operations.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of impacts from hazardous and contaminated materials. Additionally, the Council advanced the design of the Project, and identified approaches to avoid, minimize, and mitigate impacts.*

Refer to Section 3.14 of the Final EIS for an evaluation of hazardous and contaminated materials, based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. This evaluation includes a description of the affected environment (including identification of potentially contaminated sites), an evaluation of the Project's environmental consequences related to hazardous and contaminated materials, and mitigation measures that will be implemented with the Project (including remediation for contaminated sites). Information from the Final EIS is summarized in the responses to comments below.

<u>General concerns over identification and remediation of hazardous and contaminated material sites</u>

Short-term direct and indirect impacts typically result from earthwork or other disturbances at or in proximity to contaminated areas that might mobilize or result in the release of hazardous and contaminated materials. As described in Section 3.14.4, the Council will conduct site remediation in accordance with the MPCA Brownfield Program regulatory framework and the approved RAP for the Project. As described in Section 3.14.4, in cases where the disturbance of hazardous and contaminated material cannot be avoided, the Council will conduct site remediation in accordance with commitments made as part of the MPCA's oversight of the Brownfield Program and the Project's participation in it. Implementation of these measures will result in controlled management of hazardous and contaminated materials and a low risk of human exposure to unhealthy contaminants. The following are specific mitigation measures that will be implemented with the Project:

- ***Response Action Plans (RAPs).*** *RAPs were developed by the Council and approved by MPCA to address the risks identified in the Phase I and Phase II environmental site assessments (ESA). Cleanup of identified contamination will begin prior to, or at the same time as, project excavation and/or drilling activities. All cleanup activities will be conducted with prior MPCA approval and in accordance with the approved Site Health and Safety Plans (HASP).[4]Qualified inspectors will monitor cleanup activities. A final report documenting all removal and disposal activity will be prepared and submitted to the MPCA.*
- ***Construction Contingency Plan (CCP).*** *It is reasonable to expect that previously undocumented soil or groundwater contamination may be encountered during construction. Prior to the start of construction, the Council will prepare, and MPCA will review and approve, a CCP to address the discovery of unknown contamination. This plan will outline procedures for initial contaminant screening; soil and groundwater sampling; laboratory testing; and removal, transport, and disposal of contaminated materials at licensed facilities. Contaminated material removal and disposal will be in accordance with this plan; monitored by qualified inspectors; and documented in final reports for submittal to MPCA.*
- ***Hazardous Building Material Surveys.*** *In addition to contaminated soil and groundwater, the potential exists for structures on acquired land to contain asbestos, lead paint, or other hazardous materials. Any existing structures on acquired land will be surveyed for the presence of hazardous/regulated materials prior to their demolition or modification. Potentially hazardous materials will be handled and managed in compliance with all applicable regulatory standards and will be disposed in accordance with all Hazardous Materials Abatement Plans for in-place hazardous/regulated materials, and the RAP/CCP for hazardous/regulated materials in the site soils.*
- ***Regulated Waste Assessments.*** *Regulated Waste Assessments were completed for existing bridge structures that will be modified or demolished as part of the Project. The purpose of the assessments is to identify the presence and quantity of asbestos and regulated waste at the seven bridges and two pier protection locations along the Southwest LRT alignment (see Appendix E for the Project's Preliminary Engineering Plans). The effort includes documenting and sampling suspect regulated waste, including asbestos, lead-based paint, polychlorinated biphenyl (PCB) containing caulk, and mercury-containing light bulbs and ballasts. Potentially hazardous materials will be handled and managed in compliance with all applicable regulatory standards and will be disposed of in accordance with the Hazardous Materials Abatement Plans for in-place hazardous/regulated materials, and the RAP/CCP for hazardous/regulated materials in the site soils.*

<u>Hazardous and contaminated material near the proposed 21st Street Station</u>

As described in Section 3.14.2, the Kenilworth Corridor area (including the 21st Street Station area) is generally within the vicinity of multiple former rail yards that have since been redeveloped with industrial/commercial properties and recreational parks and trails. The Project's ESA investigation characterized soil and groundwater conditions throughout the corridor so that development of a RAP was possible. The Kenilworth Corridor is addressed in the Construction RAP (Southwest Light Rail Transit East Segment, dated November 17, 2015). The RAP indicates that soil in the Kenilworth Corridor is characterized by "Unregulated Fill" and "Urban Fill" from West Lake Street to west of Penn Station. Unregulated fill is defined in the RAP as uncontaminated material based

[4] Health and Safety Plans (HASP) will be developed by the individual contractors as a requirement of the Project's contract specifications. Contractors will also be responsible for implementation of HASPs.

on MPCA definition of unregulated fill (also includes non-impacted, naturally occurring native soil). Unregulated fill will be managed as unrestricted reuse material on the Project site and as excess material off-site. Urban fill is defined as wide-spread low level contaminated material typical of historic urban/industrial areas with key indicator parameters (metals, PAHs) and debris indicating a diffuse anthropogenic origin. The majority of urban fill in the Project area also includes mixed rail bed fill material as described in the RAP. Urban fill will be managed as unrestricted reuse material on the Project site based on MPCA definitions. Urban fill will be reused in areas where it will be capped with concrete or bituminous pavement, rail guideways, structure slabs, topsoil and/or sod, depending on location. Urban fill that cannot be reused within the Project limits because of lack of capacity for reuse will be properly disposed at a permitted industrial or solid waste landfill facility.

Golden Auto/National Lead Superfund site

Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. This includes modifications along the Bass Lake Spur in the area of the proposed Louisiana Station which will avoid the need for the construction of a bridge to connect the Bass Lake Spur and the MN&S spur and will therefore avoid disturbance of the Golden Auto/National Lead Superfund site.

Hopkins Landfill

Based on direction from the MPCA, a Phase II ESA was conducted at the proposed Hopkins OMF site, which included investigation of the Hopkins Landfill area. The Phase II ESA investigations included collecting soil, soil vapor, and groundwater samples for laboratory analysis. Data from the Phase II ESA indicated that the landfill has not affected the proposed Hopkins OMF site, and risks associated with methane generation are considered low.

A RAP for the OMF was approved by the MPCA. This RAP included a soil vapor intrusion mitigation system to address chlorinated solvent contamination resulting from soil and groundwater contamination. This mitigation system would help mitigate methane soil vapor, in the event that methane migration to the OMF site occurs. For additional detail regarding Hazardous and Contaminated Materials see Section 3.14 in the Final EIS.

Winter snow removal salt use

The Council is aware of the chloride impairment of Minnehaha Creek and Nine Mile Creek. Metro Transit would likely utilize deicing chemicals at station platforms, access walkways, and park-and-ride lots that may include chlorine. The Project will provide storm water infiltration BMPs, and it is understood that infiltration BMPs are the preferred method for addressing chlorides for the NMCWD, along with the general management of the application rates. However, Metro Transit does not track the use of deicing chemicals to the level of detail required to be able to quantify the amount used in the vicinity of Minnehaha Creek and Nine Mile Creek.

N.11 Electromagnetic fields, electromagnetic interference, and utilities

Summary of Comments: The Council and FTA received approximately 20 comments concerning electromagnetic fields (EMFs) and electromagnetic interference (EMI) and their impacts, as well as impacts to utilities. Those commenters included the cities of Eden Prairie, Minnetonka, and Minneapolis, businesses, community groups, and the general public. The City of Eden Prairie commented that short-term and long-term impacts to public utilities must be minimized and mitigated by the Project. The City of Minneapolis commented that utilities, sidewalks, and street infrastructure disrupted as part of the Project must be replaced at the Project's expense. In regard to electromagnetic fields, commenters stated concerns for potential health effects on humans and birds living in close proximity to the LRT's catenary system. One commenter expressed concerns about how the electromagnetic interference could disrupt measuring equipment.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of EMF and EMI impacts and impacts to utilities. Additionally, the Council advanced the design of the Project, and identified approaches to avoid and minimize impacts.*

Section 3.15 in the Final EIS includes an evaluation of both electromagnetic fields and electromagnetic interference and the Project's impacts on utilities.

No adverse long-term direct impacts to utilities are anticipated because all conflicting utilities will be relocated and services maintained, in accordance with the Southwest LRT Utility Relocation and Management Plan. Site-specific conflicts will be addressed by design measures such as relocating utilities, as appropriate.

Utility relocations and/or replacements are expected when existing facilities are in conflict with the LRT improvements or required as a result of the Project. These improvements are part of the federally funded Southwest LRT Project and do not extend beyond the limits of disturbance shown for the Project (see Final EIS Appendix E). Except where required by the project or to meet minimum specifications, upgrading the size and/or capacity of utilities are funded locally. Prior to construction, affected area utility companies and utility agencies will be contacted and requested to provide line relocation measures and approval of the proposed alteration of utility lines. In addition, utility location excavations and preconstruction surveys in general accordance with the MnDOT Utility Accommodation Policy (see Final EIS Appendix D) will help minimize unintended utility service disruptions.

Through construction specifications, the Council will require the appropriate construction contractor(s) to notify affected businesses and residences of planned disruption of service due to construction activities. Utilities can be damaged unintentionally during construction if their locations are uncertain or misidentified. The large number of utilities present within the utilities study area increases the likelihood of encountering previously unidentified utilities. Should utilities be discovered during construction that were not identified in the contract documents, the appropriate utility companies and agencies will be contacted to identify the line(s). The discovered line(s) will not be disturbed until businesses and residences are notified and the utility owner approves the proposed alteration.

Coordination with local and state agencies may be required to relocate specific utilities outside the Project corridor. Utilities that are located within rights-of-way owned by cities and counties may be subject to an individual franchise agreement as authorized by Minnesota Statue 216B, Public Utilities, which sets forth the terms under which utility companies may operate in the public right-of-way. Public and private utilities must conform to MnDOT Utility Accommodation Policy (see Final EIS Appendix D), which require owners to obtain a permit in order to place utility facilities on trunk highway right-of-way. Utility installations on, over, or under railroad property will require review and approval by the railroad, shall conform to requirements contained within the BNSF Utility Accommodation Policy (see Final EIS Appendix D) and comparable policies for Canadian Pacific Railway, and may require a Utility License Agreement issued by the railroad. See Section 3.15 of the Final EIS provides an updated description of impacts to utilities.

According to FTA Guidance, people riding the LRT could be exposed to direct current (DC) magnetic fields as high as 1,000 milli Gauss, which is well below acceptable international guidelines for public exposure to DC magnetic fields of 400,000 to 1,180,000 milli Gauss (FTA, 2008). People in buildings adjacent to the LRT alignment would be exposed to lower levels of EMF, so there would be no EMF health effect from the Project on people either riding the LRT or in buildings adjacent to the light rail alignment. No mitigation measures are warranted for long-term or short-term direct or indirect impacts from EMF/EMI due to the absence of any corresponding impacts. The LRT startup activities will include a test to verify there are no EMI impacts from the 750 V DC LRT power supply or catenary lines and/or other nearby utilities to the Rail Signal System.

In addition, the Project is not expected to have an EMF related impact on birds. The death of birds by electrocution is not likely because a bird that lands on the electrified catenary wire system would need to touch another wire or something that is grounded in order to complete the circuit and become electrocuted.

N.12 Cumulative Impacts

Summary of Comments: The FTA and the Council received approximately 25 comments on the Draft EIS concerning cumulative impacts. Those commenters included the City of Minneapolis, Scott County, MCWD, businesses, community groups, and the general public.

Multiple commenters, including the City of Minneapolis, expressed general concerns over potential indirect and cumulative effects related to land use and development/redevelopment. Locations of concern included the following:

- **Kenilworth Corridor.** Comments included concern over the potential for cumulative impacts related to development and redevelopment within the Kenilworth Corridor. In particular, commenters expressed a desire to ensure that the "natural character" of the area, including the vicinity of the proposed 21st Street Station, was protected.
- **Royalston Station.** Comments included requests for additional information on mitigation for the expected indirect and cumulative effects on land use and property acquisition in the area of the proposed Royalston Station.
- **SouthWest Station.** Comments included concerns over the potential for cumulative impacts related to development and property acquisitions in the vicinity of the proposed SouthWest Station.

Some commenters expressed concern about the list of reasonable foreseeable future actions as presented in Chapter 9 of the Draft EIS. Commenters requested that additional projects, such as the METRO Blue Line Extension (Bottineau LRT), be included in the list. Scott County noted that the potential Dan Patch commuter rail should be an identified as a reasonably foreseeable future action and that there should be an evaluation of opportunities for future "intermodal connections" with the Project near the planned Wooddale and Louisiana Stations. The Minnehaha Creek Watershed District commented that storm water management projects, if planned and implemented in an integrated manner with the Project, could be potentially offset future regulatory requirements for this project and future redevelopment, thereby generating large future cost savings.

The City of Minneapolis commented that the cumulative impact analysis should consider the potential additional greenhouse gas (GHG) emissions from land use patterns that may be changed by the Project and identify mitigation measures for these cumulative impacts.

Multiple commenters, including the EPA, expressed concern over the inclusion of a potential Linden Yards passenger rail storage facility within the cumulative impacts analysis and about the effects of that facility would have on development opportunities in the Basset Creek Valley area (just east of the proposed Van White Station). Neighborhood residents oppose locating the passenger rail facility at Linden Yards East, because it would not be consistent with the Bassett Creek Valley Master Plan (2007), which calls for high density development in the area.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council conducted additional work including continued evaluation of indirect/cumulative effects, reasonably foreseeable actions, greenhouse gases and air quality, and the Linden Yards passenger rail storage facility.*

Section 3.17 of the Final EIS includes the assessment of cumulative impacts for applicable environmental categories. Information from the Final EIS is summarized in the responses to comments below.

<u>Indirect/cumulative effects</u>

Response: *As described in Section 3.0 of the Final EIS, indirect impacts are impacts that "will occur later in time or will be further removed in distance from the proposed action." Cumulative impacts are "the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions (see Section 3.17 of the Final EIS)." While the Draft EIS addressed indirect and cumulative effects in Chapter 9, the Final EIS addresses indirect effects and cumulative impacts separately. The assessment of indirect effects is presented within the appropriate sections of Chapters 3 and 4 of the Final EIS for a given environmental category (i.e., Sections 3.1 through 3.16 and 4.1 through 4.6), which include identification of potential indirect impacts and avoidance, minimization, and mitigation measures. Section 3.17 of the Final EIS includes the assessment of cumulative impacts for applicable environmental categories.*

Theme M, Concerns about social and economic impacts, contains responses to comments expressing concern over potential indirect effects related to station area development.

As described in Section 3.17.3 of the Final EIS, because the Project and other transportation projects that use federal funds are required by law to compensate property owners and renters when residences and businesses are acquired for transportation improvements, the Project and similar federal actions would not contribute to

cumulative acquisition impacts after mitigation. The Project will implement appropriate measures to avoid, minimize, and mitigate the impacts of property acquisitions and displacements (see Final EIS Section 3.4). Refer to Final Section 3.17.3.1 for more information on cumulative impacts related to property acquisitions.

Reasonably Foreseeable Future Actions

Response: *Since publication of the Draft EIS, an updated and detailed review of reasonably foreseeable future actions has been completed. As described in Section 3.17.2 of the Final EIS, reasonably foreseeable future actions are those that would be constructed between 2020, the Southwest LRT Project's opening year, and 2040, the planning horizon for the Southwest LRT Project. Transportation projects considered to be reasonably foreseeable future actions are those that are included an officially approved/adopted plan or policy, such as the Council's 2040 Transportation Policy Plan (Council, 2015e) or an approved capital improvement plan, and/or projects in approved development plans from local agencies with jurisdiction. Transportation projects not included in one of these sources were not considered reasonably foreseeable future actions for the purposes of the cumulative impacts analysis in the Final EIS.*

As shown in Final EIS Section 3.17.2, the cumulative impacts analysis in the Final EIS includes the METRO Blue Line Extension (Bottineau LRT) as a reasonably foreseeable future action. The potential Dan Patch commuter rail line is in the early stages of planning and is not included in an approved/adopted plan or policy and is therefore not considered a reasonably foreseeable future action. Likewise, potential storm water management projects not included in an official capital plan were not considered reasonably foreseeable future actions. However, the Project design does not preclude future intermodal connectivity with a Dan Patch commuter rail line at planned light rail stations, or the inclusion of storm water management improvements within the vicinity of the Project.

Greenhouse Gases and Air Quality

Response: *While the Final EIS does include an evaluation of GHG emissions related to the Project (see Section 3.11), it does not evaluate potential changes in GHG emissions related to indirect changes in land use patterns. The Council on Environmental Quality (CEQ) released revised draft guidance on the consideration of GHG in NEPA documents for all federal actions on December 18, 2014, which formed the basis of the methodology for the GHG analysis completed in the Final EIS. Based on this methodology, the evaluation of GHG impacts within the Final EIS includes a review of the emissions changes from vehicles (i.e., personal automobile, trucks, and transit buses and rail vehicles) at a regional level. As described in Final EIS Section 3.11.3.3, operation of the Project will result in a net reduction of GHG emissions in the region and beneficial GHG as a proxy for climate change impacts.*

As described in Final EIS Section 3.17, if an environmental category is not adversely affected by the Project, the Project cannot contribute to cumulative impacts to that resource. Therefore, air quality and greenhouse gas emissions are not included in the cumulative impacts analysis.

Linden Yards Passenger Rail Storage Facility

Response: *The design and location of Van White Station has shifted since publication of the Draft EIS. The proposed light rail alignment and Van White Station will be northwest of Linden Yards and will not preclude the use of portions of the Linden Yards site for a rail storage or maintenance facility, nor will it preclude other development from occurring on that site. Conversely, development of Linden Yards (or lack of development of Linden Yards) will not preclude the proposed light rail alignment and station, nor would that development cut off access to the proposed station. The current design for the Van White Station was included in Appendix G of the Supplemental Draft EIS and will be included in Appendix E of the Final EIS.*

Regarding a high speed rail layover facility, or a diesel rail storage facility, at Linden Yards, there are no adopted plans or funding for either of these facilities. The Council has confirmed with the Minnesota Department of Transportation, the authority for passenger rail in the state, that there are no adopted plans for a rail storage facility at Linden Yards. Therefore, these facilities will not be evaluated in the cumulative impact assessment within the Final EIS, consistent with Considering Cumulative Effects Under the National Environmental Policy Act (Council on Environmental Quality [CEQ], 1997). Specifically, a potential high speed rail layover or maintenance facility is not included in the Cumulative Effects section of the Final EIS as a reasonably foreseeable action because it is not included within any adopted plans nor is it funded; therefore, the use of the land as a potential

rail storage yard facility is not noted as a "reasonably foreseeable" use. The MnDOT's draft Minnesota GO State Rail Plan, which would note all rail and storage facilities within the state of Minnesota, does not include any future rail facility in Linden Yards. The City of Minneapolis has no current adopted plans for the Linden Yards facility. The City of Minneapolis noted to the Council that any future high speed or commuter rail layover facility will be many years in the future, and due to very poor soils and complexities of phasing, any future rail layover facility can only occur on distinct land parcel east of the two office towers closest to the Van White station on Linden Yards East, and a future rail facility cannot support vertical development. As such, the Final EIS's land use and other analyses are based on the City of Minneapolis' applicable adopted land use plans, including the Bassett Creek Valley Master Plan (2007). That plan designates much of the Linden Yards site as mixed-use, commercial and other development, with some park land; the plan recognizes that the site's current use is industrial.

