3.0 SOCIAL EFFECTS

Chapter 3 presents several topics related to the existing social conditions in the Central Corridor Light Rail Transit (LRT) study area and potential effects from implementation of the Preferred Alternative.

Sections 3.1 and **Section 3.2** present the existing conditions and potential impacts to land use, neighborhoods, community services, community cohesion, and similar topics related to socioeconomics along the proposed Central Corridor LRT alignment. Topics such as population growth and demographics are updated with the most recent data and projections.

Section 3.3 presents a discussion of potential property acquisitions needed to construct and operate the Preferred Alternative. Consideration is given to both publicly and privately owned properties.

Existing conditions and potential impacts related to the Project to archaeological and historic resources, and parklands and recreation areas are presented in **Section 3.4** and **Section 3.5,** respectively. Particular attention was given to changes related to alignment revisions and ROW needs for the Preferred Alternative.

Section 3.6 presents a discussion of visual quality and aesthetics along the Central Corridor LRT alignment. The existing conditions along with the visual impacts that could occur from building a LRT line where none now exist. Of particular note are areas in Downtown St. Paul, the Union Depot, the State Capitol, and the route through the University of Minnesota (U of M).

Safety and security related to the Preferred Alternative are the subjects discussed in **Section 3.7**. Finally, **Section 3.8** presents updated information related to the potential impacts of project implementation to low-income, minority, and transit dependent populations along the Central Corridor LRT alignment.

3.1 Land Use and Socioeconomics

This section discusses the existing conditions and potential impacts on land use, zoning, and socioeconomics of the Central Corridor Light Rail Transit (LRT) Study Area. Table 3.1-1 provides a summary of the land use impacts for the Preferred Alternative.

Table 3.1-1 Summary of Impacts

Planning Segment	Central Corridor LRT Elements and Potential Impacts			
	Guideway and Catenary System	**Stations**	**Traction Power Substations (TPSS)**	**Operation and Maintenance Facility (OMF)**
Downtown St. Paul	A vacant building at 360 Cedar Street will be demolished. Portions of existing surface parking lots will be used for the alignment.	A vacant building at 360 Cedar Street will be demolished. Portions of existing surface parking lots will be used for the station.	TPSS will be located at the proposed Operation and Maintenance Facility (OMF) and the 4th and Cedar Streets Station.	A portion of an existing industrial building in downtown St. Paul, known as Diamond Products, will be converted to a transportation use—an OMF. Part of the site will require a change in zoning to I-1 to permit the OMF.
Capitol Area	No adverse impacts are expected to occur.	No adverse impacts are expected to occur.	A TPSS will be located near the Capitol East Station.	N/A
Midway East	No adverse impacts are expected to occur.	No adverse impacts are expected to occur.	Four TPSS are to be located at University Avenue cross streets: near Farrington Street, Mackubin Street, Milton Street, and Albert Street. At Milton Street, unused land adjacent to a U-Haul parking lot will be used for a TPSS. Land use changes will otherwise be limited to the conversion of portions of parking lots to transit uses.	N/A

Planning Segment	Central Corridor LRT Elements and Potential Impacts			
	Guideway and Catenary System	**Stations**	**Traction Power Substations (TPSS)**	**Operation and Maintenance Facility (OMF)**
Midway West	No adverse impacts are expected to occur.	No adverse impacts are expected to occur.	TPSS locations are proposed near the intersections of Prior and Charles avenues and Raymond and Wabash avenues. Land use changes will be limited to the conversion of portions of parking lots to transit uses.	N/A
University/ Prospect Park	No adverse impacts are expected to occur.	No adverse impacts are expected to occur.	TPSS locations will be located at the Stadium Village Station, the West Bank Station, and on a vacant parcel of land near the Intercampus Transitway north of University Avenue near the St. Paul city limits. Slight land use changes of vacant industrial land or parking lot to transit uses would occur.	N/A
Downtown Minneapolis	No impacts are expected to occur.	No additional stations are proposed in downtown Minneapolis.	One TPSS will be needed in the Interstate 35W (I-35W) interchange area. No land use impacts will occur.	N/A

3.1.1 Methodology

For the land use analysis, the study area was defined as the area within one-half mile of the proposed alignment. Discussions were conducted with staff from the Minneapolis Department of Planning and Economic Development (CPED) and St. Paul Planning and Economic Development (PED) to learn about land use and zoning issues that should be addressed to understand the potential effects of the Central Corridor LRT project. Comprehensive plans, land use, and zoning information were reviewed as part of this analysis.

Socioeconomic reports and projections prepared by the Metropolitan Council were reviewed for regional- to segment-level statistics. Neighborhood-level statistics were provided by the cities of Minneapolis and St. Paul. The data used are primarily from the 2000 Census. Census data were retrieved and interpreted at the block group level. Census data are aggregated at different geographic levels: national, state, county, Census tract, and block group. Block groups may be further aggregated into census blocks, however, because the privacy of individuals or households living within Census blocks may be jeopardized by disclosing sensitive or identifiable information, certain data, such as income, are only available as low as the Census block group level. Therefore, to accurately represent the existing socioeconomic conditions, the analysis was conducted using block-group level data.

After publication of the SDEIS, updated Traffic Analysis Zone (TAZ) data were made available by the Metropolitan Council for population, households, and employment projections to 2030. For corridor planning segment level statistics TAZ data were used, including Year 2000 data fields and 2030 forecasts. A TAZ is a special area demarcated by transportation planners for determining traffic-related data, such as journey-to-work statistics. These zones vary in size, but usually include one or more census tracts, census zones, or block groups. To assess demographic data by corridor planning segment, a map of the affected TAZs was laid over a map of the corridor planning segments to determine which TAZs corresponded with the six segments. Because edges of each type of area do not match, efforts were made to closely align the two. The traffic analysis zones selected for the corridor are presented in Figure 3.1-1.

3.1.1.1 Local Land Use Plans/Policies

This section identifies the plans and policies that relate to land use in the Central Corridor.

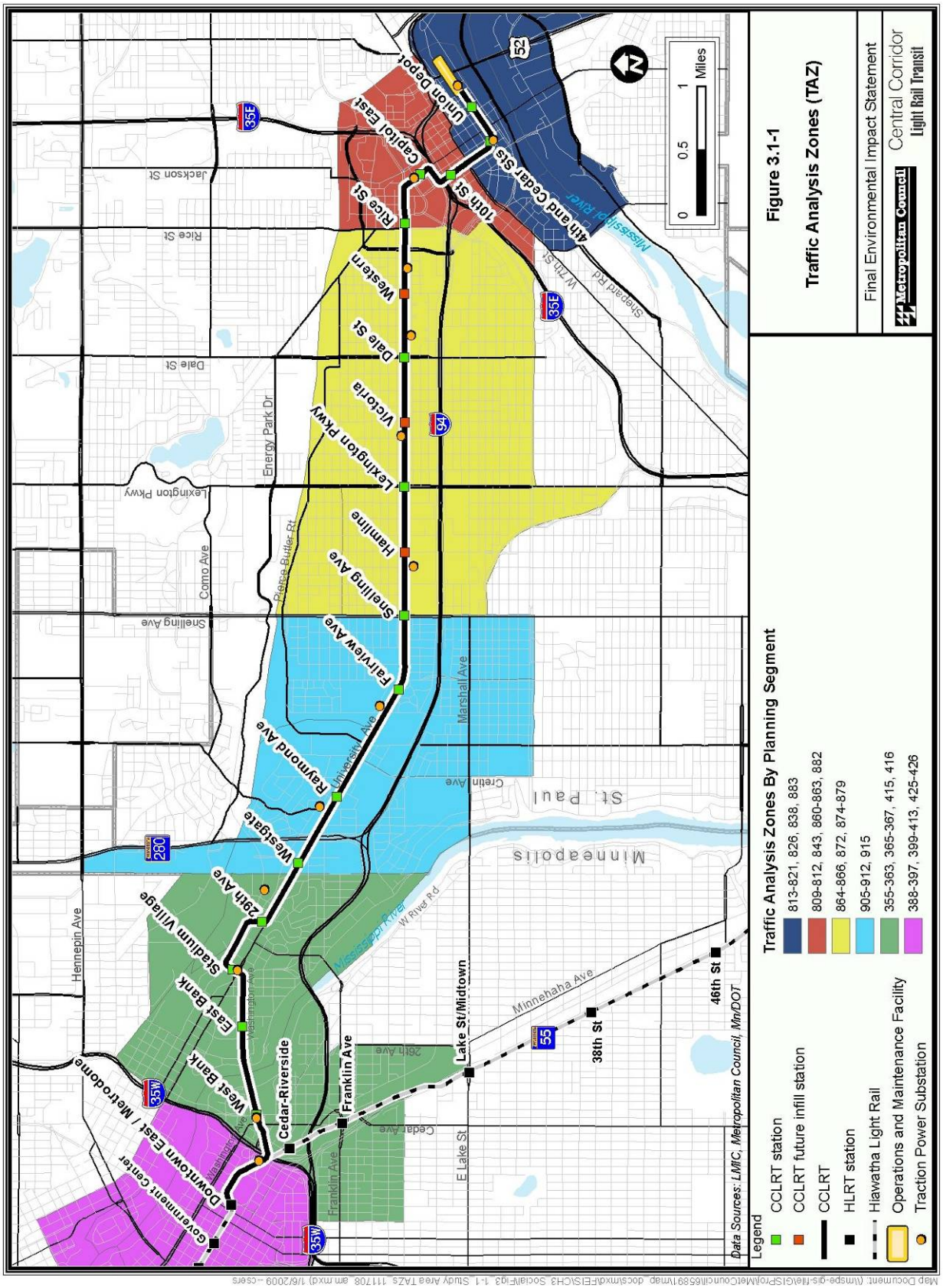
Metropolitan Council of the Twin Cities

The following section lists the Metropolitan Council of the Twin Cities (Metropolitan Council) plans and studies for land use and neighborhoods within the Central Corridor.

2030 Regional Development Framework

In expectation of accommodating 1 million additional people by the year 2030, the Metropolitan Council adopted the 2030 Regional Development Framework in 2004. The Development Framework addresses four main policies: 1) working with local communities to accommodate growth; 2) planning and investing in a multi-modal transportation system; 3) encouraging a range of choices in housing locations and types, with improved access to jobs and other opportunities; and 4) working to preserve and enhance the area's natural resources.

The framework recommends transit-oriented, mixed-use communities that provide citizens with the opportunity to live and work in the same community, thereby reducing demand on the transportation system and lowering pollution. The plan also recommends implementing new investments where infrastructure currently exists to reduce the amount of funding needed for new highways and sewer systems.



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The plan recognizes that a singular widespread approach to accommodating growth will not work, and has divided urban sections of the metropolitan region into two geographic areas, "Developing Communities" and "Developed Communities" (Metropolitan Council, 2004). The framework outlines how Minneapolis and St. Paul, as Developed Communities, must accommodate new growth through infill and redevelopment, investing in existing infrastructure, encouraging higher densities and appropriate land use in transit corridors, and planning for regional transit systems. The framework sets a goal of doubling transit ridership by 2030. The Central Corridor is identified as a potential LRT corridor.