Additionally, a potential high speed rail layover facility or a storage yard at Linden Yards is not included in the No Build Alternative because it is not included within an adopted plan nor is it a funded project.

O. Concerns about noise and vibration methodology and impacts

Summary of Comments: The Council and FTA received approximately 170 comments related to noise and vibration from the Project. Those commenters included the cities of Minneapolis, St. Louis Park, Hopkins, Minnetonka and Eden Prairie, MPRB, MnDOT, MPCA, and businesses, community groups, non-profit organizations, and the general public. Two key areas of concern were noise and vibration impacts of the freight rail relocation (LRT 3A) on residents, businesses and schools adjacent to the MN&S spur and concerns about noise and vibration in the Kenilworth Corridor related to the co-location alternative (LRT 3A-1). See Themes C, Opposition to relocation of freight rail relocation out of the Kenilworth Corridor, for responses related to comments on noise and vibration concerns of freight rail relocation. Other noise and vibration comments included concerns about noise and vibration in other locations adjacent to the LRT alignment, questions about the methodology for assessing impacts and mitigation, and concerns about noise and vibration impacts to specific properties.

***Response**: Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with FTA's* Transit Noise and Vibration Impact Assessment (2006) *and Minnesota Rules, Chapter 7030, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS, and that design incorporates design adjustments and freight rail modifications made since publication of the Draft EIS. As a result of the design adjustment process and other activities that occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.*

The scope of the Project has changed since the Draft EIS was published, including frequency of LRT operations and modifications to the Project, which no longer includes freight rail relocation. Based on this, the Council and FTA performed a detailed noise and vibration analysis of the entire corridor after publication of the Draft EIS. The most notable design adjustment from a noise impact perspective is the addition of a tunnel in the Kenilworth Corridor approximately between West Lake Station to just south of the Kenilworth Channel which reduces the number of properties that will experience a noise impact. In addition, mitigation measures for noise and vibration are included in the Final EIS. See Sections 3.12 and 3.13 of the Final EIS for more information on the noise and vibration analyses, respectively.

See also Appendix K of the Final EIS, for detailed information regarding the criteria, methodology, noise and vibration measurements, impact assessment results, and proposed mitigation measures.

O.1 Noise and vibration analysis methodology in the Kenilworth Corridor

Summary of Comments: A variety of comments from residents in the Kenilworth Corridor expressed concern about noise and vibration methodology in the Kenilworth Corridor. Primary concerns were the number of adjacent residences that would be affected and requests to minimize noise and implement mitigation measures in the Kenilworth Corridor. MPRB and others commented on land use category designations and concerns about how park property within the Kenilworth Corridor was categorized for purposes of the noise analysis. Others commented on noise impacts to trail users. Commenters raised concerns about the Project's noise impacts related to a bridge over Cedar Lake Parkway, and at the 21st Street Station.

Other concerns related to the noise assessment included:

- The methodology used to assess noise and vibration impacts, including an assertion that the noise baseline or existing noise level should exclude freight trains
- Suggestions that noise measurements should take into account higher level floors of residential buildings

Comments related to the vibration assessment included:

- Questions about the methodology used to assess vibration impacts
- Vibration impacts on adjacent condominiums and single family residences;
- Vibration propagation due to soil conditions in the Kenilworth Corridor and damage to properties (based on previous construction on Upton Avenue)
- The cumulative effect of vibration from freight rail and LRT in close proximity to residences
- Vibration damaging the existing wooden retaining walls along the north and south banks of the Kenilworth Channel.

Response: *The design adjustments that have occurred since publication of the Draft EIS have reduced the number of noise and vibration impacts in the Kenilworth Corridor. See Theme E.4 in this appendix for a summary of impacts and mitigation measures in the Kenilworth Corridor, including the 21st Street crossing. See Section 3.12, Noise and Section 3.13, Vibration and Appendix K of the Final EIS for additional information about noise impacts and mitigation measures.*

Land use classification

Following publication of the Draft EIS, the FTA and the Council, in consultation with the MPRB and MnHPO, reached agreement on designation of land use categories for the parks within the Kenilworth Corridor, including high-sensitivity sites near the Kenilworth Lagoon/Channel. The northern bank of the Kenilworth Lagoon, generally between West Lake of the Isles Parkway and South Upton Avenue, is classified as category 1 land use and the channel itself is classified as category 3. Residences are classified as category 2. Section 3.12 of the Final EIS provides a description of land use categories and metrics used to identify noise sensitive receptors according to FTA criteria (see Table 3.12-2). Active use areas like bike and running trails are generally not categorized as noise sensitive receptors because these are areas where quiet is not an essential element and the intended purpose. Theme N.1 and Theme S of this appendix provide additional information regarding impacts to parklands, Section 4(f) properties, and historic properties (see also Chapter 3.5, 3.6, and Chapter 6 of the Final EIS). See also Theme E, Concerns about LRT in the Kenilworth Corridor.

Noise and vibration analysis methodology

The noise and vibration assessment methodology (see Theme O.5 for additional information on methodology) followed the procedures outlined in the FTA's Transit Noise and Vibration Impact Assessment guidance manual (2006). This includes assessing the existing noise as it is, and not excluding any source, such as freight rail. To exclude freight rail, which is an existing noise source and part of the baseline condition, would invalidate the assessment. FTA requires that existing conditions be used as the baseline for assessing impacts (see Master Response 6 of the Appendix M for more information).

Noise measurements and assessments are conducted at the ground floor of multi-story residential buildings. This represents the worst case for noise, as these are the portions of the building that are closest to the Project. Noise measurements were not taken at higher floors of residential buildings because noise levels drop off with increasing distance. Noise assessments were conducted at the actual distances from the project to residences in the Kenilworth Corridor.

Vibration propagation

Site specific measurements were conducted in the Kenilworth Corridor to empirically determine the propagation of vibration through the soil in the corridor. These results were included in the assessment and showed that vibration does not propagate efficiently in the soil types found in the Kenilworth Corridor.

Cumulative vibration effect of freight and LRT

Because of the nature of vibration propagating through the soil, vibration impacts from LRT operation, after mitigation, would not occur (Section 3.13.4). Additionally, the co-location of freight and LRT in the Kenilworth Corridor is not an additive vibration effect; the vibration waves are independent of each other even if they are occurring at the same time and place because the waves are not in phase with one another. Therefore the effect of LRT and freight trains passing at the same time are not additive and per FTA guidance are not evaluated as combined events.

Effect of vibration on WPA (wooden) retaining walls at Kenilworth Channel

The existing wooden retaining walls along the Kenilworth Channel (see Theme S of this appendix, and Section 3.5 and Chapter 6 of the Final EIS) have been exposed to vibration from freight trains for years, and would not experience any higher vibration levels from LRT operations. Additionally, the vibration levels generated by both freight and LRT are well below the FTA Transit Vibration Criteria (Appendix K, Section 2.2.2.3, Table 2.2-4).

O.2 Noise impacts from rerouted buses

Summary of Comments: The City of Minneapolis commented that the noise analysis should be conducted to assess noise impacts from buses that would be rerouted as part of the Project.

***Response**: A noise assessment of buses was conducted for the project which used a screening procedure based on the changes to bus routes and identifying any potentially sensitive land uses near these areas. Except for locations with major park-and-ride facilities or where transit centers are to be constructed, the Project noise levels are dominated by LRT operations. Therefore, no detailed noise assessment for bus reroutes is warranted, and no noise impacts related to bus reroutes are expected. See Final EIS Section 3.12. There are no vibration impacts associated with rubber-tired vehicles, such as buses.*

O.3 Quiet zones

Summary of Comments: Several commenters, including the cities of St. Louis Park and Minnetonka, commented about implementing quiet zones.

***Response**: Final EIS Section 3.12.4 and Appendix K, Sections 6.1.2.1 and 6.1.3 contain detailed information regarding quiet zones at the intersection of roads and rail lines under the jurisdiction of the FRA throughout the corridor. The at-grade roadway/rail line crossings are being designed to be quiet zone ready and quiet zones have been included as a mitigation measure in the Final EIS. Local governments are responsible for the quiet zone application process.*

O.4 Noise and vibration impacts based on the frequency/number of LRT vehicles

Summary of Comments: Several comments were received regarding concerns about noise and vibration impacts based on the frequency or number of LRT vehicles.

***Response:** Final EIS Appendix K, Section 3.1 notes that 174 daytime trains and 35 nighttime trains are planned daily on the Southwest LRT route. This is less than the 198 daytime trains and 60 nighttime trains specified in the Draft EIS. The reduction is due to changes in the planned operating hours and headways for the Project. As a result, the noise analysis results in the Final EIS show lower noise levels from LRT operations as compared with the Draft EIS, especially at night. The noise assessment uses the Ldn descriptor, a cumulative day-night sound level measure that captures all noise during a day. The Ldn takes into account how loud an event is, how often the event occurs, how long the events are and whether they occur during the day or night. Nighttime events (between 10 PM and 7 AM) have a 10-decibel penalty included to account for increased sensitivity to noise at night.*

The vibration assessment uses the frequency of LRT operation as well. For transit operations, the permitted ground-borne vibration impact levels are lower to account for the greater frequency. Project operations fall into the "frequent" category, which uses the strictest criteria to assess vibration impacts. The Project will result in no vibration impacts.

O.5 Noise and vibration assessment methodology

Summary of Comments: Approximately 45 comments were received from EPA, community groups, and the general public regarding the methodologies employed for noise and vibration analysis included requests to:

- Use published research on noise impacts when assessing impacts of the Project
- Publish the location of field measurements capturing existing noise and vibration levels
- Account for the different noise frequencies from LRT vehicles (brakes, wheel, acceleration)
- Assess noise from wheels and rails.

EPA recommended the Final EIS provide an understanding of freight engine and rail/wheel noise impacts to residences, schools, and other sensitive receptors located close to the tracks.

Response: *The methodology employed in the Final EIS follows the FTA guidance manual on transit noise and vibration assessments. The assessment looked at all aspects of noise and vibration from LRT operations, including existing noise levels, measurements of vibration response of the ground throughout the corridor, effects on various types of land uses, and effective mitigation measures, where required. Noise-sensitive land uses (as defined in the FTA guidance manual) were identified based on mapping and site surveys, with additional input from the project team and local governments. See Appendix K, Section K-3.1, and Section K-3.2 for details on the planned operating hours and headways, and Section K-4.1 and Section K-4.2 for details on noise and vibration sensitive land use and existing noise measurements and vibration propagation measurements.*

The FTA noise impact criteria employs accepted research into noise levels and their corresponding impacts on humans. The noise assessment is based on A-weighted noise levels (dBA), which reflect how humans respond to noise of different frequencies. Detailed information regarding the background and application of the FTA noise impact criteria can be found in Chapter 2 and Appendix B of the FTA noise and vibration guidance manual, which is available on the FTA website at http://www.fta.dot.gov/12347_2233.html.

Measurements of existing noise levels were conducted at nineteen locations throughout the corridor (Final EIS Section 3.12.2.2). Vibration propagation tests were conducted at ten locations throughout the corridor (Final EIS Section 3.13.2.2). Maps showing the locations, along with detailed descriptions of these locations, can be found in the Final EIS (Section 3.12.2.2 for noise and Section 3.13.2.2 for vibration). The noise and vibration assessment and mitigation measures (see Section 3.12 and Appendix K) assumed wheels and rails are in new condition. This is standard practice in a noise and vibration assessment, and reflects experience on other transit systems. LRT vehicle wheels are maintained on a regular basis and LRT rails are ground on a regular basis as well. While this has the benefit of keeping noise and vibration levels lower, the main reasons for this are ride quality and maintenance issues related to vehicle component and rail life, so it is a reasonable assumption that the wheels and rails will stay in good condition.

In response to EPA's comment, since publication of the Draft EIS, the Council completed detailed noise and vibration analyses for sensitive receptors within the Project's study area. These receptors includes residences, businesses and parks along the LRT 3A-1 alignment and include impacts from freight rail operations (e.g., engine and rail/wheel noise). No schools are impacted with the LRT 3A-1 alignment and freight rail co-location. The majority of noise impacts from the Project are due to LRT operations, including proximity to LRT tracks and at-grade crossings. At-grade crossings of freight rail also impact nearby sensitive receptors. The Project plans to mitigate noise impacts to sensitive receptors from at-grade LRT and freight rail crossing by designing and constructing these at-grade crossings to be compliant with FRA quiet zone regulations. The updated noise and vibration impact assessment for the Project and mitigation measures for impacts that meet FTA criteria is in Section 3.12 of the Final EIS.

O.6 Noise and vibration impacts to specific properties

Summary of Comments: Approximately 70 comments were received regarding questions about impacts to noise and/or vibration sensitive properties. Commenters asked about noises levels at various properties, including condominiums and single family residences in the Kenilworth Corridor, the Minneapolis Farmers Market, residences and businesses near the SouthWest Station, residences near Smetana Road, and other properties. The City of Hopkins commented on impacts to an audiologist, MPCA commented on impacts to the

Hopkins landfill, and the City of Eden Prairie commented on impacts to the Eden Prairie water plant. Comments and concerns were also received regarding decreased property values as a result of noise and vibration impacts of the Project. A business owner inquired whether vibration from his business operations would have any potential impact to the LRT alignment.

Response: *The Final EIS assessed all noise- and vibration-sensitive locations along the LRT corridor. Locations of noise impacts are shown in Table 3.12-5 and 3.12-6 and locations of vibration impacts are shown in Table 3.13-5 to 3.13-8 in the Final EIS. The noise analysis completed for the Final EIS identifies no noise impacts to the Southwest Station Condominiums. The at-grade LRT crossing of Smetana Road has been eliminated from the Project design and replaced with a grade separated overpass, and therefore there will be no additional noise due to horns or bells at the crossing. Other locations noted by commenters, such as the Minneapolis Farmers Market and Eden Prairie Water Treatment Plant, are not noise- or vibration-sensitive uses, and they were therefore not assessed. The Council discussed the potential for vibration at the Hopkins landfill with MPCA and agreed that, based on design adjustments and distance from the landfill, vibration monitoring during construction is not needed. No structures associated with the LRT alignment will be built within 200 feet of the western boundary of the landfill.*

The Council met with numerous property owners following publication of the Draft EIS to address concerns about noise and vibration. Due to changes in the LRT alignment, the development of mitigation measures, and the addition of grade-separated crossings (see Appendix E), impacts have been reduced from what was reported in the Draft EIS.

Section 3.12, Noise, of the Final EIS provides the noise analysis for the Project. The section documents severe and moderate noise impacts caused by the Project and identifies mitigation measures for the impacts, including noise impacts in the Kenilworth Corridor. Tables 3.12-5 and 3.12-6 in the Final EIS summarize projected noise impacts under the Project without identified noise mitigation measures and Table 3.12-7 summarizes mitigation measures for noise impacts, as well as those impacts that would remain after implementation of the identified noise mitigation measures. The primary avoidance measure for noise impacts within the Kenilworth Corridor is the proposed shallow LRT tunnel. Implementation of the tunnel will avoid most noise impacts compared to an at-grade LRT alignment within the same segment of the corridor. Without the tunnel, the number of noise impacts would be greater (see Theme E for more detail).

Without mitigation, there would be 52 buildings with moderate noise impacts and 69 buildings with severe noise impacts. With mitigation applied, there are no remaining severe noise impacts and 22 buildings (59 units) with residual moderate impacts. The moderate impacts at these locations do not meet the threshold for mitigation (e.g., impact does not meet 3-dB increase threshold) as defined in the Regional Transitway Guidelines (March 2016) (see Appendix D). These properties are: Hoigaard Village in St. Louis Park (one building with 32 moderately-impacted units); Park Glen Townhomes in St. Louis Park (16 moderately-impacted residences); Lake Citihomes in Minneapolis (one building with seven moderately-impacted units); and Burnham Road North (four moderately-impacted residences). Some of the noise impacts near 21st Street Station will be mitigated by the use of wayside bells instead of the routine sounding of train horns. For the residences not mitigated by the use of a wayside bell (one severe and four moderate impacts identified along Thomas Avenue South and Burnham Road North), interior noise testing will be conducted to determine if the residences meet the interior noise level criteria (defined in Appendix K). Based on the results, the Council will identify the noise mitigation to be implemented for the residences. If the interior noise level exceeds the criteria set in the Council's Regional Transitway Guidelines (Appendix D), the Council will work with property owners on applicable mitigation. This could include implementation of sound insulation, which would require approval by the property owner(s). Sound insulation is also recommended at one building of the Residence Inn in Eden Prairie.

A quite zone is the identified noise mitigation measure for several locations where the proposed light rail alignment would be adjacent to an existing freight rail alignment. The identified quiet zones would avoid moderate and severe noise impacts at 11 locations listed in Table 3.12-7. 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 by the 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. If the municipality fails to apply for a quiet zone or FRA fails to approve the quiet zone, the Project may result in residual noise impacts.

Site-specific vibration testing, including ground borne noise for the audiologist's office in Hopkins and the tunnel in the Kenilworth Corridor, was conducted to determine the response of the ground to a vibration input and mitigation measures are included in Section 3.13. Vibration from nearby businesses would not affect LRT operations. As shown in Table 3.13-5 of the Final EIS, the project will result in no vibration impacts to residential land uses.

See Section 3.12 of the Final EIS for noise mitigation, and Section 3.13 for vibration mitigation. For concerns regarding potential decreases in property values related to the Project, including disruptive noise levels, see Theme M2.

O.7 Examples of noise and vibration levels and mitigation(s) from the Hiawatha Line project

Summary of Comments: Several comments included requests for examples of noise and vibration impacts from the Hiawatha Line project along with information on the mitigation measures implemented.