2030 Transportation Policy Plan

In accordance with the 2030 Regional Development Framework, the 2030 Transportation Policy Plan (2004) outlines the necessity of planning for and investing in multi-modal transportation, as well as encouraging mixed-use development along main transportation corridors to reduce overall transportation needs. Building transit ridership through expanding the existing bus system and developing dedicated rail and bus transitways is stressed, with a goal of doubling transit ridership by 2030. The Central Corridor is specified as a Tier I Corridor, with light rail transit identified as the preferred mode of transportation for investment. Other central issues addressed in the plan include focusing highway investments on maintaining the existing system and reducing traffic congestion. The encouragement of local communities to establish an interconnected system of streets, walking paths, and bikeways is also emphasized. This plan is in the process of being updated. The public comment period has concluded and the plan is ready for the Metropolitan Council to adopt in early January 2009.

City of St. Paul

City of St. Paul plans and studies that address land use and neighborhoods within the Central Corridor are presented below.

The Saint Paul Comprehensive Plan

The City of St. Paul adopted its most current comprehensive plan in January 2002. The City is currently updating the plan. Draft chapters of the plan have been completed and will undergo review and approval by the City Council in early 2009.

The Comprehensive Plan is generally focused on three main themes: 1) welcoming growth to aid in revitalization; 2) ensuring the well-being of St. Paul citizens through safe, economically diverse neighborhoods and providing educational and cultural opportunities; and 3) establishing "quality of place" through attractive neighborhoods and housing that promote pedestrian activity and are connected to natural areas (City of St. Paul, 2002). Development guidelines are based on the principles outlined in the *St. Paul on the Mississippi Development Framework*, which stresses neighborhoods as urban villages, investing in the public realm, establishing a mix of uses, and providing a balance of transportation modes.

The chapter on land use identifies University Avenue as one of two "highest priority public transportation corridors in the city," and recommends that new housing and job opportunities be placed on that route (City of St. Paul, 2002). The housing chapter recommends a mix of land uses and a wide range of housing options, transit-supportive densities, and using transit investments to encourage new development.

The transportation chapter recommends that demand on the street system be limited through mass transit, other alternatives to the automobile, and options to limit travel needs altogether. The plan recommends working with LRT implementation to ensure that associated development is of an appropriate scale and preserves neighborhood cohesion and identity.

The update to the Comprehensive Plan, entitled *Saint Paul 2020 Comprehensive Plan,* continues to support the recommendations outlined in the adopted plan. The draft identifies the Central Corridor as the major transit corridor between St. Paul and Minneapolis and considers it to have the greatest potential for growth and new development. Walkable communities are stressed, with auto-oriented development discouraged. Densities, housing types, and land use supportive of transit are encouraged (City of St. Paul, 2008).

St. Paul Downtown Development Strategy

Adopted as a chapter of the *Comprehensive Plan* in 2003 and updated in 2005, the development strategy is based on the principles outlined in the *St. Paul on the Mississippi Development Framework*. The plan was created in response to the increases in the residential population in downtown and the emergence of a cultural and entertainment area. The plan recommends the creation of a more vibrant street life, the establishment of central green spaces, and a mix of uses that meet the needs of downtown residents, workers, and visitors. The plan supports balancing transportation options in the area and implementing LRT and commuter rail as a means to reduce automobile traffic.

Fitzgerald Park Precinct Plan

Adopted in 2006 and thereby included in the City's *Comprehensive Plan*, the *Fitzgerald Park Precinct Plan* promotes an area that accommodates the needs of residents and patrons, establishes a pedestrian-friendly streetscape, and requires new development to be human-scaled and coincident with existing neighborhood and historic character. The plan stresses balancing multiple modes of transportation, and recommends implementation of LRT to increase options for transit, beautify Cedar Street, and create new development interest in the area.

Central Corridor Development Strategy

The key document for land use planning in relation to Central Corridor LRT for St. Paul, the *Central Corridor Development Strategy* (CCDS) was adopted as a chapter to the *Comprehensive Plan* in 2007. The CCDS is referenced in the draft comprehensive plan because it will continue to be the guide for development in St. Paul's Central Corridor.

The CCDS "establishes a vision and set of strategies for how the Central Corridor should grow and change over the next 25-30 years in response to the LRT investment" (City of St. Paul, 2007). Serving as a framework for more detailed planning in the future, the CCDS outlines development standards and policies that would enable the Central Corridor to become a pedestrian-oriented area that preserves current diversity, helps to balance various modes of transportation, and takes full advantage of the LRT investment to bring in new economic opportunities.

The vision is based on six main principles:

- Using LRT as a means to establish St. Paul regionally and nationally as an "innovative, diverse, and progressive place to live, work, play, and invest" (City of St. Paul, 2007)
- Maintaining and "lifting up" the existing, diverse neighborhoods and businesses in the study area
- Fostering economic activity
- Establishing a balance of various modes of transportation to limit the use of the automobile
- Improving the image and quality of life in the corridor, which emphasizes the design and maintenance of a "beautiful, green, vibrant, and pedestrian-friendly" corridor with integrated LRT and bus stations, parks, and street cafes (City of St. Paul, 2007)
- Working with neighborhoods and stakeholders to ensure the implementation of LRT is as successful as possible

To make these goals possible, the CCDS outlines a number of development and marketing strategies, policies, and initiatives to conduct throughout the corridor. Development and land use guidelines are centered on defining areas of change and stability, thereby focusing new development in desired locations. General new development guidelines include preserving the scale and character of existing neighborhoods, making all design and land use pedestrian-oriented, and maintaining a density sufficient for supporting high-quality transit.

Guidelines for development are further specified by the scale and type of available land. For example, large underutilized plots of more than one or two blocks can give rise to new urban villages. Surface parking lots near big-box retail can be intensified and turned into transit-supportive, pedestrian-friendly environments with parking put into shared structures. Other areas of change include large infill plots - potential sites that are often narrow and extend from University to a parallel residential street. There are "Half-Depth Infill Sites" and "Full-Depth Infill Sites" along the corridor. Guidelines and recommendations are also provided for enhancing connectivity and activity in downtown St. Paul, station platform design to ensure safety and wayfinding, and establishing bike connections to LRT and along the corridor (several north-south connections are proposed in addition to those outlined in the *Comprehensive Plan).*

Policy and initiatives needed to make the outlined vision possible are addressed, including needed modifications to the comprehensive and neighborhood plans and guidelines for the establishment of Transit Opportunity Zones in the corridor. Recommendations are made for ensuring that the community, sustainable practices, and local businesses benefit and are strengthened.

Station Area Plans

To demonstrate how the principles and guidelines of the CCDS could be more specifically applied to station areas, the City of St. Paul has prepared seven Station Area Plans, adopted in 2008. The selected stations are those on University Avenue in St. Paul: Westgate Station, Raymond Avenue Station, Fairview Avenue Station, Snelling Avenue Station, Lexington Parkway Station, Dale Street Station, and Rice Street Station. Plans for downtown station areas and the three additional stations at Western Avenue, Victoria Street, and Hamline Avenue are expected to be adopted in 2009.

Each station area plan contributes to the overall vision of the CCDS, identifying areas of change and stability around each station, making recommendations for development, and highlighting opportunities for new or expanded parkland and other public spaces. The plans also address the manner in which sidewalks, LRT access, and surrounding bike paths might be implemented to encourage the safe use of transit. All development and public realm recommendations contribute to establishing the Central Corridor as a pedestrian-oriented area that preserves current diversity, helps to balance various modes of transportation, and takes full advantage of the LRT investment.

Highlights of the plans include establishing a prestigious corporate address at the intersection of TH 280 and I-94 (for the Westgate and Raymond Avenue stations); developing the surface parking lots around the Snelling Avenue Station to intensify the market district; and potentially redeveloping the Sears site near the Rice Street Station into an urban village. Policies and strategies to make the desired development and public spaces possible are also included, with some focused on implementing public art, enabling a transition to desired conditions over time, and securing parkland and public spaces.

Report of the Diamond Products Task Force

Prepared in 2005, the *Report of the Diamond Products Task Force* outlines land use, urban design, and other planning recommendations for the reuse of the Diamond Products building and its environs. The report suggests the conversion of the area to one that is pedestrian-oriented through new mixed-use development, the reestablishment of missing portions of the local street grid, and the implementation of new green and recreation areas to help transition between downtown and nearby natural areas. The report, prepared before the Diamond Products site became the preferred location for the Operations and Maintenance Facility for the Central Corridor LRT project, stressed the reduction of parking lots in the area to support the use of LRT, high-speed regional rail, and other transit services.

City of Minneapolis

The City of Minneapolis plans and studies that address land use and neighborhoods within the Central Corridor include the following:

The Minneapolis Plan

The Minneapolis Plan was adopted in 2000. The City of Minneapolis is currently in the process of updating this comprehensive plan, which will be titled *The Minneapolis Plan for Sustainable Growth*. The updated draft has been approved by the City Council and is expected to be approved by the Metropolitan Council in early 2009.

The Minneapolis Plan, which is still in effect, envisions several main goals for the city, including:

- Increase the population and tax base of the area by developing new housing and preserving the existing stock
- Create strong vital commercial corridors citywide through mixed-use development, including a variety of businesses and creative housing (City of Minneapolis, 2000)
- Improve public transportation and establish a balance of various modes
- Preserve and enhance environmental, economic, and social contexts

In designated growth centers such as downtown Minneapolis and the U of M, transit is stressed as "a component part of future growth" (City of Minneapolis, 2000). The plan recommends clustering development in these growth areas and other commercial corridors to provide sufficient access to jobs and residences.

The Minneapolis Plan for Sustainable Growth continues the recommendations outlined in the adopted comprehensive plan, with additional emphasis on sustainability and "dynamic urban living through urban design" (City of Minneapolis, 2008). The vision outlined for 2030 shows Minneapolis having an established multi-modal system including LRT and a network of bike trails and lanes, with land use regulations limiting auto-oriented design and enhancing the public realm.

Downtown Minneapolis and the U of M are identified as growth centers for the city, with University Avenue from Washington Avenue SE to Emerald Street identified as a Commercial Corridor (University Avenue from 27th Street to Emerald is considered a Community Corridor in the adopted plan, with a Neighborhood Commercial Node located at University and Bedford Street SE). Identified Activity Centers include Cedar Riverside and Stadium Village. The Central Corridor LRT station at 29th Avenue is identified as a Transit Station Area. These updated designations indicate a desire for a mix of uses that support transit and pedestrian activity and traditional urban form.

Downtown 2010

The comprehensive plan for downtown Minneapolis, *Downtown 2010* was adopted as a chapter of *The Minneapolis Plan* in 1996. The plan identifies the main challenges facing downtown: maintaining sufficient access to downtown from surrounding areas and the health of retail and neighborhoods.

Main goals for the plan include enhancing the pedestrian realm in downtown through high-quality building and street design, completing the skyway system, and encouraging the implementation of new parks. The plan also stresses "a balanced transportation system that ensures continued economic vitality in downtown and that contributes to the quality of life for downtown, the City, and the Twin City Metropolitan Region" (City of Minneapolis, 1996). The plan recognizes the need to accommodate growth and supports increasing mass transit to limit the effect of additional cars. It recommends a compact urban core to support mass transit, improving transit infrastructure, accommodating growth while not increasing traffic on roads and highways, and increasing incentives for using transit.