***Response**: The source reference noise and vibration levels for vehicles and operations used for the Project were taken from in-service operating LRT vehicles on the Hiawatha Line (METRO Blue Line) and the Central Corridor (METRO Green Line). The Final EIS includes specific assessments of potential noise and vibration effects specific to this Project. Mitigation is provided based on the FTA's* Transit Noise and Vibration Impact Assessment *(May 2006), and is consistent with mitigation applied on other projects.*

O.8 MPCA noise rule compliance

Summary of Comments: MnDOT and the City of Minneapolis comments noted that the Project should comply with Minnesota's noise rule, administered by MPCA.

***Response**: The Final EIS assesses the Project's noise levels in the context of Minnesota's noise rule, which is administered by MPCA. The Council coordinated with MPCA staff in developing this assessment. MPCA has an established set of Noise Standards (Minnesota Rules, Chapter 7030), which provide limits on environmental noise using the L10 and L50 descriptors, which represent the noise level exceeded 10 percent (6 minutes) and 50 percent (30 minutes) of the time during an hour, respectively. The standards include both daytime and nighttime limits for three different categories of land use or noise area classification, with residential land uses included in noise area classification 1. Classifications 2 and 3 are generally for commercial and industrial land uses, respectively. Because of the time limit component of the MPCA noise standards, the Project will not exceed the standards under the proposed operating conditions. Light rail vehicles will pass by a location for approximately 10 seconds 12 times an hour (based on the operating assumptions of 10 minute headways in each direction) for a total of 120 seconds, or two minutes. Because the duration of exposure to LRT noise does not exceed the L10 (six minutes) and L50 (30 minutes) time components, there is no potential for the Project to exceed MPCA thresholds. Because the Project does not exceed the MPCA thresholds, the FTA noise impact criteria are more protective than the MPCA standards and have been used to assess and mitigate noise impacts identified within this Final EIS. See Section 3.12.1.2 of the Final EIS.*

In addition to operational noise levels, construction noise levels also are subject to noise rules administered by MPCA as well as local noise ordinances. MPCA administers these noise rules to establish maximum allowable noise levels; where applicable, MPCA procedures allow for the issuance of noise variances. To address both the applicable local noise ordinances and the MPCA noise rules, the Council will develop a Noise Control Plan as described in Section 3.12.4.2. Key elements of this plan will include:

- Contractor's specific equipment types
- Schedule and methods of construction
- Maximum noise limits for each piece of equipment with certification testing
- Prohibitions on certain types of equipment and processes during the nighttime hours without local agency coordination and approved variances
- Identification of specific sensitive sites where near construction sites
- Methods for determining construction noise levels

- Implementation of noise control measures where appropriate
- Include a 24-hour construction hotline

O.9 Effective noise and vibration mitigation

Summary of Comments: Comments, including from the City of Minneapolis, were received regarding the need for, and methods of, mitigating noise and vibration impacts. These comments included recommendations for types of mitigation, including vegetation, berms, and other approaches.

***Response**: The Final EIS identifies noise impacts and mitigation (Sections 3.12.4 and 3.13.4 and Appendix K). For noise, mitigation measures include quiet zones, wayside bells, noise barriers, and testing of residences for interior noise levels. Mitigation for ground borne noise impacts was also identified and includes use of rubber pads or springs to isolate impacts at an audiologist office located in Hopkins and highly resilient rail fasteners in the shallow tunnel in the Kenilworth Corridor (approximately 2,200 feet) to eliminate ground-borne noise impacts by providing vibration isolation (see Theme E.4). No mitigation measures are warranted for long-term direct or indirect impacts from vibration due to the absence of any corresponding impacts.*

In the more developed areas of the Project corridor there isn't enough space for berms to be an effective mitigation measure because berms are required to be approximately twice as wide as they are high. Vegetation, regardless of type, is not effective as noise mitigation, unless it is at least 100 feet thick, which would not be possible in this corridor due to spatial constraints.

O.10 Stations and LRT track designed to minimize noise and vibration impacts

Summary of Comments: The cities of Minneapolis and St. Louis Park, and a community group commented that stations and the LRT alignment should be designed to minimize noise and vibration impacts.

***Response**: As described above, since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to accommodate local goals and objectives; and avoid, minimize, and mitigate the Project's adverse environmental impacts, including noise and vibration. Design adjustments that avoid or minimize noise and vibration impacts include modifications to the LRT alignments in Eden Prairie and other locations; grade separation in place of at-grade crossings, for example at Smetana Road in Minnetonka; a shallow tunnel in place of constructing a bridge over Cedar Lake Parkway; and design features such as increased tunnel-slab thickness in the shallow tunnel in the Kenilworth Corridor. Additionally, mitigation measures (Section 3.12.4 and 3.13.4) have been included at locations where impacts have been identified. Specific mitigation measures include rail dampers, noise barriers and quiet zones.*

O.11 Noise levels reaching 114 dBA

Summary of Comments: Several comments referenced the possibility of noise levels reaching 114 dBA (listed in Table 4.7-2 in the Draft EIS) and the impacts of noise at this level.

***Response**: The noise levels listed in Table 4.7-2 of the Draft EIS describe inputs in the noise assessment. 114 dBA is a sound exposure level (SEL) for wheel squeal on tight radius curves. This number represents one hour of squeal on a curve, and does not represent an individual LRT vehicle passing a set point on a curve or straight track. There are no curves in the Project tight enough for squeal to occur, so this sound level was not used in the assessment and is not expected to occur during Project operations.*

O.12 Noise and vibration impacts during construction

Summary of Comments: Several comments were received, including from the cities of St. Louis Park and Minneapolis, regarding noise and vibration during construction, including concerns about these impacts and questions about how noise and vibration would be monitored during construction.

***Response:** The Final EIS contains a detailed assessment of both noise and vibration during construction. The assessment considered mitigation measures that will be incorporated into the construction plans at locations*

throughout the corridor, including a Noise Control Plan (Section 3.12.4.2) which will help minimize noise from construction activities. Alternative construction methods have been recommended at locations where construction would be very close to buildings and where there is the potential for damage. Pre-construction surveys and vibration monitoring will be conducted at locations identified during the preparation of construction documents (see Final EIS Section 3.13.4.3).

P. Concerns about transportation system impacts

Summary of Comments: The Council and FTA received approximately 160 comments on the Draft EIS concerning transportation systems. Those commenters included the MnDOT, the Cities of Eden Prairie, Minnetonka, St. Louis Park, Hopkins, and Minneapolis, MPRB, TRPD, MCWD, Scott County Board of Commissioners, businesses, community groups, and the general public. Comments were related to how the Project will affect the existing transit, pedestrian, bicycle, and roadway systems during construction and operations of the Project. Commenters also stated concerns about site specific design issues related to roadways that will be reconstructed as part of the Project.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process. In addition, advancing the design of Project related improvements has also allowed the Council to avoid and minimize impacts to the existing transit, roadway, pedestrian and bicycle networks through coordination with cities, MnDOT and the MPRB, as well as develop more detailed information for the traffic operations analysis for the Project.*

P.1 Impacts to existing transit system and consideration of future transit projects

Summary of Comments: FTA and the Council received approximately 20 comments, including from the City of Minneapolis Public Works Department and the Scott County Board of Commissioners, regarding impacts the Project may have on existing transit systems. Commenters recommended that the METRO Blue Line Extension (Bottineau LRT), Midtown Greenway streetcar, and Highway 169 Bus Rapid Transit (BRT), each of which is in various stages of development, be included in the summary of existing transit systems in Section 4.1 of the Final EIS. Comments were also received regarding the depiction of, or impacts to, specific bus routes. One commenter recommended changes to the existing transit system, including adding other express services to downtown Minneapolis and rerouting buses near the Minneapolis Farmers Market and Royalston Station.

Response: *Since publication of the Draft EIS, the Council prepared the* Bus Transit Operations Plan (Technical Memorandum, Revision 2.1. July 2015) *that provides detailed documentation of existing bus transit service in the Southwest Corridor and summarizes the transit service plans for the Project (See Appendix C). Section 4.1.2 of the Final EIS includes a description of existing Metro Transit and SouthWest Transit systems within the Council's service area as of summer 2015. Section 4.1.3 discusses changes that would occur to the existing transit systems as a result of the Project.*

The travel demand forecasts from the Project include consideration for existing and future transit services. In order for a future transit service to be included, it must be a programmed improvement as identified in the Council's 2040 Transportation Policy Plan *(TPP) (see Exhibit 4.1-3 of the Final EIS). The TPP does include the METRO Blue Line Extension (Hiawatha LRT); however, this service is included in both the No Build Alternative and Project alternatives within the travel demand forecasts. The TPP does not include the proposed streetcar along the Midtown Greenway or a Highway 169 BRT line, because both of these projects are in early planning stages and are not yet programmed or funded. The proposed West Lake Station and the Project alignment in the*

vicinity of the station have been designed so as not to preclude the development of a Midtown Greenway streetcar in the future. The potential Highway 169 BRT alignment does not intersect with the Project, but implementation of the Project would not preclude its development. For more information on travel demand forecasts, refer to Section 4.1.3.1 of the Final EIS and the Draft Travel Demand Methodology & Forecast, Revision 4, Southwest LRT Technical Report*.*

With the Project, LRT passengers will be able to connect to the greater METRO transit system, including METRO Blue Line (Hiawatha LRT), METRO Orange Line (I-35W BRT), Northstar Commuter Rail, METRO Red Line (Cedar Avenue BRT) via Blue Line, and the planned METRO Blue Line Extension (Bottineau LRT) as well as future planned Arterial BRT lines (A line and C line). As new transit services come online, Metro Transit will consider service changes to optimize connections to existing transit service.

P.2 Regional travel demand model projections

Summary of Comments: FTA and the Council received approximately 20 comments concerning the accuracy of ridership forecasts presented in the Draft EIS. Some commenters believed that the ridership forecasts for 21st Street Station were too high.

Response: *Forecast transit ridership at proposed stations in 2040 (average weekday) is provided in Section 4.1 of the Final EIS. The Council's regional travel demand model results, which have been reviewed and approved by the FTA, served as the primary data source for this analysis. The Council's regional travel demand model served as the primary data source for this analysis. Refer to the* Draft Travel Demand Methodology & Forecast, Revision 4, Southwest LRT Technical Report *listed in Appendix C for a more detailed description of the travel demand forecasting methodology. In summary, the Council's travel demand forecasting model has been calibrated based on existing transit ridership data and various other survey data. Further, the model is based on regionally and locally-adopted land use plans and population and employment forecasts for 2040. The model forecasts are also based on the existing and proposed transportation networks in 2040, based on the Council's adopted TPP. Finally, the model forecasts are based on the current definition of the Project, summarized in Chapter 2 of the Final EIS and illustrated in Appendix E of the Final EIS. The Council has coordinated closely with the FTA on the methodology used to forecast transit travel demand for the Project. As such, the methodology and model used and the resulting travel demand forecasts, including forecast transit use at proposed light rail stations, are the most appropriate and available methodology, model, and forecasting results available for this Final EIS.*

In order to receive funding from FTA, the Project must comply with FTA's Capital Investment Grant (CIG) requirements, which include guidance on calculating and reporting system-wide transit ridership and project ridership and cost effectiveness (i.e., a project's ridership compared to its costs). FTA's Annual Report on Funding Recommendations for the CIG Program includes reporting of a proposed project's current "Project Justification Rating," which includes a project's forecast ridership and cost effectiveness. While FTA does not have thresholds that must be met for ridership, FTA does have a minimum threshold for cost effectiveness based on FTA's adopted methods. To date, FTA's Project Justification Summary Rating for the Project is "medium-high." See Chapter 7 for additional information on FTA's CIG Program.

Regarding ridership at the Proposed 21st Street Station, as described in Section 4.1 of the Final EIS a 14 percent increase (13,000 new trips) is forecast in average weekday transit trips under the Project, compared to the No Build Alternative (2040). These new transit trips include a projected combined total of over 2,000 daily boardings and alightings (ons and offs) at the proposed 21st Street Station on an average weekday. The 21st Street Station will not be as frequently used as West Lake Station, but is expected to see more frequent use than several other stations. The Council evaluated eliminating or deferring stations between May and July 2015 based on evaluation of several factors, including forecast transit ridership and based on this evaluation, 21st Street station was maintained in the Project.

In addition, bus service in the study area will be modified as appropriate to meet demand and provide connections to the proposed SouthWest LRT stations (see Section 4.1). Exhibit 4.1-5 in the Final EIS illustrates the Project bus operation Plan; Exhibit 4.1-4 shows the bus operations plan under the No Build Alternative. Metro Transit currently provides bus service to the vicinity of the proposed 21st Street Station via bus route 25. This service is proposed to continue under both the No Build and the Build Alternative (service will be provided

directly to the proposed 21st Street Station). Currently, no additional bus service to this area is proposed under the Project.

P.3 Coordination with SouthWest Transit

Summary of Comments: FTA and the Council received seven comments, including from the City of Eden Prairie, suggesting that the Project's light rail service plan be coordinated with existing SouthWest Transit bus service in Eden Prairie. Some commenters asked if transit users could use SouthWest Transit to reach destinations in Minnetonka or Eden Prairie that were not within walking distance of a proposed light rail station. Commenters also expressed concern that parking demand generated by the Project might exceed the capacity of the SouthWest Transit's existing park-and-ride lot at SouthWest Station, impairing commuters' ability to use SouthWest Transit's park-and-ride lot and bus service.

Response: *The Council has and will continue to coordinate with SouthWest Transit regarding future SouthWest Transit service, relative to the Project. The conceptual bus service plan for SouthWest Transit with the implementation of the Project includes the provision of new local bus routes to provide enhanced access to the proposed SouthWest, Golden Triangle, and Opus stations in Eden Prairie and Minnetonka. The final service plan for SouthWest Transit is subject to change as the design of the Project advances (refer to Section 4.1.3 for more information on corridor bus routes with the Project).*

As described in Section 4.3, the Project could result in spillover parking by light rail riders in off-street parking lots or at on-street parking spaces adjacent to a light rail station. Spillover parking can result from a lack of park-and-ride lot capacity relative to demand for park-and-ride lot spaces. Based on the travel demand forecasts completed for the Project (see Section 4.1 for more detail), the cumulative supply of park-and-ride lot spaces will meet and exceed the forecasted demand for park-and-ride lot parking spaces in the Project's opening year (2020). However, the travel demand forecasts show a deficit of approximately 650 park-and-ride spaces in the Project's forecast year (2040). This forecast deficit is predominantly concentrated at the proposed SouthWest and Beltline Stations, with most (about two-thirds) of the deficit occurring at the SouthWest Station.

In order to mitigate the effects of spillover parking, the Council will work collaboratively with the affected jurisdictions (i.e., Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis) to identify mitigation measures that could be implemented. The Council will complete a Regional Park-and-Ride System Report on an annual basis. As part of this effort, the Council and Metro Transit will collaborate with regional transit partners, local governments, and the Minnesota Department of Transportation to conduct an annual regional park-and-ride survey, which tracks facility use and emerging travel patterns by park-and-ride users across the region to identify the appropriate mitigation, as needed and where feasible. The results of this survey are published in the annual report which discusses mitigation measures for long-term parking impacts. In addition, the Council will develop a joint use agreement to share parking with SouthWest Transit for the park-and-ride lot adjacent to the station.

P.4 Roadway traffic operations

Summary of Comments: FTA and the Council received approximately 80 comments regarding existing traffic operations and traffic operations after implementation of the Project. Commenters included the cities of Eden Prairie, St. Louis Park, Hopkins, and Minneapolis, MnDOT, and MPRB. The City of St. Louis Park expressed concerns about the methodology used to determine traffic impacts, including the application of a single growth rate to the study area and the use of Synchro/SimTraffic software. Some commenters were concerned with possible increases in traffic congestion, while others were concerned about the Project limiting circulation or property access, especially in the Royalston Station area. Locations discussed in traffic-related comments also focused on: Technology Drive; congestion on I-494 and Highway 62; the intersections of Valley View Road and Prairie Center Drive/ Flying Cloud Drive; the intersection of Smetana Road and Feltl Road; the Blake Road Station area; the intersection of Highway 7 and Wooddale Avenue; the Beltline Boulevard Station area; the West Lake Station area; Cedar Lake Parkway; and West 21st Street. The City of Minneapolis and MnDOT also expressed a preference for traffic signal priority over signal-preemption for LRT operations at traffic signals along the Project.

***Response**: Since the Draft EIS was published, the Council completed a detailed traffic operations analysis for the entire Project corridor. The traffic analysis included an evaluation of intersections at or adjacent to proposed at-grade light rail/roadway crossings or at roadways/driveways associated with a proposed light rail station or park-and-ride lot. Traffic operations for the Project in 2040 (average weekday) were evaluated based on overall intersection level of service (LOS) and traffic queues. The threshold for acceptable LOS 6operation is between LOS D and LOS E, with LOS A-D being considered acceptable, and LOS E-F unacceptable, during the peak hour.*

As noted in Section 4.2.3, roadway and intersection improvements were incorporated into the Project to avoid new or worsened congested intersections, compared to the No Build Alternative in 2040, and the proposed improvements are reflected in the traffic operations analysis. These roadway and intersection improvements included in the Project are shown in Table E-2 and are illustrated in the Preliminary Engineering Plans (see Appendix E). For a detailed description of the traffic operations analysis for the Project, including a description of the location of traffic movements with queuing issues, refer to the PEC-West Traffic Memorandum (2015) and PEC-East Traffic Memorandum (2015). In summary, of the 75 intersections analyzed:

- *No intersections that would operate at LOS A to D under the No Build Alternative will operate at LOS E or F under the Project.*
- *Three intersections that would operate at LOS E or F under the No Build Alternative will be improved to LOS A through D under the Project.*
- *Six intersections that would operate at LOS E or F under the No Build Alternative will continue to operate at LOS E or F under the Project.*

For the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis, information from the regional travel demand model was combined with expected changes in land use and density and anticipated developments to develop growth rates for each roadway segment within the project area. This information was also reviewed in combination with anticipated developments within each city to determine if different annual growth rates should be applied in calculating the opening year forecast volumes compared to the 2040 forecast volumes. This would be done if, for example, more rapid growth was expected at the beginning or end of the forecast horizon. The growth rates were then applied to existing turning movement counts to generate opening year and 2040 No Build peak hour turning movement forecasts. For the study area within the City of Minneapolis, which is generally more developed than the other cities and therefore a lower growth is expected, a different methodology was used. As a typical practice the City of Minneapolis utilizes annual growth rates of 0.25 to 0.5 percent per year to develop background traffic forecasts, and a review of published forecasts by Hennepin County within the vicinity of the Minneapolis study area indicated typical growth rates of approximately 0.5 percent per year or less. Therefore, annual growth rates of 0.3 to 0.4 percent per year were utilized for roadways within the City of Minneapolis to develop No-Build forecasts. Refer to the PEC-West Traffic Memorandum (2015) and PEC-East Traffic Memorandum (2015) for more information on the growth rates used in the forecast traffic values completed for the traffic operations analysis.

Synchro/Sim Traffic and VISSIM traffic simulation software packages were used to develop the traffic analysis models, which is consistent with industry standards. Refer to the PEC-West Traffic Memorandum (2015) and PEC-East Traffic Memorandum (2015) for more information on the methodology used for the traffic analysis.

Information on the traffic operations of specific intersection is provided in Table 4.2-2 in the Final EIS and summarized below. Comments regarding access to specific properties are addressed in Theme M.

<u>Technology Drive</u>

Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including adjustments to the Project within the vicinity of Technology Drive in Eden Prairie. As described in Section 2.2 and Appendix F of the Final EIS, during the Draft EIS public comment period, the City of Eden Prairie asked the Council to investigate the feasibility of a more centrally located and walkable Eden Prairie Town Center Station that would provide better opportunities for transit-oriented development and redevelopment. In response to comments and concerns submitted, and to minimize impacts, increase transit ridership, and reduce Project costs, the Project alignment was moved from the south side of Technology Drive

between Prairie Center Drive and Flying Cloud Drive, to the current Project alignment, which extends from Prairie Center Drive to Eden Road on new right-of-way and then parallels Leona Road to Flying Cloud Drive. In addition, based on design adjustments incorporated into the Project since the publication of the Draft EIS, the westernmost terminus of the Project has been adjusted and will now be the proposed SouthWest Station and not the proposed Mitchell Station (i.e., the proposed Mitchell Station will not be included in the Project). Therefore, the Project will not continue along Technology Drive, between the proposed SouthWest Station and Mitchell Road. Many of the comments received concerning Technology Drive have been addressed through incorporation of these design adjustments. Refer to Theme F more information on design adjustments within the City of Eden Prairie.

Seven Technology Drive intersections were included in the Project's traffic operations analysis (see Exhibit 4.2-1). Under existing conditions, all intersections operate at an acceptable LOS (LOS A – D). Under forecasted 2040 No-Build conditions, two intersections operate at LOS E, two intersections operate at LOS F, and the remaining three operate at LOS A – D. The forecast is measured during the afternoon peak travel period. Under the Project (2040 forecast), conditions at six intersections are expected to stay the same as compared to the 2040 No Build forecasted conditions (i.e., Mitchell Road/Technology Drive, Technology Drive/SouthWest Station bus access, Technology Drive/SouthWest Station west access, Technology Drive/SouthWest Station east access, Technology Drive/Prairie Center Drive, and Prairie Center Drive/Technology Drive (and westbound Highway 5/Highway 212 ramp)), and improve from a LOS F to LOS E at one intersection (i.e., Prairie Center Drive/ Technology Drive (and the eastbound Hwy 5/Hwy 212 ramp)).

During construction of the Project, lane shifts, lane closures and short-term roadway closures or detours are expected along Technology Drive west of Flying Cloud Drive due to road reconstruction and track/signal/utility construction activities. See Theme F.1 for discussion of changes to the Project alignment along Technology Drive and revisions to impacts shown in the Final EIS for access along the roadway.

<u>Congestion on I-494 and Highway 62 (Crosstown)</u>

The Project's traffic analysis did not include detailed freeway operations on I-494 or Highway 62. However, due to a forecast reduction in regional vehicle miles traveled (VMT) under the Project, compared to the No Build Alternative (a reduction of 113,000 VMT), the Project will not contribute to increases in congestion at a regional level.

<u>Intersections of Valley View Road and Flying Cloud Drive / Prairie Center Drive</u>

The Project alignment shown in the Draft EIS included an at-grade LRT crossing of Valley View Road and indicated that with this at-grade crossing, the intersection of Valley View Road and Flying Cloud Drive was expected to operate at LOS F. Since the publication of the Draft EIS, the Project's alignment in Eden Prairie has been adjusted and now includes a grade-separated LRT crossing over Valley View Road. Appendix E in the Final EIS illustrates the location and alignment of this grade-separated crossing. As a result, the Project is will not affect traffic operations at this intersection. Refer to Theme F more information on design adjustments within the City of Eden Prairie.

The intersection of Valley View Road and Prairie Center Drive, located 500 feet south of the Flying Cloud Drive intersection was not specifically included in the project's traffic operations analysis. The adjustment to the project's alignment to include a bridge over Valley View Road would also reduce impacts to this intersection.

<u>Blake Road</u>

Four Blake Road intersections were included in the Project's traffic operations analysis. These intersections currently operate at LOS D or better under all conditions. Under the Project, these intersections are expected to operate at a LOS D or better. Therefore, the Project will not adversely impact traffic operations at this location.

<u>Intersection of Highway 7 and Wooddale Avenue</u>

Five intersections that include either Highway 7 or Wooddale Avenue were included in the Project's traffic operations analysis. Under existing conditions, these intersections operate at LOS A or B. Under the 2040 No Build Alternative, LOS A/B is maintained at all intersections, except at the Wooddale/Highway 7 Eastbound Ramps where the PM peak operation is expected to be LOS D. At the Wooddale/Highway 7 eastbound ramps, under the

2040 Build the intersection is forecast to be at LOS B. Project improvements in this area result in an improvement in LOS over the No Build condition. With the Project (2040 forecasts), LOS A/B is maintained at the intersections that were at LOS A/B under the 2040 No Build, except at the Wooddale Avenue/W 36th Street intersection where the expected LOS is at C, which is considered acceptable.

Beltline Boulevard

Since completion of the Draft EIS, the Council has developed and evaluated design adjustments, including changes to the proposed park-and-ride lot. The size of the park-and-ride lot was reduced to 89 spaces. Four intersections along Beltline Boulevard (CSAH 25, South Frontage Road, Park Glen Road and the freight rail crossing) and the intersection of CSAH 25 / Lynn Ave were included in the Project's traffic operations analysis. Intersection operations are acceptable at these intersections; all currently operate at LOS C or better during the AM peak hour and LOS D or better during the PM peak hour. Under the 2040 No Build, intersections operate with acceptable LOS, except for at the unsignalized intersection of Beltline Boulevard and CSAH 25 South Frontage Road which degrades to LOS F during the PM peak hour. Under the 2040 Build conditions, which include the park-and-ride lot, LOS D or better is maintained during both peak hours.

West Lake Station Area

The Draft EIS included a park-and-ride lot at the West Lake Station, which may have resulted in an increase in traffic in this area. However, based on stakeholder input, the proposed park-and-ride lot has been removed from the Project. As a result, the expected increase in vehicle traffic in the West Lake Station area is lower. Two intersections along West Lake Street were included in the Project's traffic operations analysis. Both currently operate at acceptable levels of service, and both are forecasted to continue operating at the same levels of service under 2040 No Build and Build conditions.

Cedar Lake Parkway

Since completion of the Draft EIS, the Council has developed and evaluated design adjustments that resulted in a shallow light rail tunnel that will be constructed between West Lake Street and the Kenilworth Lagoon. With the shallow tunnel, light rail vehicles will go under Cedar Lake Parkway. As a result, the Project is not expected to have an impact on traffic operations along Cedar Lake Parkway.

21st Street

In the 21st St Station area, the traffic analysis included an evaluation of the intersection of 21st Street with and without the passage of a 75-car freight train. The results of the traffic analysis for the 21st Street crossing show that this intersection currently operates at LOS A during both peak hours without a freight rail event. With a freight rail crossing event, the intersection currently operates at LOS D during the AM peak hour and LOS E during the PM peak hour. Under the No Build Alternative, a 75-car freight rail crossing event results in LOS E during both time periods, due to a forecasted increase in vehicle traffic on 21st Street. Under 2040 Build conditions, a 75-car freight rail crossing results in LOS E during the AM peak hour and LOS F during the PM peak hour. A freight event is not expected to occur in the peak hours; therefore, mitigation was not identified to address the operation under this condition. Without a freight rail crossing, the intersection is expected to operate at LOS A during both peak hours under the 2040 Build condition.

Transit Priority versus Preemption

Under the Project, signalized at-grade LRT crossings of roadways will operate with "traffic signal preemption" with active warning such as lights and gates, and not "traffic signal priority." Traffic signal priority means that traffic signals are coordinated to synchronize with light rail train movements to improve transit travel times; however, the trains may have to stop at the crossing for a short period when their traffic signal is red. Trains generally move at the same time as adjacent with traffic in a priority system.

Traffic signal preemption means that intersection traffic movements are controlled to allow the train to pass through without stopping (allowing for optimized transit travel times). Signal preemption with automatic gates provides a higher level of control and safety at the at-grade crossings (i.e., gates block vehicles from entering the crossing). However, signal preemption can have a greater effect on roadway traffic operations.

Traffic signal preemption was chosen for the Project based on requirements of the Manual of Uniform Traffic Control Devices (Section 8C.5) which states Highway-LRT grade crossings in semi-exclusive alignments should be equipped with automatic gates and flashing-light signals where LRT speeds exceed 35 mph. The Project will generally result in LRT speeds exceeding this threshold, and therefore the Project will include flashing-light signals, automatic gates, and traffic signal preemption at signalized at-grade LRT crossings of roadways. For consistency in crossing treatments and for safety, gated crossings are also included in this Project for crossings where LRT speeds are anticipated to be less than 35 mph.

The traffic analysis performed for the Final EIS included preemption at crossings to understand the necessary roadway and traffic signal modifications to provide acceptable traffic levels of service in the build condition. The analysis and proposed roadway and traffic signal design advancement has been coordinated with the agencies for each crossing location, including MnDOT and the City of Minneapolis.

General Property Access

Since the publication of the Draft EIS, the Council developed and evaluated design adjustments, including refinement of roadway design and driveway access points for some private properties along the corridor. Appendix E illustrates the updated design. The Project will maintain access to businesses during construction and operation of the Project, unless that property or portion of the property is acquired by the Project. Property owners will be compensated for any long-term loss in property access based on the terms of the purchase agreement between the Council and property owner in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Refer to Section 3.4.1 of the Final EIS for additional information on the Uniform Act. Refer to Theme M.2 for addition information on business impacts and compensation for any long-term loss in property access.

P.5 Construction impacts on traffic

Summary of Comments: FTA and the Council received approximately 15 comments regarding the impact that construction of the Project would have on traffic operations at various intersections in the study area.

Response: *Construction of the Project will result in temporary partial- and full-closures of some existing streets, as well as material and equipment deliveries, worker arrivals and departures, and hauling of excavation and borrow materials. Locations where temporary traffic impacts are expected to occur during construction of the Project are shown in Table 4.2-3 in Section 4.2 of the Final EIS. Construction of the Project will also result in temporary, partial and full closures of driveways while construction is occurring at those locations.*

In order to minimize short-term impacts related to vehicle traffic and roadway access, the Council or its contractors will develop a Construction Mitigation Plan, construction staging plans, and traffic control plans that will include strategies to maintain traffic flow, existing transit services, and pedestrian access along each disrupted roadway. The traffic control plans will also include the identification of construction vehicle routes and provisions requiring the contractor to maintain corridor access points and haul routes and clean them at least once per day.

MnDOT, Hennepin County, and all municipalities affected by construction activities related to the Project will require compliance with applicable state and local regulations related to the closing of roadways and the effects of construction activities, and traffic control plans will be reviewed by appropriate jurisdictions and the Council prior to the initiation of construction activities. Additionally, contractors will be required to comply with all guidelines established in the Minnesota Manual on Uniform Traffic Control Devices (2015).

P.6 Commercial vehicle access at Royalston Station

Summary of Comments: FTA and the Council received seven comments regarding truck access to businesses near the proposed Royalston Station. The alignment evaluated in the Draft EIS included the closure of 5th Avenue North between 7 Avenue and Royalston Avenue. Commenters stated that this design of the roadways in the Royalston area would impact the ability of semi-trailer trucks to access their businesses.

Response: *Since publication of the Draft EIS, design of the Project has advanced to help avoid and minimize impacts. In response to comments on the Draft EIS, 5th Avenue will remain open under Project conditions. The*

Project will result in physical modifications to existing roadways and intersections within the vicinity of the proposed Royalston Station that will affect local circulation patterns; however, these changes have been designed to accommodate truck movements and will not cause or worsen traffic congestion (see Section 4.2 and Appendix E of the Final EIS for more information). Roadway changes in the Royalston Station area include narrowing Royalston Avenue, Holden Street North, and Border Avenue from four lanes to two lanes.

P.7 Grade separation of LRT and Cedar Lake LRT Regional Trail from Wooddale Avenue and Beltline Boulevard

Summary of Comments: FTA and the Council received a comment from the City of St. Louis Park regarding delays for vehicle traffic on Beltline Boulevard and Wooddale Avenue as a result of the proposed light rail crossing. The comment also indicated that the pedestrian and bicycle traffic on the Cedar Lake LRT Regional Trail would make the Wooddale Avenue crossing complicated and busy. The comment included suggestions for grade separation between motor vehicles and the LRT, freight, and trail traffic.

Response: *Based on input after publication of the Draft EIS, the Council adjusted the Project's design at Wooddale Avenue, as illustrated in Appendix E. The Project now includes at-grade freight rail and LRT crossings, and a grade-separated crossing for the Cedar Lake LRT Regional Trail over Beltline Boulevard and a trail underpass at Wooddale Avenue. Proposed controls for at-grade crossings are shown in Table 4.6-1. Light rail vehicles will also sound horns or bells when entering a station or when approaching at-grade roadway crossings, except in locations where a quiet zone is implemented (horns will not be routinely sounded, but bells will be sounded). Within proposed quiet zones, additional safety measures (e.g., non-traversable medians), will be installed in accordance with the Quiet Zone Final Rule (49 CFR Part 222).*

The existing at-grade freight rail crossings at Wooddale Avenue and Beltline Boulevard currently operate at LOS A when there is not a freight rail crossing event. These locations are expected to continue to operate at a LOS A under the Project (see Table 4.2-2 of the Final EIS) – with regular LRT crossings.

P.8 Pedestrian and bicycle volumes

Summary of Comments: FTA and the Council received approximately 17 comments, including those from the City of Minneapolis Public Works Department and TRPD, stated that the Draft EIS provided insufficient information about bicycle and pedestrian use of the trails in the study area. Commenters stated that the regional trails are heavily used and their significance as part of the transportation system should be noted. Some commenters questioned the timing of the bicycle and pedestrian counts and suggested conducting the counts in the summer when more pedestrians and bicyclists use trails and roadways adjacent to the Project.

Response: *Trail use estimates in the Final EIS have been updated from the Draft EIS based on data provided by various agencies, including TRPD, MPRB, and the City of Minneapolis. These values are reported in Table 4.5-1 as part of the general accounting of the affected environment; however, impacts to trails were assessed equally, regardless of level of use.*

P.9 Impacts to local and regional trails and pedestrian/bicycle access

Summary of Comments: FTA and the Council received approximately 70 comments regarding the local and regional trail system, including comments from the cities of Minneapolis, St. Louis Park, Hopkins, Minnetonka, and Ede Prairie, MnDOT, MPRB, TRPD, and MCWD. Commenters indicated that the regional trails in the study area are an important bicycle and pedestrian asset. They submitted questions regarding the continuation of the Cedar Lake Regional LRT Trail and Kenilworth Trail in the corridor between the proposed Shady Oak and Penn stations, connections to Bryn Mawr Park, Spring Lake Trail and the Luce Line Trail, as well as bicycle and pedestrian connectivity in the study area in general. MPRB comments related to trail design, access, use, and maintenance are addressed below. MPRB indicated that the Cedar Lake Regional LRT Trail should be designed to a 20 mph design speed. Comments from MPRB and the general public related to trail safety and pedestrian and bicyclist safety at at-grade trail crossings are addressed in Theme R. The City of Minneapolis commented on the design of the trail crossing of LRT and freight rail near Penn Station. Some commenters requested that all local and regional trails be documented in the Final EIS, and that connectivity of local trails across the LRT alignment be maintained and that trails maintain their existing widths.

In addition, there were questions about how the existing trails will be maintained during construction. A few commenters made suggestions about additional trail connections that could be made as part of the Project or stated a preference for station areas to be conducive to pedestrian and bicycle access, rather than being focused on motor vehicle access. Comments were also received on pedestrian and bicycle access to proposed light rail stations.

***Response**: The design adjustments developed after the close of the Draft EIS comment period related to trails also reflect additional analyses and evaluations conducted in support of compliance with Section 106 and Section 4(f) and incorporate various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments, including freight rail modifications, will allow for the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Council has coordinated extensively with MPRB on the design adjustments in the vicinity of trails under MPRB's jurisdiction. In January 2016, MPRB concurred that the Project would have a* de minimis *impact on Section 4 (f) properties under its jurisdiction, based on the Section 4(f) process. See Theme S for more information on the Section 4(f) evaluation.*

<u>Impacts to Local and Regional Trails</u>

The Council will maintain existing public bicycle and pedestrian connections, including the Cedar Lake LRT Regional Trail, Kenilworth Regional Trail, Cedar Lake Parkway trails, and will maintain the Luce Line Regional Trail connection across the co-located freight and LRT alignment adjacent to Bryn Mawr Meadows Park. The Spring Lake Trail junction will be maintained.

The locations of reconfigured existing trails and sidewalks, as well as proposed new facilities, are shown in Appendix E of the Final EIS. These trails were designed to meet the AASHTO Guide for the Development of Bicycle Facilities, which does not have a specific design speed for shared use paths. However, as reconstructed the mainline of the trails are relatively straight and can be traversed at 20 mph. Exceptions are access points and ramps that may have switch backs and the roundabout at the Kenilworth/Midtown Greenway/Cedar Lake LRT Regional Trail intersection – this intersection is specifically designed to slow bicycles to make the intersection safer for pedestrians.

<u>Cedar Lake Trail Crossing of Freight and LRT near Penn Station</u>

The design of the Project evaluated in the Draft EIS included the existing at-grade trail crossing of the freight rail tracks near the intersection of the Kenilworth and Cedar Lake Trails, just south of the proposed Penn Station. The Project includes the addition of an at-grade crossing of the LRT tracks in this area. Since publication of the Draft EIS, the Council has worked closely with the city of Minneapolis, along with stakeholders, to refine the design of the Project. The crossing remains at-grade, but the design of the trails in this area have been modified, increasing the space between the busy trail intersection and the at-grade crossing (see Appendix E).