Access Minneapolis (Citywide Action Plan, Guidelines for Streets and Sidewalks, and Downtown Action Plan)

Prepared in 2007 and 2008, the *Access Minneapolis – Ten-Year Transportation Action Plan* is composed of three chapters relevant to the Central Corridor LRT project: the Citywide Action Plan, Guidelines for Streets and Sidewalks, and the Downtown Action Plan.

The **Citywide Action Plan** identifies the steps needed for improving the existing transportation system to accommodate current needs and projected growth. The purpose of the plan is to establish a livable and walkable city through a multi-modal transportation system, a goal that can be accomplished without widening existing roadways.

The plan recognizes the following "street design types" for roads on which the Central Corridor LRT line is to run:

- University Avenue in Minneapolis as a Commerce Street
- Washington Avenue from University through the East Bank as an Activity Center Street
- The roads from the Washington Avenue bridge to the Downtown East Station as Commuter Streets
- 5th Street through downtown Minneapolis as an Activity Center Street

These designations indicate that these streets are on the Primary Transit Network (PTN)—those streets "most likely to require expanded facilities for transit." The plan states that, "it is expected that any planned transit facilities will be incorporated into designs for these streets" (City of Minneapolis, 2007-8). Efficient, safe, and enjoyable pedestrian and bicycling movement is also addressed in the plan.

The section on transit identifies LRT, BRT, and other forms of mass transit as playing a "major role in managing the future growth of the city" (City of Minneapolis, 2007-8). The plan recognizes the importance of supporting transit with density through land use policies. Methods of improving transit efficiency and ridership include developing information for passengers at transit stops and evaluating the "frequency, span, and coverage of service on PTN corridors" (City of Minneapolis, 2007-8), among others.

The Design Guidelines for the Streets and Sidewalks chapter elaborates on the Citywide Action Plan. It identifies "place types" in the city, with Downtown Minneapolis and the U of M as Activity Centers, University Avenue from 27th Street to Emerald Street as a Community Corridor, and University at Bedford Street as a Neighborhood Commercial Node. The chapter outlines specific guidelines for the design of the associated streets and sidewalks for each of these place types.

The Downtown Action Plan specifies a vision for the downtown area, which elaborates on the Citywide Action Plan. The chapter emphasizes the importance of efficient mass transit, pedestrian activity, and bicycling, in addition to supporting automobile traffic. The downtown plan recognizes the growth that is expected to occur in the area, and the City's hopes to increase the use of alternative transportation to meet increasing trip generation.

Minneapolis Park and Recreation Board

The Minneapolis Park and Recreation Board plans and studies that address land use and neighborhoods within the Central Corridor include the following:

Comprehensive Plan

Adopted in 2007, the *Comprehensive Plan for the Minneapolis Park and Recreation Board* outlines a vision for Minneapolis parks through 2020. The plan is centered on such themes as establishing natural areas and urban forests that "endure and captivate," recreation that promotes healthy lifestyles and community, and identifiable parks that meet diverse needs and "shape city character" (Minneapolis Park and Recreation Board, 2007). In terms of coordinating park development within growth areas, the plan recommends land acquisition and building facilities to help shape those areas. The plan specifically refers to the Hiawatha LRT corridor, downtown Minneapolis, and the Southeast Minneapolis Industrial (SEMI) area.

Missing Link Development Study Report

Approved in 2008, the Missing Link Development Study Report outlines a plan to complete the Grand Rounds National Scenic Byway, a system of parkways and trails that circumnavigate Minneapolis. The Missing Link will connect East River Parkway with St. Anthony Parkway, providing Northeast and Southeast Minneapolis and adjoining communities' access to parks, trails, paths, and green space. The new parkway and trails will overlap the Central Corridor LRT alignment at 27th Avenue S.E., slightly to the northwest of the 29th Avenue Station, and would therefore provide an easy connection between LRT and the Grand Rounds.

Ramsey County

The draft Transportation, Transit, and Surface Water Management section of the *Ramsey County 2008 Comprehensive Plan* recognizes the importance of providing efficient and affordable transit service throughout the county as an alternative to the automobile. Although Ramsey County does not provide transit, the county stresses planning for and promoting transit that meets the needs of its citizens through coordination with such organizations as the Metropolitan Council. Further, the plan describes the county's cooperation with municipalities to encourage land use planning that supports a multi-modal transportation system and encourages transit use. In addition to improving the existing bus system, it recommends LRT in the Central Corridor, commuter rail, and bus rapid transit as elements of the multi-modal system. A policy supporting a dedicated and sufficient transit-funding source is also stressed. The plan is expected to be reviewed by the Metropolitan Council in early-to-mid 2009.

Hennepin County

The Hennepin County plans and studies that address land use and neighborhoods within the Central Corridor include those described in the following paragraphs.

Hennepin County Transportation Systems Plan

Prepared in 2008, the draft *Hennepin County Transportation Systems Plan* identifies the county's vision for transportation, updates previous planning efforts, and outlines recommendations for transportation decisions in the future to accommodate population growth. The plan identifies the automobile as the primary mode of transportation and focuses on roadway issues, but also addresses improvement of a multi-modal transportation system.

Light rail transit is identified as a desired element of the multi-modal transportation system, including Central Corridor LRT as the highest priority in expanding the light rail system. The plan recommends that the county work to implement Central Corridor LRT, in addition to other light rail, commuter rail, and bus rapid transit systems. Coordination with county partners on establishing transit-supportive land use is also stressed, as is cooperation with the Regional Railroad Authority to acquire abandoned rail corridors for future transportation use. Improving pedestrian and bicycling safety and efficiency is addressed in an effort to make all modes of travel possible, including the implementation of intermodal hubs to facilitate modal transfers.

The plan has been submitted to the Metropolitan Council for approval, and is expected to be adopted by Hennepin County Board of Commissioners in mid-2009.

Intermodal Station Siting and Feasibility Study

Prepared in 2006, the *Intermodal Station Siting and Feasibility Study* outlines design concepts, rail operations, and staging possibilities for a transit station in downtown Minneapolis that would facilitate the use of and transfers between various transportation modes. As addressed in the study, the station could provide access to commuter and intercity rail, buses serving the downtown area, and Central Corridor and Hiawatha LRT through the extension of the existing LRT line. With space provided for vehicle pick up/drop off and potential skyway and bike connections, the intermodal station would serve as an essential part of encouraging transit use in the region.

In addition to accommodating these various transportation modes, the study addresses land use surrounding the intermodal station. The new Minnesota Twins ballpark and potential mixed-use developments are considered, including the possibility of incorporating the transit station into one of the new developments. Parkland and pedestrian bridges are also outlined, to make the pedestrian realm surrounding the station safer, more inviting, and better integrated with surrounding areas. Further, the proposed mixed-use developments would help contribute to the activity of the streets in the area, and their density would support transit use.

Capitol Area Architectural and Planning Board

The *Comprehensive Plan for the Minnesota State Capitol Area*, prepared in 1998, outlines a vision for reintegrating the Capitol Area with surrounding neighborhoods and maintaining the visual and symbolic integrity of the campus. The plan equips the Capitol Area Architectural and Planning Board (CAAPB) with the necessary tools for guiding new developments and other improvements in the area to meet the desired goals.

Recommendations for the Capitol grounds include providing “proper approaches” to the Capitol buildings for pedestrians, mass transit users, and motorists, as well as developing new buildings in a way that compliments the original design of the grounds (Capitol Area Architectural and Planning Board, 1998). Preserving and enhancing open spaces within the Capitol area is also stressed, as is requiring that new development be supportive of and integrated with surrounding communities. The plan promotes infill development around the grounds to further accommodate and encourage pedestrian activity. Other issues addressed in the plan include public art on the grounds, making parking lots “inconspicuous” (Capitol Area Architectural and Planning Board, 1998), and establishing the Capitol grounds as a hub for urban villages.

The plan supports developing a transportation strategy that increases pedestrian activity in and around the Capitol grounds and encourages transit use, while accommodating the needs of vehicular traffic. Protective transit shelters are recommended, as is the coordination with Metro Transit to continue sufficient transit access to the area.

University of Minnesota

The *University of Minnesota Twin Cities Campus Master Plan* was last adopted in 1996, and is scheduled to be reviewed and acted upon by the Board of Regents in February and March 2009. The plan offers a vision for the future of the Twin Cities campus that is directly tied to the institution’s strategic goals, namely in supporting a sustainable community focused on teaching, research, and outreach activities and providing an environment that inspires pride in the people who study, work, reside in, and visit the campus.

The main recommendation for the physical character of the campus is the preservation of established areas such as Northrop Mall and the agricultural setting of the St. Paul campus. Establishing connections with the riverfront and Washington Avenue on the East and West Banks is also outlined.

The plan demonstrates the need for ensuring sufficient access to the campus, creating a safe urban environment that is integrated with its surroundings, and providing a mix of uses to meet the needs of those living and working in the area. Enhancing natural features and providing a balanced system for access and transportation are also stressed.

The plan stresses accommodating other means of transportation (i.e., bicycle, mass transit, or foot) into the street system to provide a balanced system of modes and routes. Accommodating vehicular traffic is recommended, but the plan also recommends lowering parking demands by establishing alternative access, including LRT on Washington Avenue. LRT is identified as "the most important increment of campus access that is on the planning horizon" (University of Minnesota, 1996).

Initial recommendations for updates to the Master Plan, prepared in 2007 and 2008, include incorporating energy-conservation measures, reducing campus sprawl, and using Central Corridor LRT stations as gateways to the campus. The draft plan reiterates the provision of access to mass transit and enabling a multi-modal transportation system.

3.1.1.2 Tax Increment Finance Districts

Tax Increment Finance (TIF) Districts have been established by the cities of St. Paul and Minneapolis to help finance desirable projects within their jurisdictions. More than 50 TIF Districts can be found in the study area, and nearly two-thirds are located in Minneapolis. Examples of TIF Districts include financing for the Carleton Lofts near the Raymond Avenue Station, which is a collection of renovated buildings now used as artist lofts, and the reuse of the historic Milwaukee Railroad Depot near the Hiawatha LRT Government Plaza Station.

3.1.1.3 Overlay Districts

Major overlay districts that address land use and neighborhoods within the Central Corridor include:

- Central Corridor Overlay District (St. Paul) – The Central Corridor Overlay District was established in 2008 to facilitate the implementation of a mixed-use, transit-supportive environment along the corridor, as outlined in the CCDS. The overlay district extends along University Avenue from St. Paul's border with Minneapolis to Marion Street, one block west of Rice Street, and coincides generally with the desired areas of change and stability outlined in the CCDS.
- Pedestrian Oriented Overlay District (Minneapolis) – The Pedestrian Oriented Overlay District was established to encourage pedestrian-friendly commercial areas and prevent the implementation of automobile-oriented and other high impact uses. The district follows the alignment in Minneapolis along University Avenue from the St. Paul border to Washington Avenue, and also includes a portion around the Cedar-Riverside area on the western side of the U of M. Transit Station Area Pedestrian-Oriented (TSAPO) Overlay Zoning Districts, a subset of the Pedestrian Oriented Overlay District, have been established for areas around the 29th Avenue and Stadium Village Stations.