<u>Construction Impacts to Trails</u>

During construction of the Project, some sidewalks and trails along roadways will be temporarily obstructed. Detour routes or facilities will be implemented to provide temporary access around these areas, where appropriate. Mitigation strategies in the event of temporary closures are identified in the Construction Mitigation Plan, which includes a Construction Communications Plan and staging plan for implementation by the Council prior to and during construction.

<u>Pedestrian and Bicycle Access to Stations</u>

Section 4.5 of the Final EIS includes an evaluation of the existing pedestrian and bicycle networks in the vicinity of each station. The Council has worked closely with MnDOT, Hennepin County and the cities to design roadway modifications, add pedestrian improvements, and accommodate passenger drop-off or transfer areas that will allow safe crossing of tracks and access to the stations. Proposed new facilities that are included in the Project are shown in Appendix E of the Final EIS. All of the new trails and sidewalks that are included were added to improve bicycle and pedestrian access to the LRT stations.

In addition, the Council, City of Minneapolis, MPRB, and Hennepin County undertook the West Lake Multimodal Transportation Study, completed in February 2016. The goal of the study was to identify opportunities to address non-motorized and motorized travel within the West Lake LRT Station area with projects that can be implemented as a part of the construction of the Southwest LRT or as part of other capital initiatives. The study report includes Green Line Design Recommendations, some of which will be constructed as part of the Project, including enhanced crosswalk markings at specific intersections, and wayfinding signage.

See Theme I for addition information on station specific concerns.

P.10 Parking

Summary of Comments: Approximately 40 comments on transportation systems also included comments about parking at station areas or impacts to existing parking.

Response: *Under the Project, there will be some changes to on-street and off-street parking. Changes to off-street parking will be related to land acquisitions, and changes to on-street parking will occur in some areas where changes to existing roadways are needed to accommodate the Project. Overall, the Project will reduce the supply of off-street parking (i.e., off-street parking lots, typically associated with privately-owned businesses) by eliminating 692 spaces and will reduce the supply of on-street parking by eliminating 57 spaces. In addition, the Project will include new park-and-ride lots at nine light rail stations, for a combined addition of approximately 2,487 new park-and-ride spaces. Refer to Section 4.3 of the Final EIS for more information on impacts to parking.*

In addition to long-term reductions in the supply of parking, temporary removal of on-street parking spaces may occur at locations to facilitate construction of the Project (e.g., to facilitate truck movement or to provide a temporary truck loading zone). These potential temporary removals of on-street parking spaces will be identified prior to the start of construction as part of the Construction Staging Plan.

The Council will compensate business owners for the loss of off-street parking spaces, based on the terms of the purchase agreement between the Council and property owner, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). Refer to Section 3.4.1 for additional information on the Uniform Act. The Council will develop a Construction Mitigation Plan that will address temporary on-street parking loss during the construction of the Project. The Council will phase construction activities; therefore, many of the spaces lost during construction will only be unavailable for a portion of the Project's construction period.

For more information on issues related to specific station area see the Responses to Theme I, and for more information on property acquisitions and displacements, see Theme M.4.

Q. Concerns about modifications to freight rail infrastructure

Summary of Comments: FTA and the Council received approximately 10 comments related to the Project's modifications of freight rail infrastructure and operations (e.g., track modifications, freight connections, operational requirements, freight rail operations), not including comments related to the location of freight rail as part of the Project (see Themes C and D for comments regarding freight rail relocation and co-location, respectively). Commenters included TC&W, CP, a community group, the Cities of Minneapolis and St. Louis Park, STB, and MnDOT.

TC&W requested confirmation that the Project will comply with requirements set forth by current track engineering and design standards and requested details about freight detours and track outages during construction. One community group stated that no additional trackwork should be allowed. The City of St. Louis Park commented that the freight rail siding removal on the Bass Lake Spur should also be addressed as part of the Project, and raised questions about railroad abandonments and agreements. STB commented regarding their jurisdiction, including the process for discontinuation of service, rail line abandonments, improving, upgrading, or realigning an existing rail line, connecting track, changes in freight rail operations affecting safety, and trackage rights. The City of St. Louis Park and TC&W also inquired about STB involvement and trackage rights.

Response: *The Draft EIS described freight changes as part of freight rail relocation and co-location (LRT 3A and LRT 3A-1, respectively), and stated that future coordination with STB would be needed. After the close of the Draft EIS public comment period, the Council undertook a process to develop and evaluate adjustments to LRT 3A and LRT 3A-1 directly related to the following: (1) whether TC&W freight trains currently operating along the Kenilworth Corridor should be rerouted to sections of the MN&S Spur and Wayzata Subdivision; or (2) whether the TC&W freight trains should continue to operate along the Bass Lake Spur and Kenilworth Corridor as they currently do. Based on the analysis prepared, committee recommendations, and public comments received during the four step process, the Council identified in April 2014 the design adjustments to be incorporated into the LPA: the Shallow LRT Tunnel – Over Kenilworth Lagoon (i.e., LRT 3A-1 – co-location). In doing so, the other design adjustments considered through the four-step process were dismissed from further study. The Council found that, relative to the other options considered, the Shallow LRT Tunnel – Over Kenilworth Lagoon (i.e., LRT 3A-1 – co-location) design adjustment would provide the best balance of costs, benefits, and environmental impacts, and in doing so found that it would best meet the Project's Purpose and Need.*

Further, as a result of the light rail design adjustments to LRT 3A and LRT 3A-1 during the design adjustment process, the Council found that the LPA with freight rail retained in its existing location in the Kenilworth Corridor (LRT 3A-1) would be the Project's environmentally preferred alternative, rather than the LPA with the relocation of freight rail (LRT 3A). In summary, with the changes made during the design adjustment process and in comparison to freight rail relocation (LRT 3A), freight rail co-location (LRT 3A-1), would: result in less harm to Section 4(f) protected properties; maintain regional freight rail connectivity; minimize reconstruction of freight rail tracks and construction-related disruptions; avoid diminishing the potential for transit oriented development around light rail stations located in the vicinity of freight rail tracks; avoid the displacement of any residents or businesses in the St. Louis Park/Minneapolis Segment; include bicycle and pedestrian improvements that would provide connections between light rail stations and their surrounding neighborhoods; and minimize the displacement of wetlands.

Section 2.2 and Appendix F of the Final EIS provide a description of the process used by the Council after publication of the Draft EIS to develop and evaluate design adjustments, including design adjustments to potential freight rail modifications that were evaluated in the Supplemental Draft EIS.

The Project, which is based on LRT 3A-1 (co-location), will not involve freight rail line abandonment or discontinuance of freight rail service. The Council has coordinated with agencies (including STB, FRA, and HCRRA), freight rail owners, and freight operators along the proposed light rail alignment to inform Project decisions and freight requirements. Existing freight operations, including number of trains per week and trains

speeds, are listed in the Final EIS (see Section 4.4). The Final EIS includes a description of freight modifications included in the Project, which address specific concerns summarized above.

Beginning east of Excelsior Boulevard and extending to east of Beltline Boulevard, the existing freight rail tracks (i.e., the Bass Lake Spur, owned by CP) will be shifted north approximately 45 feet, allowing the light rail alignment to be located south of the freight rail tracks, thereby providing better station connections to local activity centers. At the crossing of Highway 100, the freight rail bridge will be relocated from the southern portion of the corridor to north of the planned LRT bridge to align with the overall shift of the freight rail alignment. To facilitate the shift of the existing freight rail tracks and accommodate the proposed light alignment, the Council intends to purchase all of the 6.8-mile Bass Lake Spur from CP Railway. Approximately 3.8 miles of the existing track in the Bass Lake Spur is needed to accomplish the shift.

The Project includes removal of the siding track from west of Excelsior Boulevard to east of Beltline Boulevard; this will eliminate the bi-directional maneuvering and parking by TC&W along siding tracks in this area. The removal of the siding tracks will be addressed with CP (owner) and TC&W (operator) under any potential future purchase or operating agreements for the Bass Lake Spur, which would include compensation for the removal of the siding tracks.

A number of short-term impacts to freight rail operations will result from construction activities along the three freight rail corridors adjacent to the Project. The Final EIS identifies freight stoppages, most in the 8- to 10- hour range, with some stoppages up to 36 hours (see Table 4.4-3). In order to minimize the potential for freight rail disruption, the Council, in coordination with the affected freight railroad owners and operators, will develop specifications for the contractor to follow in developing and implementing construction staging and sequencing plans. The plan will facilitate coordination between the Project and the affected freight railroad owners and operators during construction activities affecting freight railroad operations to help ensure the Project does not create unreasonable constraints during construction. Detours for freight rail are not anticipated. While the Project will require freight rail track modifications, including new freight track in some locations, these modifications will not substantially alter operations and will not open access to new freight rail markets (see also Theme Q.1 and Theme Q.2 for more information about coordination with freight rail owners and operators).

Q.1 Removal of switching wye and addition of Southerly Connection

Summary of Comments: The cities of Minneapolis and St. Louis Park, TC&W, and several individual commenters requested that the Skunk Hollow switching wye be replaced so freight trains can move without stopping.

Response: *As part of the proposed freight rail modifications in the Bass Lake Spur, the Project will sever the connection to and require the removal of the northern branch of the existing Skunk Hollow switching wye. The switching wye currently allows for freight train movements between the Bass Lake Spur and the MN&S Spur. In addition, the southern branch of the existing switching wye provides access to a shipper (e.g., freight rail customer).*

The existing function of the northern branch of the Skunk Hollow switching wye will be replaced with the new "Southerly Connection," which will allow TC&W trains continued access between the Bass Lake Spur eastbound to the southbound MN&S Spur and the reverse. The Project will not change access to the existing customers.

The proposed Southerly Connection is included in the Project (see Section 2.1), and related environmental consequences resulting from the Southerly Connection are evaluated as part of the Final EIS. This includes the evaluations of potential impacts related to neighborhoods and communities (see Section 3.3), visual quality (see Section 3.7), noise (see Section 3.12), vibration (see Section 3.13), and safety and security (see Section 4.6), among others.

The elimination of the northern branch of the existing Skunk Hollow switching wye and replacement with the new Southerly Connection to accommodate the light rail alignment and the proposed Louisiana station will likely reduce freight rail travel times for switching movements between the Bass Lake Spur and the MN&S Spur. As a result of these freight rail modifications, the Project could contribute indirectly to increases in the frequency and/or length of freight trains traveling along the MN&S Spur, which could result in indirect adverse impacts on

the human environment that could be significant. Future freight rail operations are subject to a range of market forces and are dependent on the business plans of freight railroad operators, both of which are outside of the jurisdiction of the FTA and the Council. Pursuant to 40 CFR 1502.22 and Minnesota Statute 4410.2500, the Final EIS does not evaluate potential adverse effects on the human environment related to the potential indirect impact of increased freight rail frequency and/or length of freight rail trains because that information is not available or obtainable (see Section 4.4 for additional information on compliance with 40 CFR 1502.22).

Q.2 Freight rail operations

Summary of Comments: MnDOT commented that FTA and the Council should work with freight rail operators to retain effective connections to the freight rail system. The City of St. Louis Park commented that freight rail functionality should continue to be considered and addressed as the Project design advances. TC&W requested copies of correspondence with freight owners and operators, and noted support for the Project as long as freight rail service is preserved, and noted they were not acknowledged as an existing operator in the Draft EIS. CP expressed concerns about coordination with railroad owners and operators to address questions regarding engineering design, ownership, maintenance, and operation of railroad infrastructure. One commenter requested the process influence railroad operations to the extent possible to avoid idling in residential areas. One community group commented that the project should set speed limits for trains (the commenter was not specific about freight or light trail trains).

***Response**: While the Project will require freight rail track modifications, these modifications will not substantially alter freight rail operations (see also Theme Q.1 and the potential effect of the proposed Southerly Connection). Freight rail operating decisions, including train speeds and idling, are not under FTA or Council jurisdiction. However, TC&W has acknowledged they intend to limit their speed to a maximum of 10 mph within the Kenilworth Corridor. The Council has and will continue to coordinate with freight rail owners and operators affected by the Project. The Final EIS includes a summary of coordination between the Council and freight rail owners and operators in Section 4.4 (see also Appendix N):*

- ***Canadian Pacific Railway (CP)**. CP is the owner of the 6.8-mile Bass Lake Spur freight railroad.*
- ***BNSF Railway (BNSF)**. BNSF is the owner of the Wayzata Subdivision.*
- ***Twin Cities & Western Railroad (TC&W).** TC&W operates freight trains in the Bass Lake Spur, Kenilworth Corridor, and the Wayzata Subdivision. TC&W's operating rights will be maintained per the terms of the existing trackage rights agreement*

Q.3 Appleton Interchange

Summary of Comment: The City of St. Louis Park noted a track rehabilitation project at the Appleton Interchange west of the Twin Cities would allow for a freight reroute, which would reduce freight train traffic in St. Louis Park and Minneapolis.

***Response:** Reroutes for coal trains, including routes through Appleton, were studied in a 2014 report, "SWLRT Engineering Evaluation of Freight Rail Relocation Alternatives" (TranSystems, 2014). The report concluded that operational impediments and implementation challenges make the Appleton freight reroute alternatives unworkable (see Theme G for detail). Improvements to the Appleton freight interchange are outside the scope of the Project. See Section 2.2 of the Final EIS for additional information on the findings within the 2014 report.*

R. Concerns about safety and security

Summary of Comments: Council and FTA received approximately 50 comments on the Draft EIS concerning safety and security. Those commenters included the cities of Minneapolis, St. Louis Park and Hopkins, MPRB, businesses, community groups, and the general public. Comments included concerns about general safety/security issues along the LRT route (including LRT operations close to freight rail), safety issues at specific locations (including residences, schools, trails, recreational facilities, and stations), and emergency service access and response times (during construction and operations).

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS. These proposed adjustments are intended to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with regulations related to safety and security for rail systems, including federal (49 Code of Federal Regulations [CFR] Parts 201 – 213, 214, 219 220, 222, 225, 228, 229, 233, 234, 235, 236, and 674) and state (Minnesota Chapter 312 [HF 3172/SF 2785], Section 299A.017), as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. As a result of the design adjustment process and other activities that have occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the design adjustments and through other activities that have occurred since publication of the Draft EIS.*

FTA and the Council have considered the safety and security impacts of the Project, including safety and security design features, roadway and at-grade crossing design, pedestrian and bicycle trail safety, and the continuation of emergency response services, since publication of the Draft EIS. Section 4.6 of the Final EIS describes the evaluation of safety and security impacts for the Project, as well as the minimization, avoidance, and mitigation measures that will be implemented with the Project. Information from the Final EIS is summarized in the responses to comments below. Comments on the Draft EIS concerning safety and security issues related to the relocation of freight rail out of the Kenilworth Corridor are addressed in Theme C. Comments on specific safety and security issues related to LRT operations within the Kenilworth Corridor are addressed in Theme E.

R.1 General safety/security issues along the LRT route, including LRT operations close to freight rail

Summary of Comments: The Council and FTA received approximately 20 comments on the Draft EIS concerning general safety and security issues related to LRT operations. Those commenters included the City of St. Louis Park, community organizations, businesses, and the general public. The City of St. Louis Park commented that fencing is needed on both sides of all tracks in order to reduce safety risks (e.g., pedestrians trespassing). Other concerns raised include safety issues related to light rail operations close to freight rail operations (i.e., co-location), and security issues or illegal activity within the vicinity of proposed alignment and stations.

Response:

Safety and security design features for LRT

The Project has been designed to provide security and maintain safety for transit riders and the general public (including neighborhoods adjacent to the Project). The Project will conform to FTA's Rail Fixed Guideway Systems; State Safety Oversight Program for Safety and Security Guidance for Recipients with Major Capital

Projects (Circular C 5800.1), covered under 49 CFR Part 633 – Project Management Oversight. The Project will be designed to meet the following minimum objectives, in accordance with FTA guidance:

- *Design for the identification, minimization, and elimination of hazards through the use of appropriate safety design concepts and/or alternative designs;*
- *Use of fixed, automatic, or other protective safety devices, such as warning signals and devices to control hazards that cannot be eliminated; and,*
- *Provide special procedures for hazards that cannot be minimized by the aforementioned devices.*

Further, the design and operations of the Project will conform to the State of Minnesota rail safety regulations that went into effect in July 2014 as part of Minn. Stat. Section 4, Chapter 115E.042. Key features of this legislation include the following: the preparation of prevention plans; increased safety inspections; emergency response training; requirement to plan for emergency responses; and improving response capacity.

In order to maintain safety and security during construction and operation of the Project, the Council will implement the Project's Safety and Security Management Plan (SSMP) (Council, 2014) and the Metro Light Rail Transit Design Criteria (Council, 2015). The purpose of the SSMP is to consider safety and security when designing and constructing the Project. The plan covers requirements for safety and security design criteria, hazard analyses, threat and vulnerability analyses, construction safety and security, operational staff training, and emergency response measures. The purpose of the Metro Light Rail Transit Design Criteria (Council, 2015) is to establish basic design criteria to be used in the design of the Metro Transit's LRT system. The design criteria include design standards and specifications to provide security and/or enhance safety, such as guidance on fire and life safety protocols, track geometry and trackwork, station design, tunnel design, traffic engineering, and structural engineering. These plans and programs also specify actions and requirements of the Council and Metro Transit Police to maintain safety and security during operation of the Project.

Fencing and railings will be designed for fall protection near substantial grade changes and for locations susceptible to pedestrian or bicycle encroachments onto the light rail tracks. Where possible, fencing will be located in the vicinity of at-grade trail or sidewalk crossings, in station areas, and between the light rail alignment or freight rail alignment when adjacent to a trail or sidewalk. The proposed Hopkins OMF will be secured by perimeter fencing to eliminate hazards that could cause risk to the public.

<u>Light rail operations close to freight rail</u>

The design of the Project in the vicinity of freight rail facilities will be developed in accordance with the Metro Light Rail Transit Design Criteria, which includes design standards and specifications to provide security and/or enhance safety. This includes operations and maintenance safeguards to prevent LRT operational derailments, emergency guard rails (i.e., a rail or other structure laid parallel with the running rails of the track to keep derailed wheels adjacent to the running rails) where appropriate, and corridor protection barriers (strong barriers, commonly referred to as "crash walls," placed between freight rail and light rail tracks) where either light rail or freight rail tracks are elevated above the adjacent tracks or the clearance between the centerline of the light rail tracks and the centerline of the freight tracks is less than 25 feet. In addition, where clearance between the centerline of the light rail tracks and the centerline of the freight tracks is less than 50 feet, intrusion detection to detect freight or light rail derailment will be installed, where appropriate. These protective design features will promote safe and independent operation of light rail and freight rail within their respective alignments and in the shared corridor.