3.1.1.4 Transit-Oriented Development Studies

The City of St. Paul conducted two transit-oriented development studies to serve as examples for development in response to strong use of public transportation along University Avenue.

3.1.1.5 Neighborhood and District Plans

Neighborhoods and planning districts have prepared plans for the revitalization and improvement of associated areas. Examples of these plans are included below, listed from east to west.

St. Paul on the Mississippi Development Framework

Adopted in 1997, the development framework outlined in this document has been used in the adopted *Comprehensive Plan* to help guide development throughout the city. This document, which specifically addresses downtown St. Paul, stresses the creation of "urban villages." Urban Villages are defined as areas that are centered around a green gathering space, are interconnected, and contain a balance of uses and a strong public realm. The comfort of the pedestrian is a guiding principle, with development focused on creating an inviting street front, aided by balancing various modes of transportation to limit the influence of the automobile. Establishing a local transit system that further reduces automobile use is also stressed—one that serves downtown and the urban villages throughout the day and is understandable, safe, and attractive.

Historic Lowertown Small Area Plan

This plan, adopted in 1994, works to consolidate and improve previous efforts to ensure the success of the area. The plan recommends development of the area as a mixed-use neighborhood that is oriented towards pedestrians, encourages bicycle activity, and helps maintain existing natural features and the historic character of the area. The plan supports the development of LRT through the neighborhood, including the implementation of a station at Union Depot and on the "diagonal alignment across the St. Paul Athletic Club Block" (City of St. Paul, 1994). A station is also recommended at 11th and Cedar.

A Plan for Capitol Heights

The Capitol Heights small area plan, adopted in 2000, outlines the neighborhood's goal of becoming a mixed-use, medium-density residential area with a commercial center on Rice Street. The plan addresses stabilization of bluffs and slopes, economic development goals, and neighborhood connections with surrounding areas. The plan stresses rehabilitation of the existing housing stock, revitalization of Rice Street as a main street, and establishment of attractive pedestrian connections to such nearby amenities as the Capitol area.

Rice Street Small Area Plan and Forty-Acre Study

Adopted in 2005, the Rice Street plan outlines the vision of making Rice Street pedestrian-oriented and inviting while accommodating automobiles by establishing parking behind buildings. The plan recommends such zoning changes as establishing Traditional Neighborhood (TN) areas and eliminating General Business (B3) zoning to improve the mixed-use quality of the area. This shift does not allow automobile-oriented commercial uses and encourages the pedestrian-friendly environment envisioned in the plan. Rehabilitation of homes and intensification of underutilized plots are also addressed.

Thomas-Dale Small Area Plan

Thomas-Dale, as outlined in the small area plan (2007), wishes to remain a mixed-use area that is racially, culturally, and economically diverse. The district recommends encouraging new development that is compatible with existing neighborhoods, accommodating a variety of transportation modes, and creating a pedestrian-friendly environment. The plan stresses intensification of residential and commercial development in transportation corridors, especially University Avenue. Needed zoning changes include the establishment of TN areas to encourage higher-density, pedestrian-oriented, mixed-use development. Additional goals for the district include limiting gentrification and encouraging new businesses to hire local residents.

Lexington Hamline Small Area Plan and Lex-Ham Tomorrow Plan

Adopted in 1993 (Lexington-Hamline Small Area Plan) and 2001 (Lex-Ham Tomorrow Plan), these plans outline strategies to achieve a strong pedestrian realm and high-quality urban design for new development areas. The plans recommend preservation and rehabilitation of existing homes, improvement of pedestrian connections over I-94 at Griggs Street, and decreasing the effect of surface parking lots on pedestrians by implementing landscaping along parking lot edges. The plans stress making University Avenue more pedestrian-oriented by adding vegetation, and requiring that new development be mixed-use that is built closer to the street. Part of the area north of the Skyline Towers is recommended to be green space, and the plan stresses the involvement of the community in planning for the Central Corridor LRT project.

Snelling Hamline Neighborhood Plan

Adopted in 2007, the Snelling Hamline plan addresses land use, transportation, housing, and public safety, among other issues. The plan promotes a pedestrian-oriented environment on streets and in open spaces and balancing a number of transportation modes. Recommendations for development include establishing transit-supportive densities and a mix of land uses. The neighborhood also considered implementation of TN zoning to facilitate this vision and adoption of the Urban Village Principles as described in the *Comprehensive Plan*. LRT is recommended to balance transportation modes, and the use of the region's investment in LRT is stressed to encourage economic development in the area. Other recommendations include the use of rain gardens to help manage stormwater, the preservation and expansion of existing green spaces, and the evaluation of mechanisms to support locally owned businesses.

Hamline Midway Community Plan

Adopted in 2000, the Hamline Midway plan outlines a community agenda based on maintaining diversity, incorporating environmentally sensitive practices, and ensuring that all people have access to and can participate in all projects and programs in the area. The plan recommends implementing life-cycle housing and improving the streetscape on Snelling and University avenues. Strengthening and improving transportation alternatives in the area is also stressed.

Merriam Park Community Plan

The Merriam Park plan, adopted in 2004, addresses five major areas for the neighborhood: land use, economic development, the environment, transportation, and infrastructure. The plan recommends that University Avenue support small- to medium-scale, locally oriented commercial uses, and that development protect and enhance the pedestrian realm. Major

development projects are encouraged to be mixed-use and to be located on transit routes or underutilized plots. The plan recommends that transit service be improved, that University Avenue be the location for LRT, and that LRT be designed to benefit the neighborhood and not simply be used as a commuter system.

St. Anthony Park Community Plan

The St. Anthony Park plan was adopted in 2008 and stresses creation of a sustainable and integrated community, with LRT, pedestrian activity, and bicycling aiding in decreasing the area's dependency on the automobile. The plan suggests that sustainable development can be encouraged through implementation of LRT, and recommends that a zoning study be conducted to consider rezoning the Raymond Avenue station area to a TN district. Such a change, the plan indicates, will help encourage development that respects the historic character of the area, encourages pedestrian activity, and helps increase transit use. Redevelopment of underutilized industrial land, establishing bike connections to surrounding areas, and creating gateways to the neighborhood are also recommended.

University Avenue and 29th Avenue Transit Corridor Development Objectives and Design Guidelines

Prepared in 2005 and 2006, the Development Objectives and Design Guidelines for the University Avenue/29th Avenue corridor were created to provide a framework for new development so that it is compatible with surrounding neighborhoods and is transit-supportive. The plan recognizes the need to improve transit services along University Avenue and recommends that development be mixed-use in character and be of a high enough density to ensure a quality transit system. Building form is addressed in detail. The plan recommends orientation to the street to increase safety and vitality of the pedestrian realm, implementation of lighting, and buildings of a scale appropriate for desired densities and surrounding neighborhoods. Partnerships to create "development synergies" (City of Minneapolis, 2005-6) and improvements in connections to surrounding areas are also recommended. In specific regard to LRT, the plan stresses that easy pedestrian and transit connections to the station platform at 29th Street be efficient and understandable.

Southeast Minneapolis Industrial and Bridal Veil Refined Master Plan

Completed in 2001, the Southeast Minneapolis Industrial (SEMI) area plan outlines a vision for accommodating new growth that includes implementation of dense industrial uses in designated areas, design that encourages the public to venture into the area, and reestablishment of natural areas. The plan recognizes that much of the area is not developed to its "highest and best use" (City of Minneapolis, 2001). The plan recommends an easy-to-understand pattern of streets and blocks, a comprehensive stormwater management plan, and establishing urban land uses that are compatible to surrounding areas south of the rail yards near University Avenue. This shift to housing and commercial areas would, the plan explains, accommodate and support the implementation of LRT on University Avenue and simultaneously allow for an easy connection to nearby industrial jobs. The plan recommends the implementation of an Industrial Living Overlay district to allow light industrial, housing, office, and retail in the area south of the rail yards.

The Marcy-Holmes Master Plan Supplement

The 2008 addendum to the *Marcy-Holmes Master Plan* outlines ways in which the lower-density residential portions of the neighborhood and the commercial area of Dinkytown might be strengthened by accommodating higher-density development. Streetscape

improvements, the creation of small parks and gateways, and enhanced bus stops with amenities for pedestrians are also addressed. Additionally, the addendum stresses orientation of new development to the street, use of window frontage on the first floor in commercial areas, and implementation of shared parking, all of which would contribute to a more pedestrian-friendly and transit-oriented neighborhood.

Cedar-Riverside Small Area Plan

Adopted in 2008, the Cedar-Riverside plan expands upon visions for the neighborhood outlined in *The Minneapolis Plan*. General recommendations for the area include improving streetscapes in the neighborhood to enhance pedestrian safety and enjoyment; developing underutilized and vacant sites with compact, mixed-use development; and supporting a multimodal transportation system. The plan addresses the neighborhood's concerns for accommodating parking through shared parking systems and structures, as well as promotion of improved transit. Economic development is addressed in various sections of the neighborhood. The area adjacent to the West Bank station is recommended to continue as an Activity Center that accommodates pedestrians, transit, and automobiles through additional development. The plan also analyzes two different locations for the Central Corridor LRT station platform: between Cedar Avenue and 19th Avenue and between 19th Avenue and the U of M skyway. The plan recommends connections to each of these three points - whatever the location of the platform - to support and provide sufficient access to the surrounding neighborhoods.

Elliot Park Master Plan

Prepared in 2002, the Elliot Park Master Plan's primary objectives are to preserve the historic nature of the neighborhood and create a livable community. The policies and methods for achieving the two primary objectives include expanding the mix of uses, using Guthrie Theatre investments to encourage further development in the area, improving transit service - in part, through the use of LRT - and redeveloping surface parking lots or mitigating their effects on pedestrians. Extending bus routes to connect with LRT is also recommended, as is the use of the LRT. The plan recommends implementing an overlay zoning ordinance that limits parking and paved areas, and stresses alternatives to the automobile. Rather than implementing major changes, the overall development approach is infill and reuse of structures, with a focus on mixed-use development that supports economic and social diversity.

Historic Mills District Master Plan (with Update)

Prepared in 1998, the *Historic Mills District Master Plan* outlined the area's primary goals: to implement new housing and to attract new business investment to help the area reconnect with surrounding neighborhoods and downtown. This vision is supported by key urban design concepts, including completing the park along the riverfront, improving pedestrian connections across Washington Avenue, and implementing a transitway that links the airport with downtown and the riverfront. The original plan provided two main scenarios: one generally structured around housing and supporting commercial uses, and the other in support of a Twins ballpark. The update, approved in 2001, replaced the stadium proposal with a proposal for the Guthrie Theatre. Creating new housing, attracting new businesses, and respecting the historic character remained general principles in the update. The 2001 document also recognizes the location of the Hiawatha LRT line, and references the Central Corridor LRT line as a portion of an overall plan to establish effective transit in the area.

Downtown East and North Loop Master Plan

Adopted in 2003, the *Downtown East/North Loop Master Plan* outlines how new development should occur in underutilized areas in downtown and around rail transit station areas. Its main focus is the creation of complete communities within downtown. A "complete community" is defined as a less auto-dependent environment created through the integration of transit planning and high-density, mixed-use development. The plan promotes creating pedestrian-oriented streetscapes, accommodating parking below ground or within mixed-use developments, and using LRT investment as a means to implement the vision outlined in the plan. The plan also outlines how the Twins stadium could aid in "re-knitting" the downtown core with emerging neighborhoods in the North Loop, and how the multi-modal transit station should be incorporated into the area. Guidelines are provided for developing the Metrodome site if that stadium is no longer needed. It suggests that new infill development and a new park would support the Downtown East Station.