<u>Security and illegal activity</u>

Security within the proposed light rail right-of-way will be the joint responsibility of Metro Transit Police and local law enforcement authorities. Three Rivers Park District Department of Public Safety and Minneapolis Parks Police Department are the law enforcement agencies responsible for providing a safe environment on the regional trails within the study area, such as the Cedar Lake LRT Regional Trail and the Kenilworth Trail. Metro Transit has its own licensed police force to ensure public safety on and near the transit system. Transit police will routinely patrol the proposed stations and LRT alignment, as well as nearby bus routes and bus stops. Transit police officers will provide security at light rail stations and in light rail vehicles.

R.2 Safety issues at specific locations

Summary of Comments: The Council and FTA received approximately 20 comments on the Draft EIS concerning safety issues at specific locations, including residences, schools, trails, recreational facilities, and stations. Those commenters included the cities of St. Louis Park, Hopkins, and Minneapolis, and MPRB, community organizations, businesses, and the general public.

Commenters stated concerns over vehicle, pedestrian, and bicycle safety of at-grade roadway/trail/sidewalk crossings, and access to proposed stations. Commenters also expressed concern over the safety of pedestrians and bicyclists accessing the neighborhoods, residences, schools, playgrounds, and recreational facilities near the proposed light rail alignment. Specific comments included concerns about the potential for crashes between LRT trains and vehicles/pedestrians/bicycles, as well as congestion-induced crashes (i.e., traffic backing up at crossings while LRT is passing).

The City of St. Louis Park commented on the need to acknowledge the safety concerns related to the co-location of the regional trail (Cedar Lake Regional LRT Trail) with light rail and freight rail. The City of Hopkins expressed concern about pedestrian and bicycle safety at Downtown Hopkins and Blake Stations, and the need to provide safe roadway crossings in these areas. The City of Minneapolis commented on the need to provide pedestrian safety at at-grade crossings. MPRB commented on the safety of trails and at parks adjacent to the Project that are under its jurisdiction, including the Cedar Lake Regional LRT Trail, the Kenilworth Trail, Cedar Lake Park (including East Cedar Beach), Cedar Lake Parkway, and Park Siding Park. MPRB and others also commented on concern over ice and debris falling from the bridges over the Kenilworth Channel, noting the Channel is used year round.

Other commenters mentioned safety concerns at the Wooddale Avenue, Beltline Boulevard, Blake Road, and 21st Street intersections and the need to provide safe access to all proposed stations. Other locations of concern were the area of Smetana Road in Minnetonka, the Cedar Lake Parkway crossing in Minneapolis, and the Minneapolis Farmers Market.

Response: *Since publication of the Draft EIS, the Council advanced the design of the Project to include a more detailed understanding of safety measures that will be incorporated into the Project. As part of this process, the Council coordinated with the affected cities along the route and with MPRB. Safety and security at specific locations like trails, parks, trails and venues, such as the Minneapolis Farmers Market, will be provided by installing measures to keep pedestrians and bicyclists off the LRT alignment and provide opportunities to safely cross the LRT alignment at grade-separated crossings or at-grade crossings with appropriate safety features. Some crossings identified as at-grade crossings in the Draft EIS will now be grade-separated, including the Wooddale Avenue intersection. A shallow tunnel in the Kenilworth Corridor will result in the LRT alignment being in a tunnel in the vicinity of Park Siding Park. The tunnel will also eliminate an at-grade LRT crossing at Cedar Lake Parkway. Safety of bicyclists and pedestrians as well as safety and security at stations is discussed in Sections 4.5 and 4.6 of the Final EIS, respectively, and summarized below.*

<u>At-grade roadway, trail, and sidewalk crossing safety</u>

The Project will include new at-grade LRT crossings of existing roadways and trails. At-grade roadway crossings have been designed to include crossing-safety controls such as flashing lights, vehicle and pedestrian gates, and traffic signals, where appropriate (see Table 4.6-1 in the Final EIS for additional information). Light rail vehicles will also sound horns or bells when entering a station, and when approaching at-grade roadway crossings, except in locations where a quiet zone is implemented (e.g., horns are not routinely sounded in quiet zones, but bells would still be sounded). In these locations, additional safety measures (e.g., non-traversable medians, wayside horns/bells, etc.), will be installed in accordance with the Quiet Zone Final Rule (49 CFR Part 222).

In some cases, the roadway crossing will include crossings for sidewalks and trails. In these locations, the crossings will be designed to maintain pedestrian and bicycle safety based on current industry standards. Industry standards include but are not limited to flashing lights with an audible warning to notify pedestrians and bicyclists of a train's arrival at crossing locations, detectable warning strips (i.e., textured crossing material), and signs. For locations where the Project includes at-grade crossing of co-located light rail and freight rail tracks, crossing controls will be designed to promote pedestrian and bicycle safety and will include space between

the freight tracks and the light rail tracks to allow sidewalk and trail users to have refuge space in the event of a freight and light rail train passing simultaneously. In addition, these crossings will be equipped with detectable warnings and fences lining the crossing paths to bring attention to the freight or light rail crossing locations. The design details of pedestrian and bicycle safety features will be made during Engineering and finalized prior to construction. All reconstructed pedestrian and bicycle facilities will be designed to maintain safety, in accordance with the Metro Light Rail Transit Engineering Criteria (Council, 2015).

The Council will maintain all existing public bicycle and pedestrian connections (including the Cedar Lake LRT Regional Trail, the Kenilworth Trail, and the Cedar Lake Trail) although some trails or sidewalks may be reconfigured. All trails adjacent to an LRT station will have a connection to the station; wayfinding, regulatory and warning signage and markings of trail intersections will be included in the Project to address conflicting movements, where appropriate.

Kenilworth Channel recreational users

The proposed trail and LRT bridges over the Kenilworth Channel have been designed to span the channel with no piers extending into the water (see Section 6.7 and Appendix E of the Final EIS). The reconstructed freight bridge will include piers in the water, but has been designed to allow for the continuation of park uses and recreational activities. Recreational watercraft will be able to navigate the channel connection between Cedar Lake and Lake of the Isles in the same manner they do currently. To prevent ice or snow from collecting on the bridge and dropping into the channel area, the bridge railings and drainage for the bridge deck surfaces will be designed to contain water/snow/ice and drain to one end of each bridge. Falling debris from passing freight trains or LRVs, or trail users dropping objects down into the channel from the trail bridge, are highly unusual occurrences, and freight trains and trails currently use bridges to cross the channel without these occurring on any kind of regular basis; high containment fences to prevent such occurrences are not part of the Project.

Station safety

Avoidance of potential safety issues at new light rail stations (e.g., station area security/crime and station area pedestrian and bicycle accessibility) will be achieved through implementation of the Project's SSMP (Council, 2014) and the Metro Light Rail Transit Design Criteria (Council, 2015). The purpose of the SSMP is to consider safety and security when designing, constructing, and operating the Project. The plan covers requirements for safety and security design criteria, hazard analyses, threat and vulnerability analyses, construction safety and security, operational staff training, and emergency response measures. The purpose of the Metro Light Rail Transit Design Criteria (Council, 2015) is to establish basic design criteria to be used in the design of the Metro Transit's LRT system. The design criteria include design standards and specifications to provide security and/or enhance safety, such as guidance on fire and life safety protocols, track geometry and trackwork, station design, tunnel design, traffic engineering, and structural engineering. These plans and programs also specify actions and requirements of the Council and Metro Transit Police to maintain safety and security during operation of the Project. As described in Section 4.6 of the Final EIS, Metro Transit has its own licensed police force which will provide safety and security at proposed station. Metro Transit also has an extensive community service officer (CSO) program. CSOs are studying law enforcement but are not yet sworn officers. These future licensed officers monitor closed-circuit TV and assist with traffic and crowd control. Three Rivers Park District Department of Public Safety and Minneapolis Park and Recreation Board Police Department are the law enforcement agencies responsible for providing a safe environment on the regional trails within the study area, such as the Cedar Lake LRT Regional Trail and the Kenilworth Trail.

Station areas will continue to be designed according to best practices for safety and security, including emergency equipment, public address systems, video cameras, emergency telephones, and closed circuit television. The public address system, with both audio speakers and signs, will convey information to people with disabilities in compliance with ADA requirements. Lighting for proposed station areas and park-and-ride lots, as well as vehicular and pedestrian circulation areas, will be consistent with the Metro Light Rail Transit Design Criteria (Council, 2015). Emergency lighting will be provided in all public areas, including platforms, pedestrian facilities, vehicular traffic areas, bus loading zones, and park-and-ride lots.

R.3 Emergency service access and response times during construction and operations

Summary of Comments: *The Council and FTA received approximately 15 comments on the Draft EIS concerning emergency service access and response time during construction and operations. Those commenters included the City of Minneapolis, MPRB, community organizations, and the general public.*

Several commenters expressed concern over access and response times for emergency responders (e.g., police, fire, and ambulance). Some commenters, including MPRB and the City of Minneapolis, requested that the Council coordinate with the City of Minneapolis Police Department, Minneapolis Parks Police Department, Minneapolis Fire Department, and emergency medical responders in the development of safety and security plans and the final design of the Project. The MPRB expressed concern about emergency responder access to parks and the East Cedar Beach. The City of Minneapolis commented that all stations must have adequate police and fire access.

Response: *Under the Project, emergency vehicle access to areas within the vicinity of the Project will be maintained. In particular, access via public roadways will be maintained by providing either at-grade, above-grade, or below-grade light rail crossings of roadways. In the few areas where existing roadway connections or driveways to properties will be affected by the Project, alternate roadway connections or driveways will be provided for continued emergency vehicle access (see Section 4.6.3.1). Emergency vehicle access to individual properties will also be maintained under the Project, either: (1) the existing vehicular access to a property will be maintained; or (2) alternate vehicular access will be provided where existing vehicular access to a property will be closed to accommodate the Project. In addition, access for emergency response vehicles to parks and trails will be maintained at all times during construction and operation of the Project in accordance with all relevant laws and standards, as appropriate.*

In locations where there will be at-grade light rail crossings of roadways, such as West 21st Street (which provides access to East Cedar Beach), the potential exists for increases in emergency response time as a result of delay to emergency vehicles while LRVs are in the crossing. To help avoid or minimize delays to emergency vehicles at proposed at-grade light rail crossings, the Council will coordinate with emergency services providers on identification of alternative crossing routes that will avoid the proposed at-grade light rail crossings and the potential for delay. Additional coordination will occur through the LRT Fire Life Safety and Security Committee (LRT FLSSC), as described in the Project's SSMP (Council, 2014).

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

S. Concerns about Section 4(f) and Section 106 properties

Summary of Comments: The Council and FTA received approximately 60 comment letters related to Section 4(f) and/or Section 106 protected properties. The commenters included the cities of St. Louis Park and Minneapolis, EPA, MPRB, DOI, and TC&W, as well as businesses, community groups, non-profit organizations, and the general public. These comments are addressed below and are categorized according to four general categories: concerns about Section 4(f) and/or Section 106 process and analysis; concerns about impacts to Section 4(f) parkland and recreation properties; concerns about impacts to Section 4(f) historic properties; and concerns about impacts to Section 106 historic properties. EPA provided comments on several Section 4(f) and Section 106 related topics. The response to the EPA comments is located in Appendix N of the Final EIS.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. The Project team developed and evaluated the design adjustments in response to comments submitted on the Draft EIS, including proposed adjustments to achieve the following: accommodate local goals and objectives; improve the performance of the proposed light rail extension; reduce project costs; and avoid, minimize, and mitigate the Project's adverse environmental impacts. The design adjustments also reflect additional analyses and evaluations, including compliance with Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act, as well as incorporation of various avoidance, minimization, and mitigation measures into the Project. In particular, the design adjustments incorporated into the Project will result in the co-location of light rail and freight rail in the Kenilworth Corridor (LRT 3A-1) and will not result in the relocation of existing freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The Final EIS is based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS, and that design incorporates design adjustments and freight rail modifications made since publication of the Draft EIS. As a result of the design adjustment process and other activities that occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the adjustments made during this process.*

Section 4(f)-Related

Chapter 7 of the Draft EIS included the project's Draft Section 4(f) Evaluation, which was circulated for public and agency review concurrently with the Draft EIS (the comment period closed on December 31, 2012). In addition to other alternatives, the Draft Section 4(f) Evaluation included an assessment of LRT 3A-1, which was designed to allow for the continued operations of TC&W freight trains currently operating along the Bass Lake Spur and Kenilworth Corridor, similar to the current proposed Project. The Draft Section 4(f) Evaluation contained the following preliminary use determinations:

- *A 0.277-acre use of Nine Mile Creek Conservation Area*
- *A use of the Kenilworth Lagoon (historic property – acreage of use is not specified in the Draft EIS)*
- *A 0.016-acre temporary occupancy during construction of Park Siding Park (park property)*
- *A 0.81-acre use of Cedar Lake Park (park property)*
- *A 0.07-acre use of Cedar Lake Parkway (historic property)*

A Draft Section 4(f) Evaluation Update was included as Section 3.5 of the Supplemental Draft EIS, which was circulated for public and agency review concurrently with the Supplemental Draft EIS (the comment period closed on July 21, 2015). The Draft Section 4(f) Evaluation Update was prepared and included in the Supplemental Draft EIS due to: (1) various design adjustments to the LPA and the retention of freight rail service within the Kenilworth Corridor (LRT 3A-1); (2) FTA, MnHPO, MnDOT Cultural Resources Unit, and the Council had advanced the project's Section 106 process for historic properties, including reaching preliminary determinations of effect; and (3) FTA had advanced the Section 4(f) process, including additional coordination with officials with jurisdiction and reaching a revised set of preliminary Section 4(f) determinations. The Draft Section 4(f) Evaluation Update contained the following updated preliminary use determinations:

- *A non* de minimis *use (0.4 acre) of one historic property (Kenilworth Lagoon/contributing element of the Grand Rounds Historic District);*

- *A* de minimis *use of three park properties (Kenilworth Channel/Lagoon park property [0.3 acre], Cedar Lake Park [0.7 acre], and Bryn Mawr Meadows Park[0.4 acre]) and one historic property (St. Paul, Minneapolis & Manitoba Railroad Historic District [1.5 acre]); and*
- *A temporary occupancy of one park (Purgatory Creek Park [0.3 acre]) and two historic properties (Minikahda Club [0.02 acres] and Cedar Lake Parkway [reconstruction of 320 feet of the parkway]).*
- *Section 4(f) was found to not apply to the Nine Mile Creek Conservation Area because its primary purpose is not as a park or recreation area but rather as a conservation area that is not a designated wildlife or waterfowl refuge.*

In January 2016, FTA and the Council published the Amended Draft Section 4(f) Evaluation *for public and agency review and comment (the comment period closed on February 25, 2016). The* Amended Draft Section 4(f) Evaluation *included two new preliminary* de minimis *impact determinations for Unnamed Open Space B and the Opus development trail network, both in the City of Minnetonka.*

*FTA's determination within the Final Section 4(f) Evaluation is, that as a result of the Project, there will be a Section 4(f) use (non-*de minimis*) of the Kenilworth Lagoon/Grand Rounds Historic District. Further, FTA determined that there is no prudent and feasible alternative to the Section 4(f) use of the Kenilworth Lagoon/Grand Rounds Historic District and that the Project will cause the least overall harm in light of the statute's preservation purpose. Finally, FTA has determined that all possible planning to minimize harm to the Kenilworth Lagoon/Grand Rounds Historic District has occurred through the Section 106 process leading to the Project's Section 106 MOA (see Appendix H).*

*In addition to the non-*de minimis *Section 4(f) use of the Kenilworth Lagoon/Grand Rounds Historic District, FTA determined within the Final Section 4(f) Evaluation the following:*

- *A* de minimis *impact on four park properties (i.e., Unnamed Open Space B, the Opus development trail network, Kenilworth Channel/Lagoon park property, and Bryn Mawr Meadows Park) and one historic property (i.e., St. Paul, Minneapolis & Manitoba Railroad Historic District); and*
- *Temporary occupancies of two park properties (i.e., Purgatory Creek Park and Cedar Lake Park) and two historic properties (i.e., Minikahda Club and Cedar Lake Parkway).*

FTA and the Council will continue to work with officials with jurisdiction during construction to implement mitigation measures specified in the Final Section 4(f) Evaluation and Section 106 MOA.

Section 106-Related

Section 3.4 of the Draft EIS assessed potential cultural resource impacts for all alternatives, including LRT 3A-1. Following is a summary of the historic properties where potential impacts under LRT 3A-1 were anticipated:

- *Minneapolis and St. Louis RR Depot*
- *Chicago Milwaukee and St. Paul Railroad Depot, St. Louis Park*
- *Cedar Lake Parkway, Grand Rounds*
- *Kenilworth Lagoon*
- *Grand Rounds Historic District*

Within the Final EIS, FTA, in consultation with MnHPO and other consulting parties, made final Section 106 findings of adverse effect for the following historic properties (see Section 3.5 and Appendix H):

- *Chicago Milwaukee and St. Paul Railroad Depot, St. Louis Park*
- *Kenilworth Lagoon*
- *Grand Rounds Historic District*
- *Archaeological sites 21HE0436 and 21HE0437*

The Section 106 MOA in Appendix H stipulates measures associated with the adversely affected properties that will be incorporated into the Project. The Section 106 MOA also stipulates measures to avoid adverse effects on other properties that have been incorporated into the Project. FTA and the Council will also continue to work with affected agencies, property owners, and communities on issues related to Section 106 historic properties after the publication of the Final EIS through the implementation of the Section 106 MOA.

S.1 Section 4(f) and/or Section 106 process and analysis

Summary of Comments: FTA and the Council received several comments concerning the Section 4(f) and/or the Section 106 processes and analyses, including from the cities of St. Louis Park and Minneapolis, MPRB, STB, EPA, and DOI. Several of those comments stated that the Section 4(f) Evaluation presented in the Draft EIS was insufficient per the applicable statutes. Several of these comments noted that a Section 4(f) analysis must contain a comprehensive assessment of potential use to all Section 4(f) properties and must contain a full discussion of avoidance and measures to minimize harm to Section 4(f) park and historic properties. The STB stated that they do not have any comments regarding the Section 4(f) analysis in the Draft EIS. EPA commented on the Section 4(f) applicability to the stream channel connecting Brownie Lake and Cedar Lake, which would have been affected by LRT 3A (freight rail relocation alternative) (see Appendix N). Several commenters noted that the Section 106 coordination process with the MnHPO was not fully documented and that more detailed analysis of Section 106 properties was needed. STB indicated that they wished to be listed as a Section 106 coordinating agency, included in the Section 106 process, and in the development and execution of the Project's Section 106 Agreement.

Response:

Section 4(f)-Related

The Section 4(f) process, analysis, and documentation for the Final EIS was conducted and prepared in conformity with 23 CFR 774 (see also the Section 4(f) Policy Paper*; FHWA, 2012). For the Section 4(f) process, FTA and the Council coordinated with applicable officials with jurisdiction for the Section 4(f) properties, including MPRB, the cities of Eden Prairie and Minnetonka and the MnHPO. The Final EIS includes the Project's Final Section 4(f) Evaluation (see Chapter 6), which considers if the Project has a temporary or permanent use of qualifying publicly owned and publicly accessible parks and recreation areas, historic resources (independent of ownership), and publicly owned wildlife and waterfowl refuges protected under Section 4(f). The assessment of constructive use takes into account "proximity impacts" such as noise, vibration, visual, and access impacts, and uses analysis results taken from applicable Final EIS sections. A comparison of FTA's Section 4(f) property use determinations between the Draft Section 4(f) Evaluation, Draft Section 4(f) Evaluation Update, Amended Draft Section 4(f) Evaluation, and Final Section 4(f) Evaluation is provided in the Final Section 4(f) Evaluation. In the Final Section 4(f) Evaluation, FTA also assessed proximity impacts to parks not used by the Project and determined that there will be no proximity impacts that will substantially impair the activities, features, and attributes that qualify the properties for Section 4(f) protection. All of FTA's Section 4(f) determinations in the Draft Section 4(f) Evaluation, Draft Section 4(f) Evaluation Update, and Amended Draft Section 4(f) Evaluation were preliminary and FTA's determinations in the Final Section 4(f) Evaluation are final. The rationale for FTA's final Section 4(f) determinations described above are documented in Section 6.7 and supporting documentation is provided in Appendix I of the Final EIS.*

FTA and the Council conducted its continued Section 4(f) coordination activities following publication of the Draft EIS, including coordination as appropriate with officials with jurisdiction. Section 4(f) agency coordination is documented in Chapter 6 and Appendix I of the Final EIS, including written letters of concurrence from applicable officials with jurisdiction for de *minimis impact and temporary occupancy determinations. For all historic properties evaluated under Section 4(f), MnHPO is the official with jurisdiction. Section 4(f) agency coordination activities were coordinated with the drafting of the Project's Section 106 MOA for historic resources, including the Kenilworth Lagoon/Grand Rounds Historic District (see Appendix H of the Final EIS). See Theme L in this appendix for more information regarding concerns about NEPA process, public involvement, and agency coordination.*

Section 106-Related

- *In accordance with 36 CFR 800.5, FTA, MnDOT CRU and the Council, in consultation with the MnHPO and other consulting parties, reviewed Project elements and applied the criteria for an adverse effect under Section 106 to determine if the Project would result in any adverse effects to historic properties within the Project's APEs. This consultation considered anticipated long-term or short-term direct and indirect effects on the identified architecture/history and archaeological properties from construction and operation of the Project.*

As noted earlier in this section, FTA made Section 106 findings of adverse effect for the following historic sites: Grand Rounds Historic District, the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot, the Kenilworth Lagoon, and archaeological sites 21HE0436 and 21HE0437. See Section 3.5.1.3 of the Final EIS for a description of the criteria and process used to reach a determination of effect. Tables 3.5-2 and 3.5-3 of the Final EIS summarize potential effects on architecture/history and archaeological properties considered; the rationale for the finding of effect for each property, as determined through the Section 106 process; and measures that have been, or will be, integrated into the Project's design to avoid, minimize and mitigate adverse effects on historic properties. These measures are documented in the Project's Section 106 MOA. A detailed discussion of the Project's effects on each historic property, including the rationale and final finding of effect for each property, and the final Section 106 determination of effect of the Project on historic properties as a whole are contained in the Assessment of Effects report in Appendix H.

FTA, is responsible for the Project's implementation of the Section 106 consultation process, which spanned from 2008 through 2016. A listing of the Project's Section 106-related meetings is included in Section 3.5 and included numerous Section 106 consulting party meetings. Section 106 meeting-related documentation is included in Appendix C. Section 106-related agency correspondence is documented in Appendix N. Signatories and invited signatories to the Section 106 MOA include the FTA, MnHPO, MnDOT and the Council. As documented in the Draft EIS, the STB agreed to become a Cooperating Agency in August 2012, because several alternatives under evaluation at the time would have required STB approval to be implemented. Subsequent to the publication of the Draft EIS the freight rail modifications to be incorporated into the proposed action can be implemented without STB approval. As such, FTA and the STB agreed that STB would participate in the Project's NEPA process, but there would be no need for STB's expertise in the Project's NEPA review. Consequently, there would be no need for STB to formally take part in the Project's Section 106 process.

In accordance with 36 CFR 800.8, Section 106 consultation efforts were coordinated with the NEPA process and related outreach activities and events. In particular, opportunities for the public to review information pertaining to and provide comments related to steps in the Section 106 process were incorporated, as appropriate, into public meetings related to NEPA, design and engineering processes, such as open houses held on station design options near historic properties. At these meetings, information was shared summarizing the steps in the Section 106 process, historic properties identified, and effects to historic properties. A list of meetings related to public involvement efforts is included in Section 3.5.

S.2 Impacts to Section 4(f) parkland and recreation properties

Summary of Comments: Several commenters, including the cities of Minneapolis and St. Louis Park, TC&W, and MPRB, stated that the description of potential use of various Section 4(f)-protected recreation properties in the vicinity of the Kenilworth Corridor was unclear and that subsequent preliminary Section 4(f) determinations were unsubstantiated. The City of Minneapolis and MPRB expressed concerns about Project impacts to these properties, including preserving the natural setting of these places. USEPA noted that the Project should be designed to avoid impacts to Nine Mile Creek Conservation Area. One commenter noted that it should be clearly stated in the EIS that the LRT regional trails within HCRRA right-of-way are not protected under Section 4(f). Another commenter noted that coordination with commuter cyclists using local trails in the Kenilworth Corridor during construction should be undertaken by the Project. MPRB commented that parkland altered by the Project (e.g., as a result of temporary construction activities) should be returned to the same or better condition as before construction of the Project, and that park property should not be used permanently as part of the Project. Several commenters expressed concerns about impacts to the Grand Rounds Scenic Byway and noted that the Section 4(f) analysis did not include a discussion of potential use of the Byway. See Theme N.1 for responses to non-Section 4(f)-specific comments regarding park and recreation properties.

Response: *As described above, since publication of the Draft EIS and the close of the Draft EIS comment period, the Council has incorporated design adjustments, including freight rail modifications, into the Project. These design adjustments also reflect additional analyses and evaluations, including compliance with Section 4(f), as well as incorporation of various avoidance, minimization, and mitigation measures incorporated into the Project. As a result of the design adjustment process and other activities that occurred since publication of the Draft EIS,*

many of the comments received on the Draft EIS have been addressed through incorporation of the design adjustments made since those comments were received. Section 6.2 of the Final EIS describes the Section 4(f) determinations that have changed from the Draft EIS (and Supplemental Draft EIS) to the Final EIS.

Following is a description of the changes in Section 4(f) determinations that have occurred since publication of the Draft EIS for park and recreation properties. Note that in all cases, Section 4(f) determinations in the draft Section 4(f) Evaluations completed for the Project were characterized as potential or preliminary and that within the Final EIS those Section4(f) determinations are final, including written concurrence from the appropriate official with jurisdiction, where applicable.

- ***Purgatory Creek Park.*** *Due to design adjustments in Eden Prairie (addressed in Theme F of this appendix), the Project will include temporary construction activities within Purgatory Creek Park. The portion of the park to be temporarily occupied during construction will be restored to existing conditions or better. FTA, with written concurrence from the City of Eden Prairie, determined that there will be no permanent Section 4(f) use of Purgatory Creek Park and that proposed construction activities within the park will meet the criteria for a Temporary Occupancy Exception.*
- ***Nine Mile Creek Conservation Area.*** *As noted in the Final Section 4(f) Evaluation (Chapter 6 of the Final EIS), Section 4(f) was found not to apply to the Nine Mile Creek Conservation Area because its primary purpose is not as a park or recreation area but rather as a conservation area/open space that is not a designated wildlife or waterfowl refuge. Section 3.6 of the Final EIS provides an assessment of impacts to the Nine Mile Creek Conservation Area.*
- ***Opus Development Area Trail Network.*** *The Project will permanently alter relatively short sections of the Opus development area trail network to accommodate the introduction of the light rail alignment, Opus Station, and related improvements. The design of the Project has been developed to minimize the area of the trail network to be modified. Further, Project designs have ensured and will continue to ensure that all existing trail connections will be maintained during and after construction of the Project. FTA requested and received written concurrence from the City of Minnetonka regarding FTA's final* de minimis *impact determination for the Opus development area trail network.*
- ***Park Siding Park.*** *As a result of design adjustments made since publication of the Drat EIS, the Project's temporary occupancy of the park described in the Draft EIS will be avoided.*
- ***Kenilworth Channel/Lagoon, an element of the Minneapolis Chain of Lakes Regional Park.*** *As described in Chapter 6 of the Final EIS, design adjustments and mitigation measures have been incorporated into the Project that will avoid adverse impacts to the activities, features, and attributes that qualify the Kenilworth Channel/Lagoon, an element of the Minneapolis Chain of Lakes Regional Park, for Section 4(f) protection. For example, the horizontal clearances between the banks and the new piers will be of sufficient width to accommodate recreational activities that occur within the channel/lagoon. FTA concluded, and the MPRB concurred in writing that there will be a Section 4(f)* de minimis *use of Kenilworth Channel/Lagoon.*
- ***Cedar Lake Park.*** *Since publication of the Draft EIS, the design of the Project has been adjusted to avoid a Section 4(f) use of Cedar Lake Park. The Project will, however, result in temporary construction activities within Cedar Lake Park, particularly the extension of a sidewalk on West 21st Street and the adjustment to the alignment of North Cedar Lake Trail at Cedar Lake Junction. FTA, with written concurrence from the MPRB, determined that those construction activities meet the criteria for a Section 4(f) temporary occupancy exception. In the Draft EIS, it was thought that MPRB owned two parcels of land west of the HCRRA right-of-way and north of the Kenilworth Lagoon, which will be acquired for the Project and that use (0.81 acres) was ascribed to Cedar Lake Park. Through real property research conducted by MnDOT right-of-way staff, it was subsequently determined that this land is currently owned by BNSF and, as such, purchase of those properties from BNSF will not constitute a Section 4(f) use because those properties are privately owned.*
- ***Bryn Mawr Meadows Park.*** *The Project will result in a variety of permanent and short-term (construction-related) changes to Bryn Mawr Meadows Park. In particular, the Luce Line Trail will be realigned within Bryn Mawr Meadows Park to allow the trail to cross over a new bridge that will cross BNSF freight tracks to the east, connecting to the proposed Van White Station and Cedar Lake Trail (which provides connections to the*

Kenilworth Trail). A new bicycle/pedestrian bridge will replace the existing bridge that crosses BNSF freight rail tracks toward the south. FTA concluded, and the MPRB concurred in writing, that there will be no adverse impacts to the activities, features, and attributes of Bryn Mawr Meadows Park and, as a result, that there will be a Section 4(f) de minimis *use of Bryn Mawr Meadows Park.*

- ***Commuter Trails within HCRRA Right-of-Way.*** *Section 4.5 and Chapter 6 of the Final EIS note that the existing trails within the HCRRA right-of-way in the Kenilworth Corridor (Cedar Lake Trail, Kenilworth Trail, Cedar Lake LRT Regional Trail, and Minnesota Bluffs LRT Regional Trail) are an interim use allowed under permits granted by HCRRA to the trail owner. Because they are an interim use within an established transportation right-of-way, these trails are not subject to protection as Section 4(f) properties (as per 23 CFR 774.11[h]). See Theme P-5 for more information regarding concerns about Project impacts to non-Section 4(f) bicycle and pedestrian facilities.*
- ***Grand Rounds National Scenic Byway.*** *As noted in the Final Section 4(f) Evaluation, the Grand Rounds National Scenic Byway, which includes Cedar Lake Parkway, is not a Section 4(f)-protected park/recreation property (i.e., it was designated a National Scenic Byway by the FHWA in 1998). The designation of a road, such as Cedar Lake Parkway, as a scenic byway is not intended to create a park or recreation area within the meaning of 49 U.S.C. 303 or 23 U.S.C. 138 and as such it is not considered a Section 4(f) park/recreation property.*

S.3 Impacts to Section 4(f) historic properties

Summary of Comments: FTA and the Council received several comments expressing concern about the Section 4(f) evaluation of historic properties, including from the cities of St. Louis Park and Minneapolis and MPRB. Commenters expressed concerns about the adequacy of that analysis. The evaluation of three historic properties within the Draft Section 4(f) Evaluation were highlighted in the comments: Cedar Lake Parkway; Kenilworth Lagoon; and the Grand Rounds Historic District.

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, FTA and Council have advanced the Project's Section 4(f) and Section 106 processes, to determine the Project's use of Section 4(f) protected historic properties. The Section 4(f) determinations for historic properties are based on the Section 106 determinations of effect for those properties and on the Section 106 work to avoid or resolve any adverse effects to the historic properties. As a result of the design adjustment process and other activities that occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the design adjustments made since those comments were received.*

Following is a description of the changes to Section 4(f) determinations for historic properties that have occurred since publication of the Draft EIS. Note that in all cases, Section 4(f) determinations in the Draft Section 4(f) Evaluations for historic properties were characterized as potential or preliminary, and that within the Final Section 4(f) Evaluation those Section 4(f) determinations are final, including MnHPO's written concurrence as the official with jurisdiction, where applicable.

- ***Minneapolis & St. Louis Railway Depot.*** *FTA determined that there will be no permanent or temporary Section 4(f) use of the Minneapolis & St. Louis Railway Depot historic property under the Project and that, based on the associated Section 106 finding of No Adverse Effect, the proximity impacts associated with the Project will not result in a Section 4(f) constructive use of the property; as such, there will be no Section 4(f) use of the property.*
- ***Minikahda Club.*** *The Project will result in some minor temporary construction activities within the Minikahda Club. FTA, MnDOT CRU and Council staff consulted with MnHPO through the Section 106 process to review the project's construction plan in the vicinity of the Minikahda Club. MnHPO concurred in writing with FTA's determination that the Section 4(f) temporary occupation exception criteria will be met by the Project.*
- ***Cedar Lake Parkway.*** *As a result of the design adjustments made since publication of the Draft EIS, the proposed light rail alignment will be in a shallow tunnel that will be constructed between West Lake Street and just south of the Kenilworth Lagoon. As a result, the light rail alignment will be in a tunnel under Cedar*

Lake Parkway, rather than on a bridge over Cedar Lake Parkway. The freight rail alignment will remain at-grade across Cedar Lake Parkway. Because the light rail alignment will be in a tunnel between West Lake Street and just south of the channel, visual impacts at Cedar Lake Parkway will be substantially minimized. As noted in the Final Section 4(f) Evaluation, FTA made the following final Section 4(f) determinations: that there will be no permanent Section 4(f) use of the Cedar Lake Parkway historic resource property under the Project; that the proximity impacts associated with the Project will not result in a Section 4(f) constructive use of the Cedar Lake Parkway; and that the temporary construction activities under the Project that will occur within the Cedar Lake Parkway will meet the criteria for a temporary occupancy exception, including written concurrence from MnHPO.

- ***Kenilworth Lagoon/Grand Rounds Historic District.*** *As described in the Final Section 4(f) Evaluation, FTA determined that there will be a non-*de minimis *use determination for the historic Kenilworth Lagoon based on the MnHPO's final determination of a Section 106 adverse effect on the historic property. In accordance with Section 4(f), the non-*de minimis *use determination for the Kenilworth Lagoon included a full evaluation of all potential feasible and prudent avoidance alternatives to the use of the Kenilworth Lagoon; all possible planning to minimize harm to the historic site, and an assessment of least overall harm in light of the statute's preservation purpose. Measures associated with the Kenilworth Lagoon that will be incorporated into the Project are stipulated in the Project's Section 106 MOA, which is included in Appendix H and in the appropriate sections of Chapter 6 of the Final EIS.*
- ***St. Paul, Minneapolis & Manitoba Railroad Historic District****. While a small portion of the St. Paul, Minneapolis & Manitoba Railroad Historic District will be incorporated into the Project, the Project will result in a Section 4(f) de minimis impact to the property. FTA, with concurrence from the MnHPO and in consultation with other consulting parties, determined under Section 106 that there will be No Adverse Effect to the historic property.*

S.4 Impacts to Section 106 historic properties

Summary of comments: Several commenters, including, the cities of Hopkins, St. Louis Park and Minneapolis, EPA, and MPRB expressed concerns about impacts to the historic Cedar Lake Parkway and stated that the analysis regarding the potential effects to Cedar Lake Parkway was insufficient. Similar comments were expressed by several commenters with regard to the historic Kenilworth Lagoon and the Grand Rounds Historic District, as well as other historic properties. In particular, the City of Hopkins commented that the Project should avoid or minimize any impacts to the Minneapolis & St. Paul Railway Depot. The City of Minneapolis noted that it supported the analysis of potential effects included in Appendix H of the Draft EIS and that it supports efforts to minimize project impacts on identified historical or cultural resources. EPA noted that the Draft EIS did not contain information on the status of consultation with MnHPO and recommend an MOA with MnHPO be developed (See Appendix N).

Response: *Since publication of the Draft EIS and the close of the Draft EIS comment period, FTA, MnDOT CRU and Council have advanced the Project's Section 106 process to determine the Project's effects on protected historic properties and to work to resolve any adverse effects. As a result of the design adjustment process and other activities that occurred since publication of the Draft EIS, many of the comments received on the Draft EIS have been addressed through incorporation of the design adjustments made since those comments were received, determinations of effect made under Section 106 and development of a Section 106 MOA.*

Following is a description of the changes to Section 106 determinations that have occurred since publication of the Draft EIS for historic properties. Note that in all cases, Section 106 determinations in the Draft EIS were characterized as potential or preliminary and that within the Final EIS those Section 106 determinations are final, including MnHPO's written concurrence. Note that there were potential Section 106 determinations of effect in the Draft EIS for properties that would have been affected by alternatives other than LRT 3A-1 that are not affected by the Project, which is based on LRT 3A-1 (co-location).