Development Objectives for North Nicollet Mall

North Nicollet Mall is bounded on its southern end by 5th Street, where the Nicollet Mall Station is located. The Development Objectives, prepared by the City of Minneapolis in 1999, formulated a general framework for new development in the area and its relation to downtown and the city. The plan identifies four major redevelopment parcels in this area: 1) the Library Block, which has since seen the construction of the new Central Library; 2) the Powers Block, consisting of half of the block bordered by 5th Street, Nicollet, Marquette, and 4th Street; 3) the Nicollet Hotel Block, and 4) the Ritz Block - two blocks currently occupied by parking lots adjacent to the Library Block. Mass transit modes such as LRT were viewed in the plan as the "chief priority for developing solutions to meet the demands of an increasingly intense and active Downtown Core" (City of Minneapolis, 1999). At the time the plan was adopted, it stressed the integration of the adjacent Powers Block into the Nicollet Mall Station. Because new development at the other blocks would be close to the station as well, connections to all blocks from the station were desired. Additional requirements outlined in the plan for LRT included wider station platforms, a connection to the Downtown Circulator, and understandable connections to the skyway and tunnel systems to help facilitate a Nicollet Mall Intermodal Transit Station.

3.1.2 Existing Conditions and Future Projections

This section outlines current land use and zoning for the corridor by planning segment. Refining previous land use analyses, the FEIS analysis considered land uses up to one-half mile from the Preferred Alternative alignment. Figure 1-2 (Chapter 1) shows the boundaries of the segments, and Table 3.1-2 and Figure 3.1-2 present generalized land use for the Central Corridor in its entirety.

As shown in Table 3.1-2 and Figure 3.1-2, a substantial amount of the corridor consists of single-family homes, with more than 1,150 acres devoted to this use (16 percent of the study area). This land use and associated residential zoning are generally located to the north and south of the alignment behind a row of commercial uses, particularly along University Avenue. Commercial and retail use accounts for the second largest land use category, approximately 15.6 percent of the corridor land use, although a substantial portion of this percentage is located in the two downtown areas. Another major category for land use in the corridor is public and institutional land (14.2 percent), which includes the State Capitol area and the U of M campus. Industrial use accounts for the fourth largest land use category with 14 percent (over 1,000 acres), and is mainly concentrated in the SEMI area

and the Midway Industrial District. Approximately 350 acres are devoted to parks and other open spaces (4.9 percent), and roughly 133 acres are currently unused parcels (1.8 percent). Figure 3.1-3 to Figure 3.1-7 depict land use by segment, and are referenced in greater detail in the following sections.

Table 3.1-2 Existing Land Use for Central Corridor

Land Use Category	Acreage	Percentage of Total Land Use
Single-Family Residential	1,162	16.0
Multi-Family Residential	816	11.2
Commercial/Retail	1,129	15.6
Office	269	3.7
Mixed Use	304	4.2
Industrial	1,013	14.0
Public/Institutional	1,030	14.2
Parks/Open Space	352	4.9
Transportation	805	11.1
Unused	133	1.8
Water	243	3.4
Total	7,256	100.0

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

Figure 3.1-8 to Figure 3.1-10 depict zoning in the Central Corridor, which is described in detail in the following sections. Zoning is typically based on a city's land use plans. It provides the legal basis for shaping future development according to adopted plans, but does not necessarily reflect the land uses that are actually within a zoning district. Zoning districts seen on a map can include an existing condition, a condition that existed in the past and is still in effect, or a desired future condition, depending on when the zoning districts were enacted or changed.

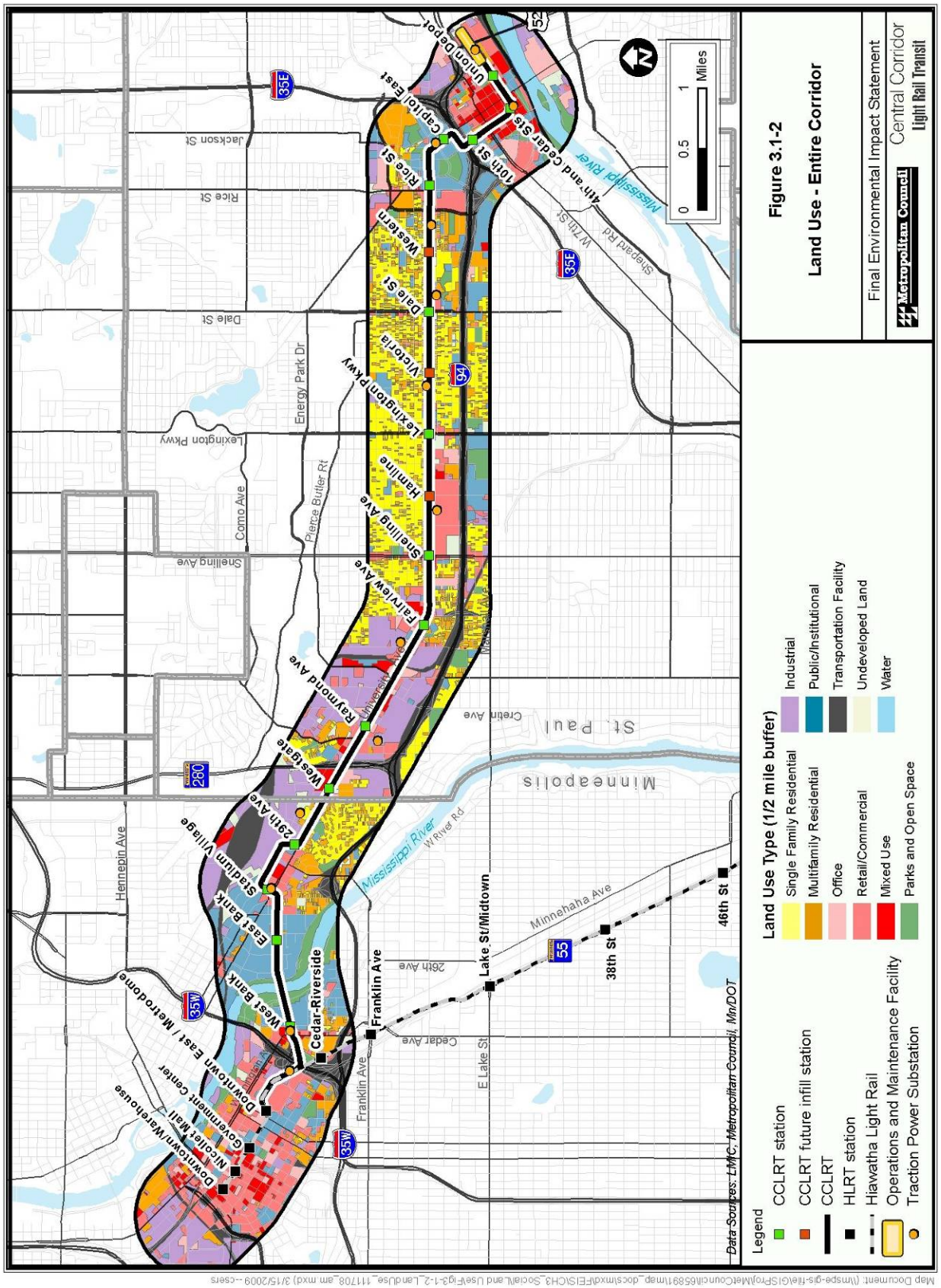
Figure 3.1-2
Land Use - Entire Corridor
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Land Use Type (1/2 mile buffer)
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Parks and Open Space
Industrial
Public/Institutional
Transportation Facility
Undeveloped Land
Water
Miles
0
0.5
1
Data Sources: LMC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-fil\GISProj\MetCouncil\5589\1\map_docs\mxd\FEIS\CH3_Social\Land Use\Fig3-1-2_LandUse_111708_am.mxd) 3/15/2009 --csers
Union Depot
Capitol East
Rice St
Western
Dale St
Victoria
Lexington Pkwy
Hamline
Snelling Ave
Fairview Ave
Raymond Ave
Westgate
29th Ave
Stadium Village
East Bank
West Bank
Cedar-Riverside
Franklin Ave
Lake St/Midtown
38th St
46th St
Minnehaha Ave
Downtown East / Metrodome
Government Mall
Downtown/Warehouse
Nicollet Mall
Mississippi River
W River Rd
St. Paul
Minneapolis
Cretin Ave
University Ave
Energy Park Dr
Pierce Butler Rt
Como Ave
Lexington Pkwy
Snelling Ave
Hennepin Ave
Jackson St
Rice St
Dale St
Shepard Rd
W 7th St
Mississippi River
7th and Cedar St
10th St
35E
35W
94
280
55
52

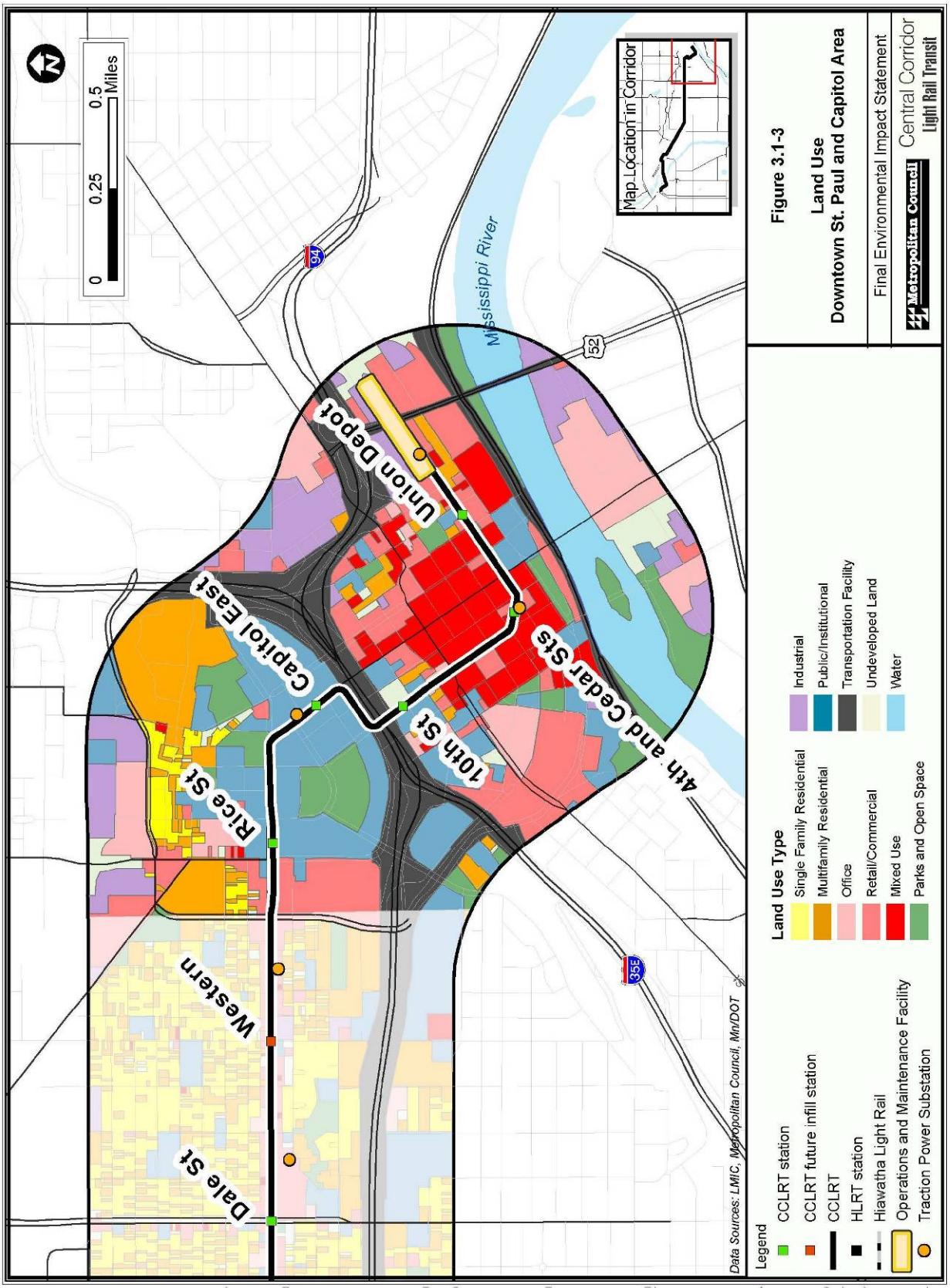
Figure 3.1-3
Land Use
Downtown St. Paul and Capitol Area
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Map Location in Corridor
Mississippi River
Union Depot
Capitol East
Rice St
10th St
4th and Cedar Sts
Western
Dale St
Land Use Type
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Parks and Open Space
Industrial
Public/Institutional
Transportation Facility
Undeveloped Land
Water
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Data Sources: LMIC, Metropolitan Council, MnDOT
0
0.25
0.5
Miles
94
52
35E