- ***Minneapolis & St. Louis Railway Depot.*** *Due to design adjustments made since publication of the Draft EIS and avoidance stipulations in the Section 106 MOA, FTA, with MnHPO's concurrence, determined that the Project will result in No Adverse Effect on the Minneapolis & St. Louis Railway Depot.*

- ***Chicago, Milwaukee, St. Paul & Pacific Railroad Depot.*** *FTA determined that construction of Project infrastructure would result in an adverse effect on the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot. Specifically, the introduction of a solid, approximately eight to 11 foot tall noise wall between the depot and the railroad corridor with which it is associated will sever the direct visual connection and relationship between the depot and the railroad, thereby altering an important characteristic that qualifies the depot for the NRHP in a way that diminishes its integrity of setting, feeling, and association. FTA also determined that stipulations in the Section 106 MOA will resolve that adverse effect.*
- ***Minikahda Club.*** *While design adjustments since publication of the Project will result in some minor temporary construction activities within the Minikahda Club, FTA, with MnHPO's concurrence, determined that the Project will result in No Adverse Effect on the Minikahda Club.*
- ***Cedar Lake Parkway.*** *As a result of the design adjustments made since publication of the Draft EIS, the proposed light rail alignment will be in a shallow tunnel that will be constructed between West Lake Street and just south of the Kenilworth Lagoon. As a result, the light rail alignment will be in a tunnel under Cedar Lake Parkway, rather than on a bridge over Cedar Lake Parkway. The freight rail alignment will remain at-grade across Cedar Lake Parkway. Because the light rail alignment will be in a tunnel between West Lake Street and just south of the channel, visual impacts at Cedar Lake Parkway will be substantially minimized. As a result, FTA, with MnHPO's concurrence, determined that the Project will result in No Adverse Effect on the Cedar Lake Parkway.*
- ***Kenilworth Lagoon/Grand Rounds Historic District.*** *As described in Section 3.5 and Appendix H of the Final EIS, FTA determined that there will be a Section 106 adverse effect on the Kenilworth Lagoon/Grand Rounds Historic District. Measures associated with the Kenilworth Lagoon/Grand Rounds Historic District are stipulated in the Project's Section 106 MOA, which is included in Appendix H and summarized in Section 3.5 of the Final EIS.*
- ***Archaeological Sites.*** *FTA, with concurrence from the MnHPO, determined that the Project will result in Adverse Effects at two archaeological sites, 21HE0436 and 21HE0437, both of which will be destroyed during the construction of the Project (the term "destroyed" is used in applying 36 CFR 800.5 and the Secretary of the Interior's Standards [36 CFR 68]). Measures to minimize and mitigate the adverse effect on the two archaeological sites are specified in the Project's Section 106 MOA and summarized in Section 3.5 of the Final EIS. Adverse effects to archaeological site 21HE0409 will be mitigated through stipulations also included in the Project's Section 106 MOA.*
- ***Other Properties.*** *Section106 adverse effects to other historic properties will be avoided through the implementation of avoidance stipulations included in the Section 106 MOA, which are summarized for the applicable historic property in Table 3.5-3 of the Final EIS.*

T. Concerns about cost and schedule

Summary of Comments: FTA and the Council received approximately 50 comments concerning the estimates of capital costs and operations and maintenance (O&M) costs in the Draft EIS, including comments from Hennepin County, the City of St. Louis Park, St. Louis Park Public Schools, MPRB, TRPD, and TC&W). Several commenters noted an error in the capital cost estimate for LRT 3A in Chapter 8 of the Draft EIS. Commenters were also concerned that certain elements were missing or incorrectly estimated within the Draft EIS capital cost estimates (e.g., missing the cost of the proposed park-and-ride lot at the proposed West Lake Station; the costs associated with freight rail for LRT 3A and LRT 3A-1 were not comparable; the capital cost of freight relocation was not accounted for). In particular, the MPRB and TRPD noted that the Draft EIS was missing the capital costs associated with trails. Some commenters also suggested that there was not enough detail about how capital and O&M costs were calculated. Another noted concerns about potential cost overruns. Comments received about the cost-effectiveness of the Project are addressed under Theme B: Opposition to the Project.

Response: *Capital cost estimates for the Project, including the Locally Preferred Alternative (LPA) and Locally Requested Capital Investments (LRCIs), in the Final EIS (see Chapters 2 and 7) are presented in the format of FTA's Standard Cost Category (SCC) workbook, which is a template developed by FTA to provide a consistent format for reporting and estimating capital costs across projects seeking Capital Investment Grant Program funds. The workbook summarizes the Council's estimated capital costs of specific components of the Project into ten common cost categories and the Project's overall capital cost. The SCC workbook is also used to help translate current base-year dollars (i.e., 2016) into year-of-expenditure dollars. Year-of-expenditure dollars represent future-year dollars based on when those dollars would actually be spent by the project, a projected future inflation rate per year, and projected finance costs. Both base-year and year-of-expenditure capital cost estimates for the Project have been updated since publication of the Draft EIS to reflect the current design of the Project and current unit costs estimates. Some elements that were proposed to be part of the Project in the Draft EIS (e.g., the park-and-ride lots within the city of Minneapolis) are no longer part of the Project and are not reflected in the capital cost estimates in the Final EIS. The error noted in the year-of-expenditure capital cost estimate for LRT 3A in Chapter 8 of the Draft EIS was corrected in an errata publication by Hennepin County and is not applicable to the Final EIS because the Project is based on co-location of freight rail and light rail within the Kenilworth Corridor (LRT 3A-1), rather than relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor (LRT 3A). The capital cost estimate for the Project in year-of-expenditure dollars is $1.791 billion (without LRCIs, which are estimated to cost $29.3 million), as shown in Chapter 7 of the Final EIS (see Table 7.1-1, which includes line item costs based on the SCC workbook). The SCC workbook is described in the FTA web page "Standard Cost Categories (SCC) for Capital Projects" (see https://www.fta.dot.gov/funding/grant-programs/capital-investments/standard-cost-categories-scc-capital-projects), which is cited in Chapter 7 of the Final EIS. The Project's capital cost estimates will continue to be refined as the Council advances the Project toward a Full Funding Grant Agreement. Methods to help avoid capital cost overruns during construction include: use of risk assessments in reviewing capital cost estimates; strategic allocation of line-item and non-allocated contingency based on factors such as the level of design; identification of specific uncertainties or risks for line items; multiple layers of review; setting unit costs based on recent similar local projects and other applicable experience.*

Annual base-year and year-of-expenditure system-wide operations and maintenance costs for the No Build Alternative and the Project are also included in Chapters 2 and 7, respectively, of the Final EIS. The updated O&M cost estimates for the Project reflect adjustments to the proposed transit operation plan in 2040, updated unit costs, and design adjustments that have occurred since publication of the Draft EIS. The methodology used for preparing the Project's O&M cost estimates is described in detail in the Southwest Light Rail Transit (LRT) Service Plan Updates and Operations and Maintenance Cost Results for the Final EIS (July 2015), which is cited in Chapter 7 of the Final EIS. Combined annual systemwide operating costs for Metro Transit/Metropolitan Transportation Services and SouthWest Transit are estimated to be approximately $1.392 billion in 2040 under the Project, compared to $1.309 billion under the No Build Alternative.

T.1 Funding of O&M costs

Summary of Comments: FTA and the Council received several comments concerning the funding plan for O&M costs. Most of those commenters, including Hennepin County, asked who would pay for the maintenance and/or operating costs of freight rail track modifications related to the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor. A few commenters asked how Metro Transit's net operating loss would be covered and who would pay for it. Other commenters asked if the revenue from light rail riders would break even with the line's operating costs and, if so, how many years until the train breaks even, or if farebox revenues would not equal operating costs, how many riders would be required for the train to break even. Further, one commenter asked if taxpayers would be allowed to vote on operating funding for the Project.

Response: *Operating costs to freight rail owners and operators were considered as part of the design adjustment process undertaken by the Council after the close of the public comment period on the Draft EIS (see Chapter 2 and Appendix F of the Final EIS for additional information on this process). The Council coordinated with freight rail owners and operators on the modifications to freight rail that are included in the Project and operating costs are not projected to increase as a result of the Project. Operating costs for freight rail operators due to the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor are not included in the Final EIS, because the Project provides for the co-location of freight rail and light rail in the Kenilworth Corridor.*

The proposed funding plan for the Project's O&M costs is described in Chapter 7 of the Final EIS. The O&M funding plan addresses both Metro Transit/Metropolitan Transportation Services and SouthWest Transit, because the transit operation plans and costs for both entities would be affected by the Project. Table 7.2-2 of the Final EIS provides a line-item summary of O&M funding sources for both Metro Transit/Metropolitan Transportation Services and SouthWest Transit in 2040, based on the Project and the No Build Alternative. Funding for the O&M costs for the Project will come from transit fare revenues and from a combination of two other sources. After accounting for fare revenue, remaining operating costs will be divided equally between state general funds and the Counties Transit Improvement Board (CTIB). Minnesota Session Laws (2008) Section 473.4051 subd. 2 states that, after operating revenue and federal money have been used to pay for light rail operations, 50 percent of the remaining balance must be paid by the State of Minnesota. State funding for transit operations is derived from general fund appropriations, and is appropriated by the state legislature on a biennial basis. The cost and revenue of the Project are accounted for in the system-wide operating cost estimates and funding plan. However, the Final EIS does not identify costs and revenue solely attributable to the proposed light rail extension, because changes in O&M costs are a function of system-wide changes to transit operations under the Project. Therefore, the Final EIS does not include estimates of farebox recovery on the proposed light rail extension or estimates of ridership on the extension that would be required for fares to cover all of the light rail extension's operating costs. Taxpayers concerned about the level of operating funding for the Project can communicate those concerns to their representatives in the State Legislature and CTIB, which will be providing operating funds to the Project. HCRRA is the current owner of the Kenilworth Corridor (see Exhibit 4.4-1). Future long-term ownership of the Kenilworth Corridor has not been determined and will be decided as a result of negotiations between the Council and HCRRA, prior to construction of the Project.5 As part of these negotiations, TC&W's operating rights within the Kenilworth Corridor will be maintained per the terms of the existing trackage rights agreement.6 See Appendix N for a summary of correspondence between the Council and HCRRA regarding long-term ownership of the Kenilworth Corridor.

[5] The Council will take all reasonable actions to keep the Kenilworth Corridor in public ownership while it is being used for rail transportation of any kind, per the terms of the Memorandum of Understanding between the Council and the City of Minneapolis (2014; refer to Appendix D).

[6] Source: Trackage Rights Agreement Between Soo Line Railroad Company, TC&W Railroad Company, and Hennepin County Regional Railroad Authority, August 3, 1998, and supplemented July 30, 2002. This agreement grants TC&W Railroad Company non-exclusive rights to conduct railroad operations within the Kenilworth Corridor, including the operation of freight trains, occasional passenger trains, locomotives, cabooses, rail cars, maintenance-of-way equipment, and other rail equipment.

T.2 Costs of mitigation measures

Summary of Comments: FTA and the Council received several comments concerning costs associated with mitigation measures. Specific comments, including from the City of St. Louis Park and TC&W, raised concerns that the Project's estimated capital costs did not include the cost of mitigation measures, such as wetland or noise mitigation measures or mitigation measures for St. Louis Park related to the relocation of freight.

Response: *Since publication of the Draft EIS, the capital cost estimate for the Project has been updated reflecting design adjustments identified by the Council, increased level of design and engineering detail, and adjusted contingency estimates reflecting the current level of design. The Project will include the avoidance, minimization, and mitigation measures summarized in Tables 3.0-1 and 4.0-1 of the Final EIS. The capital cost estimates for the Project in Chapters 2 and 7, including the use of contingencies, reflect and include those specific mitigation measures.*

T.3 Capital funding strategy

Summary of Comments: FTA and the Council received several comments concerning the proposed funding plan for the Project, including concerns about the lack of specificity for local funding sources. Some commenters were concerned that the Project would lead to increased taxes and others were concerned about the effect of the Project's federal funding proposal on the federal deficit, some questioning why the proposed federal share was 50 percent. Another commenter questioned how many years of operation it would take for fares to cover the Project's capital costs.

Response: *The assumption that 50 percent of required funds will come from the Federal Transit Administration is based on: the federal Capital Investment Grant (CIG) Program requirements; past local and national experience with similar projects; and the Council's and its funding partners' proposed funding plan. The CIG Program was reauthorized by Congress in 2015 within the five-year FAST ACT surface transportation bill; CIG Program funding for the Project is subject to Congressional appropriation. Under the Project's proposed capital funding plan, the remaining 50 percent of the capital cost of the Project will be funded from the following sources: 9.2 percent from the State of Minnesota; 27.7 percent from the Counties Transit Improvement Board (CTIB); 9.2 percent from Hennepin County Regional Railroad Authority (HCRRA); 3.6 percent from additional local contributions; and 0.2 percent from the Federal Surface Transportation Program. Under the Project's proposed capital funding plan, increased taxes are not anticipated for implementation. The capital funding plan covers the Project's capital costs. Revenue from transit fares will be used to help cover the Project's O&M costs, as described under Theme T.1.*

T.4 High costs or cost effectiveness

Summary of Comments: Several commenters expressed concerns that the Project or its components cost too much or that the Project, components of the Project, or other alternatives were not cost-effective.

Response: *The merits of the Project relative to its costs and adverse impacts are discussed in Themes A and B, while Themes C through I address costs as one element in the evaluation of components of the Project or other alternatives and options.*

T.5 Schedule

Summary of Comments: Several commenters asked if the schedule to open the Project could be expedited and suggested that the public review and comment phases should be shortened or eliminated.

Response: *The Project's schedule is proceeding as quickly as allowable under federal, state, and local rules, including various requirements for public and agency review. The Project's anticipated opening year is 2020.*

U. Technical and typographical corrections

Summary of Comments: The Council and FTA received approximately 50 comments regarding technical or typographical corrections or stating that the Draft EIS included false or inaccurate statements. Commenters included the Cities of Minneapolis, Minnetonka, Hopkins, Eden Prairie, and St. Louis Park, MnDOT, MPCA, EPA, NMCWD, TRPD, MPRB, STB, businesses, community groups, non-profit organizations, and the general public.

Response: *Errors noted by commenters can be categorized as follows:*

1. *The commenter correctly identified an error, and it was corrected in the Final EIS where applicable, or the issue of concern has been updated in the Final EIS. For example, the Three Rivers Park District noted incorrect trail names in the Draft EIS, which have been corrected in the Final EIS.*
2. *The commenter incorrectly identified an error in the Draft EIS. For example, a business stated the Draft EIS failed to include Royalston City Market properties in the list of properties with affected access; at the time of the Draft EIS publication, the Draft EIS accurately disclosed access changes occurring at that location.*
3. *The commenter identified an error in the Draft EIS that is immaterial to the information presented in the Final EIS. For example, the City of St. Louis Park corrected information relevant only to the relocation of freight rail from a portion of the Bass Lake Spur and Kenilworth Corridor, which is no longer an element of the Project.*

V. Information requests, including requests to add information to the Draft EIS

Summary of Comments: The Council and FTA received seven comments requesting specific information be added to the Draft EIS or Final EIS, including the City of Minnetonka, City of St. Louis Park, and the EPA. Responses to these requests are included below. Approximately 15 commenters requested specific information or posed questions in regards to procedural matters, including:

- Requests for copies of the Draft EIS;
- Technical difficulties accessing the document through the swlrt.org website;
- Incorrect internet links;
- Requests to be added to the mailing list;
- Requests for copies of the public comments received; and
- Confirmation of the Draft EIS public comment deadline.

Response: *Hennepin County or Council Staff responded to requests for copies of the Draft EIS, questions about the public comment period, and technical issues as the comments were received. Comments received on the Draft EIS are posted on the Project website, www.swlrt.org.*

Will there be any public statements or press releases with the status/timeline updated for the LPA selection?

> *Press releases and information about the LPA selection process are available on the Project website, www.swlrt.org.*

What is the intent of the pink line in the Conceptual Engineering drawings?

> *The pink lines indicate a trail.*

Are there plans to have express trains running from SouthWest Station to Downtown Minneapolis? If not, what are the proposed travel times?

> *All trains will stop at every station between SouthWest Station and Target Field Station. Operating characteristics are described in Section 4.1 of the Final EIS.*

Provide the before and after noise data for Hiawatha, if an overpass at Cedar Lake Parkway is selected.

> *The Project no longer includes a proposed light rail bridge over Cedar Lake Parkway; see Theme E, Concerns about LRT in the Kenilworth Corridor.*

Confirm the number of train trips per day and other operating characteristics.

> *The operating characteristics are described in Section 4.1 of the Final EIS and have been updated since the Draft EIS.*

Confirm the Project alignment and status.

> *The Project alignment is described and illustrated in Chapter 2 and Appendix E of the Final EIS and remains proposed pending a Record of Decision by FTA.*

Is there a "no action" plan for the new light rail going through Golden Valley?

> *The commenter is referring to the METRO Blue Line Extension project; more information on that project is available at www.bluelineext.org.*

The City of Minnetonka requested improved maps of land cover types.

> *Updated land cover maps are provided in Section 3.10 of the Final EIS.*

The EPA commented that the Final EIS should clarify where impacts occur and how impacts were avoided or minimized, or what mitigation will be included in the Project.

Measures to avoid and minimize impacts caused by the Project (i.e., LRT 3A-1) were addressed through the design adjustment process undertaken after the close of the public comment period on the Draft EIS. Comments received on the Draft EIS, as well as input from Project stakeholders, were incorporated into the design adjustment process. Several of these design adjustments resulted in FTA's decision to publish the Supplemental Draft EIS. The design adjustment process undertaken since publication of the Draft EIS was described in Chapter 2 and Appendix F of the Supplemental Draft EIS and is included in Chapter 2 and Appendix F of the Final EIS. The current preliminary engineering plans for the Project, reflecting adjustments to avoid and minimize impacts, are included in Appendix E of the Final EIS. Further, the Final EIS includes identified mitigation measures for adverse impacts caused by the Project. Avoidance, minimization and mitigation measures for impacts to environmental resources, transportation-related resources, Environmental Justice populations, and Section 4(f) properties are identified in Chapters 3, 4, 5, and 6, respectively.

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