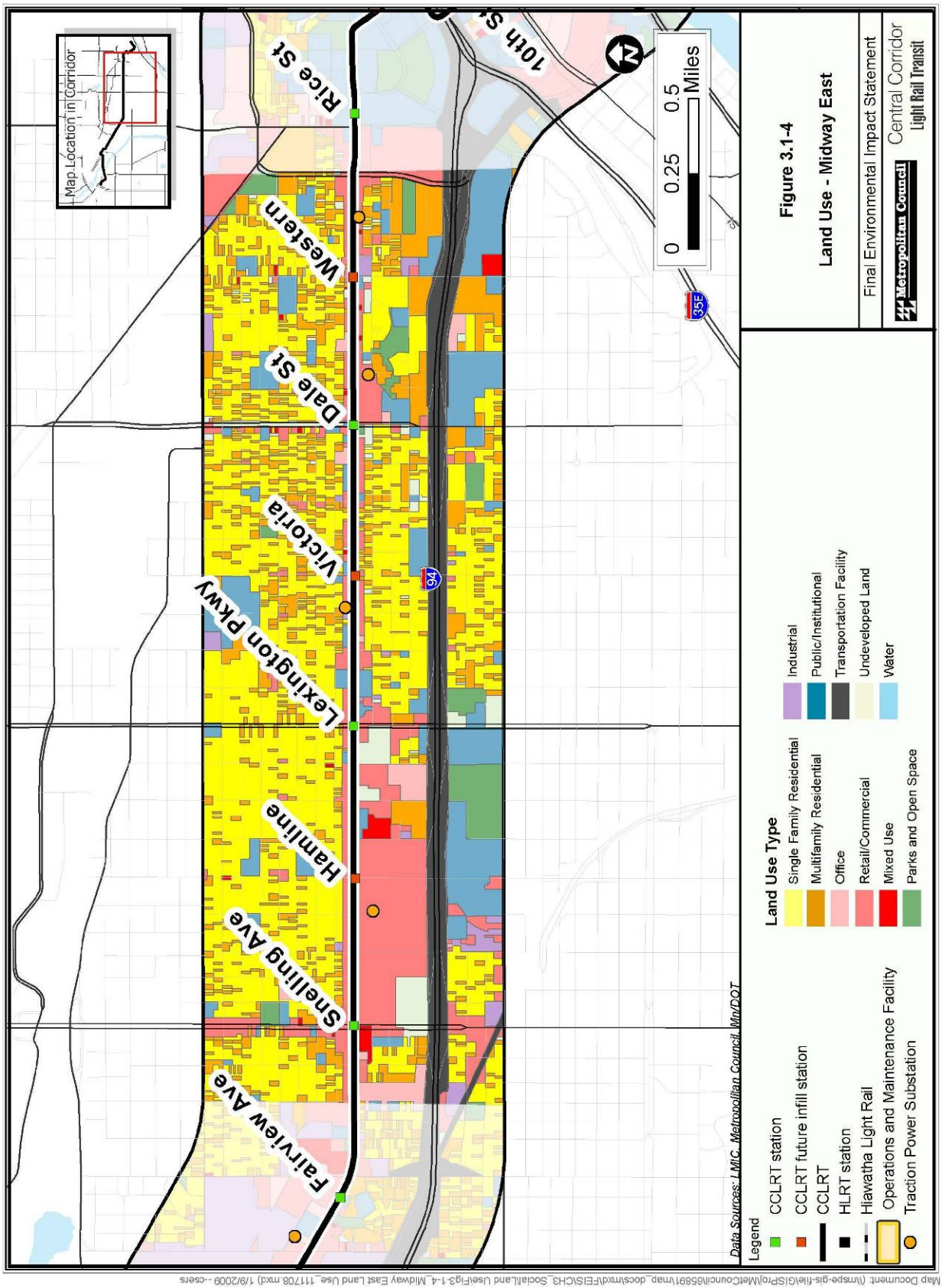
Figure 3.1-4
Land Use - Midway East
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
Map Location in Corridor
0 0.25 0.5 Miles
Rice St
10th St
Western
Dale St
Victoria
Lexington Pkwy
Hamline
Snelling Ave
Fairview Ave
94
35E
Land Use Type
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Parks and Open Space
Industrial
Public/Institutional
Transportation Facility
Undeveloped Land
Water
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\GISProj\MetCouncil\55891\map_docs\mxd\FEIS\CH3_SocialLand Use\Fig3-1-4_Midway East Land Use_111708.mxd) 1/9/2009 --csers

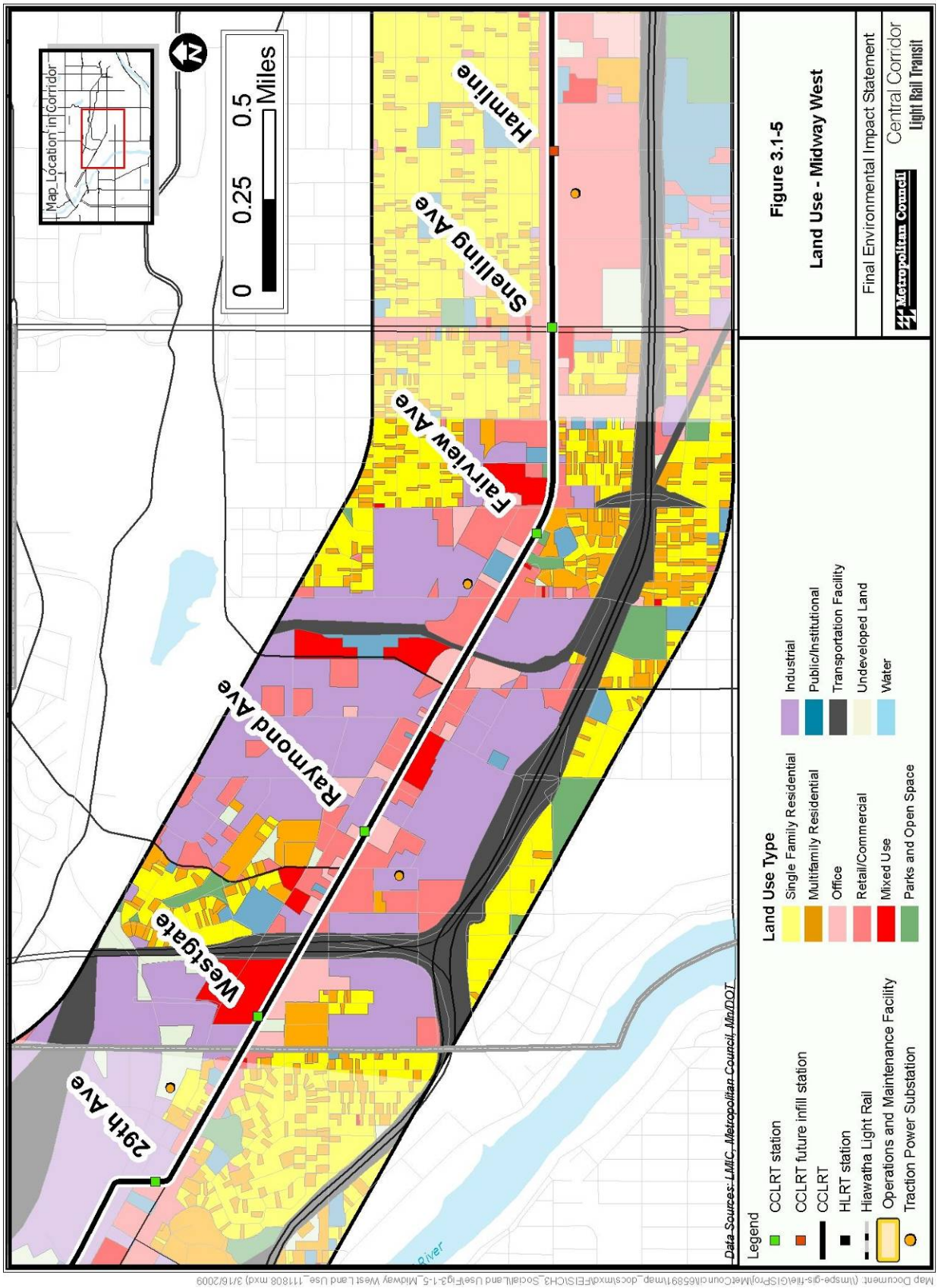
Figure 3.1-5
Land Use - Midway West
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
Map Location in Corridor
N
0 0.25 0.5 Miles
Hamline
Snelling Ave
Fairview Ave
Raymond Ave
Westgate
29th Ave
Land Use Type
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Parks and Open Space
Industrial
Public/Institutional
Transportation Facility
Undeveloped Land
Water
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Data Sources: LMIC, Metropolitan Council, MnDOT
River
Map Document: (\\mspe-gis-file\GISProj\MetCouncil\65891\map_docs\mxd\EIS\CH3_SocialLand Use\Fig3-1-5_Midway West Land Use_111808.mxd) 3/16/2009

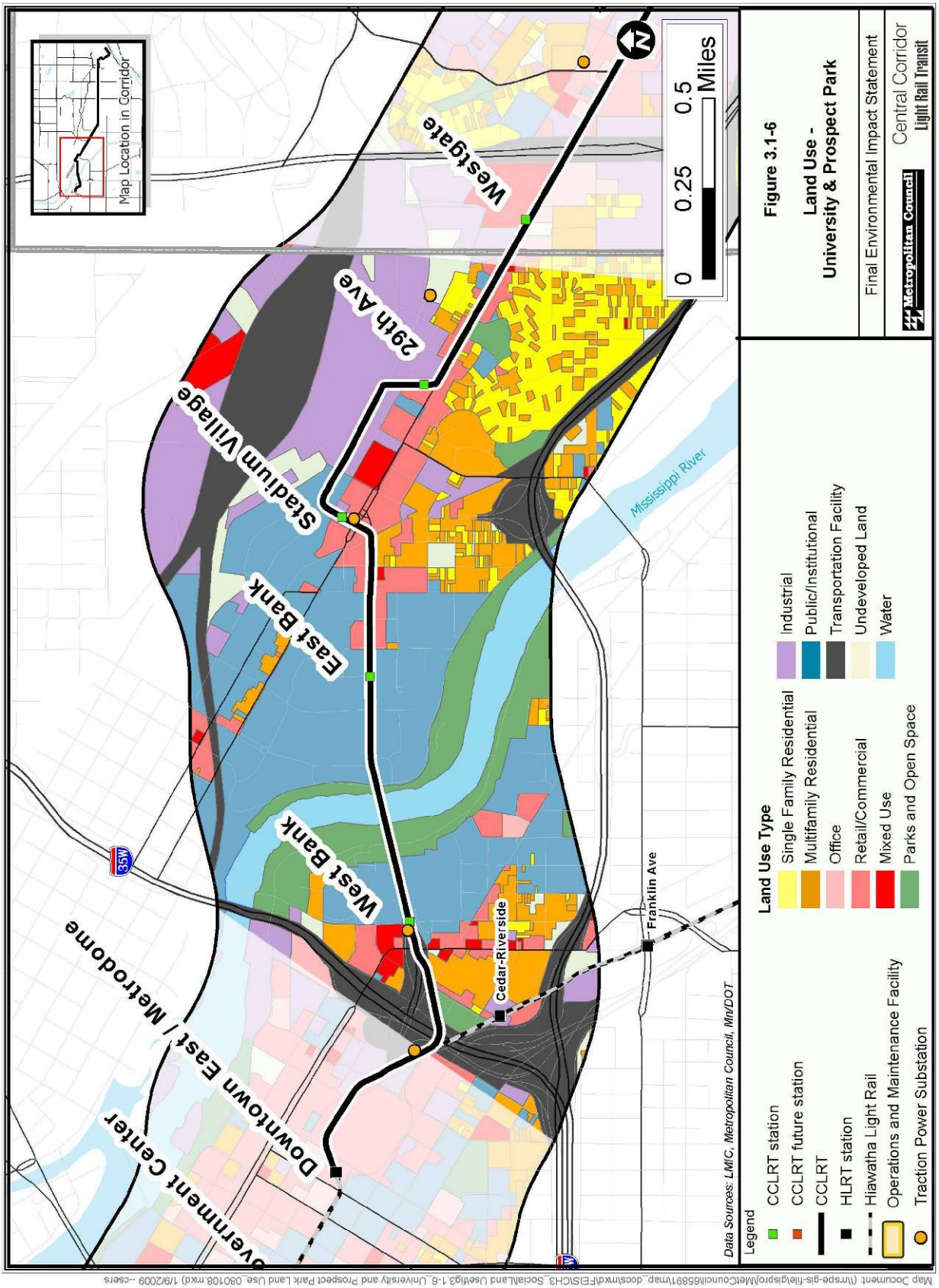
Figure 3.1-6
Land Use -
University & Prospect Park
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Map Location in Corridor
0 0.25 0.5 Miles
N
Westgate
29th Ave
Stadium Village
East Bank
West Bank
Downtown East / Metrodome
Government Center
Cedar-Riverside
Franklin Ave
Mississippi River
35W
Land Use Type
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Parks and Open Space
Industrial
Public/Institutional
Transportation Facility
Undeveloped Land
Water
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\trspe-gis-file\gisproj\MetCouncil\5589\1\mxd_docs\mxd\FEIS\CH3_SocialLand Use\fig3.1-6_University and Prospect Park Land Use_080108.mxd) 1/9/2009 --csers

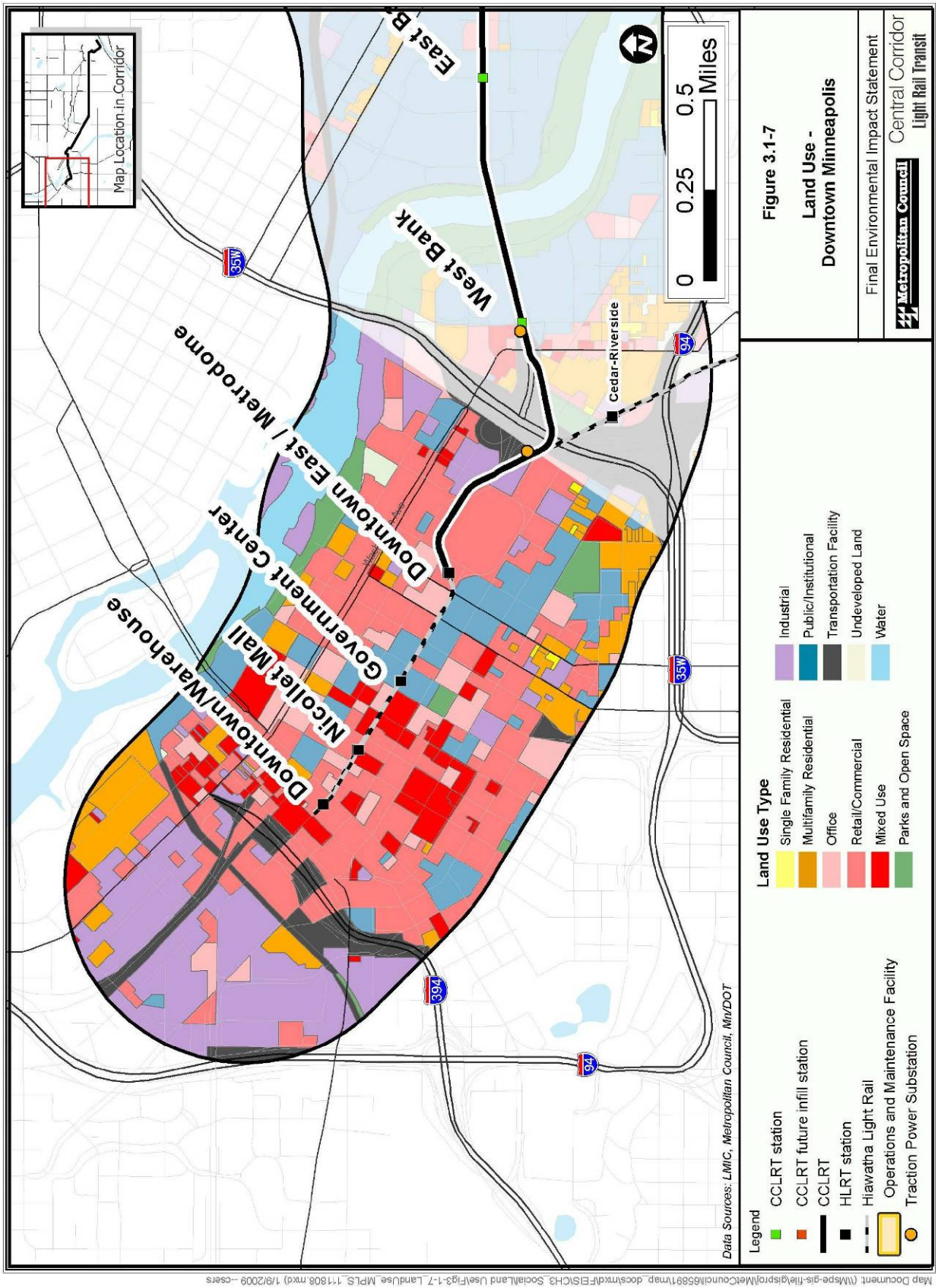
Figure 3.1-7
Land Use -
Downtown Minneapolis
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Map Location in Corridor
East Bank
West Bank
Cedar-Riverside
Downtown East / Metrodome
Government Center
Nicollet Mall
Downtown/Warehouse
0 0.25 0.5 Miles
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Land Use Type
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Parks and Open Space
Industrial
Public/Institutional
Transportation Facility
Undeveloped Land
Water
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\Mspe-gis-file\gisproj\MetCouncil\65589T\map_docs\mxd\FEIS\CH3_SocialLand Use\Fig3-1-7_LandUse_MPLS_111808.mxd) 1/8/2009 --csers

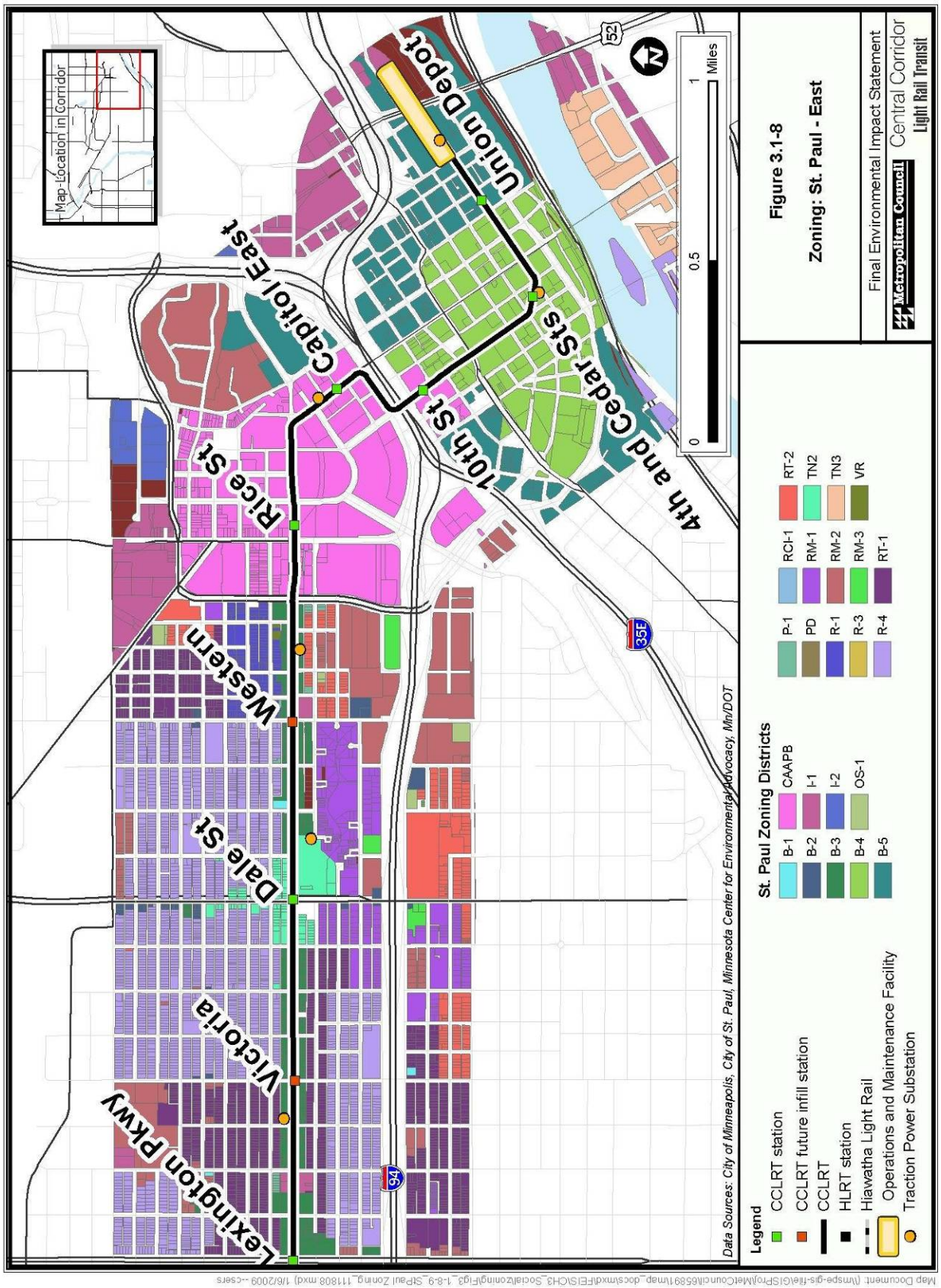
Figure 3.1-8
Zoning: St. Paul - East
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
Map Location in Corridor
Union Depot
10th St
4th and Cedar Sts
Capitol/East
Rice St
Western
Dale St
Victoria
Lexington Pkwy
35E
94
52
0
0.5
1
Miles
St. Paul Zoning Districts
B-1
B-2
B-3
B-4
B-5
CAAPB
I-1
I-2
OS-1
P-1
PD
R-1
R-3
R-4
RCI-1
RM-1
RM-2
RM-3
RT-1
RT-2
TN2
TN3
VR
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Data Sources: City of Minneapolis, City of St. Paul, Minnesota Center for Environmental Advocacy, Mn/DOT
Map Document: (\\mspe-gis-file\GISProj\MetCoun\cl65589\1\map_docs\mxd\FEIS\CH3_SocialZoningFig3_1-8-9_StPaul Zoning_111808.mxd) 1/6/2009 --csers

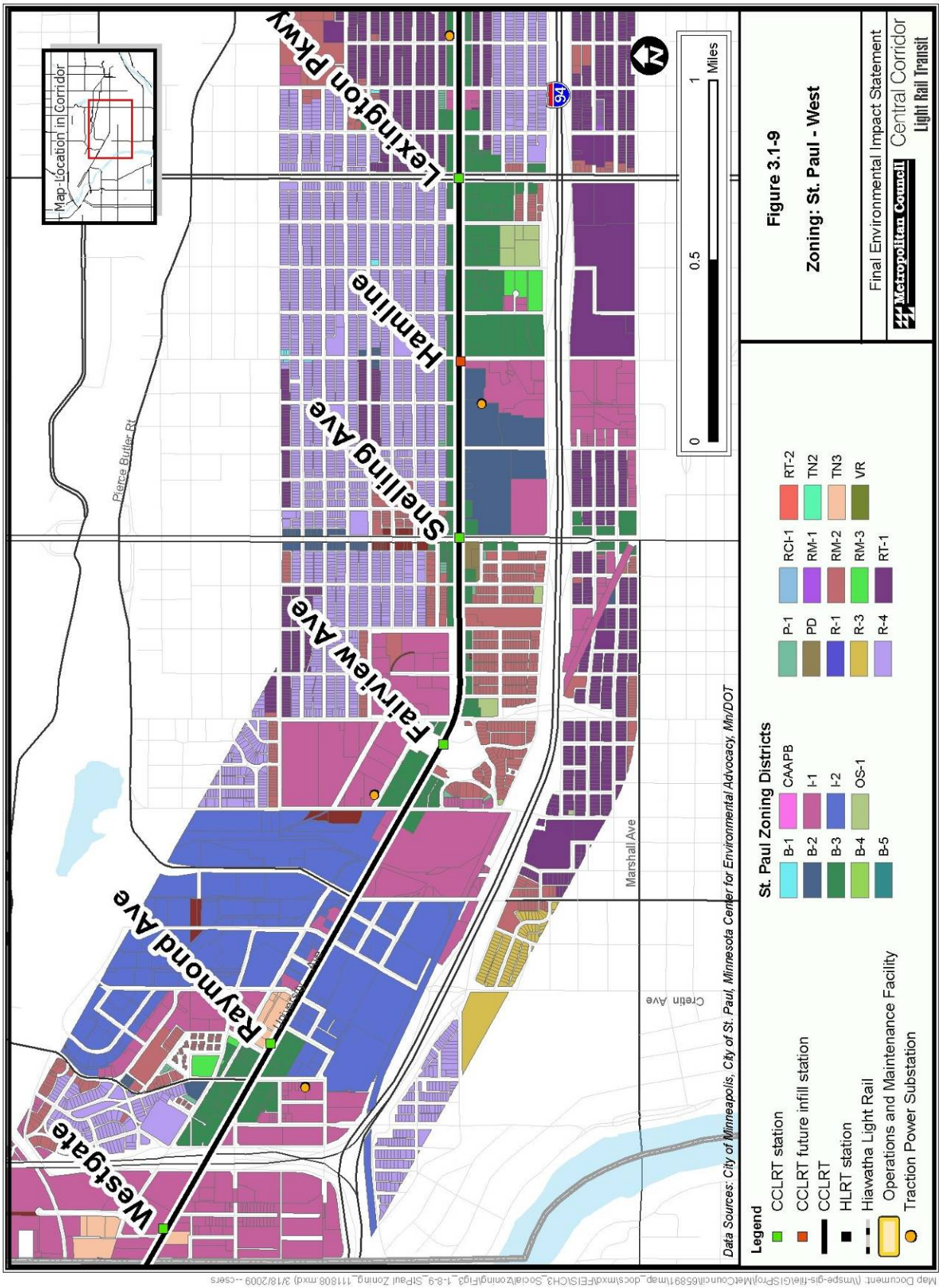
Figure 3.1-9
Zoning: St. Paul - West
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Map Location in Corridor
Lexington Pkwy
Hamline
Snelling Ave
Fairview Ave
Raymond Ave
Westgate
Pierce Butler Rt
Marshall Ave
Cretin Ave
University Ave
94
35
0
0.5
1
Miles
St. Paul Zoning Districts
B-1
B-2
B-3
B-4
B-5
CAAPB
I-1
I-2
OS-1
P-1
PD
R-1
R-3
R-4
RCI-1
RM-1
RM-2
RM-3
RT-1
RT-2
TN2
TN3
VR
Legend
CCLRT station
CCLRT future infill station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Data Sources: City of Minneapolis, City of St. Paul, Minnesota Center for Environmental Advocacy, Mn/DOT
Map Document: (\\mspe-gis-file\GISProj\MetCouncil\65891\map_docs\mxd\FEIS\CH3_SocialZoningfig3_1-8-9_StPaul Zoning_111808.mxd) 3/18/2009 --csers

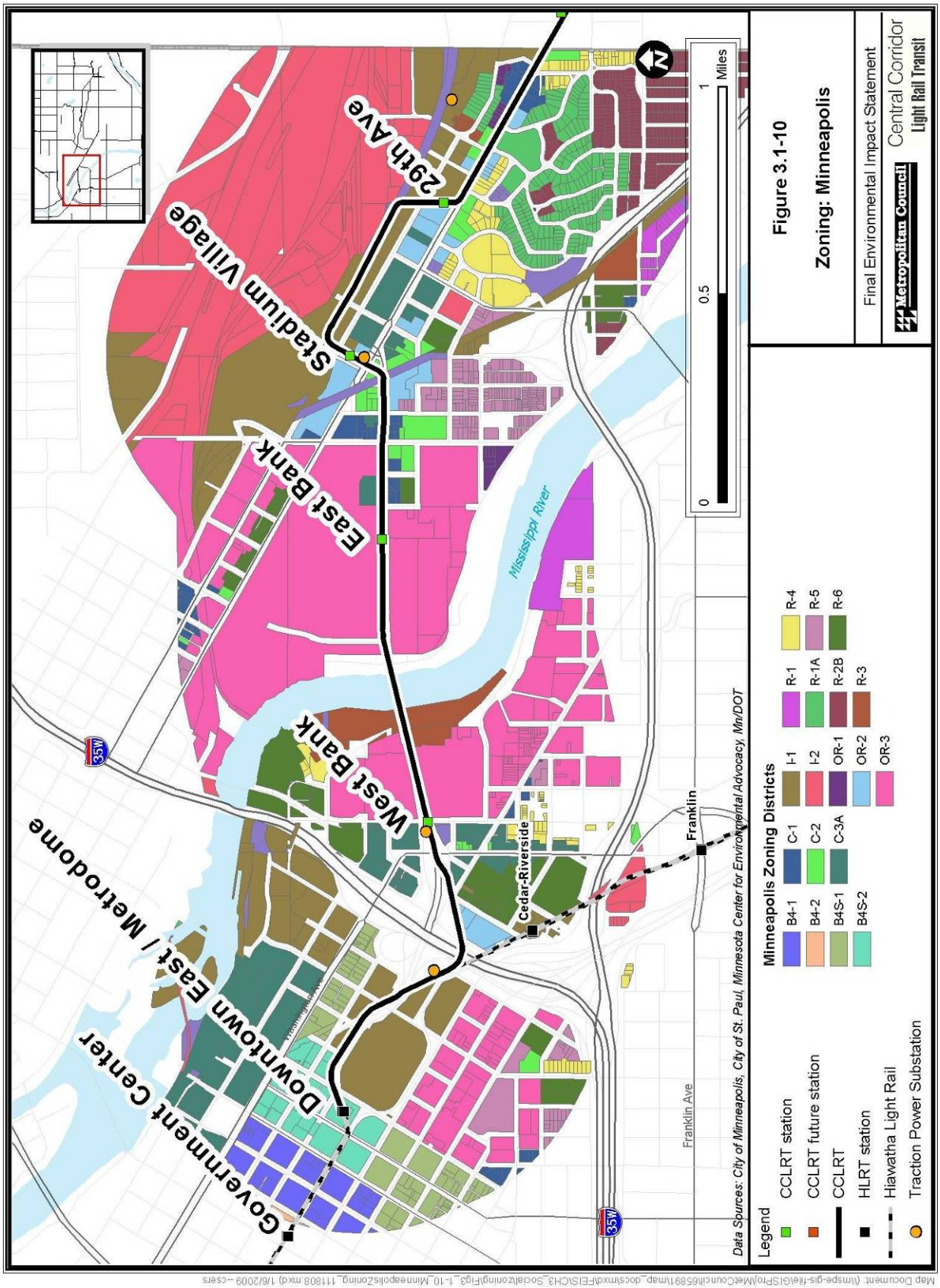
Figure 3.1-10
Zoning: Minneapolis
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
0
0.5
1
Miles
29th Ave
Stadium Village
East Bank
West Bank
Downtown East / Metrodome
Government Center
Cedar-Riverside
Franklin
Franklin Ave
Mississippi River
35W
94
Minneapolis Zoning Districts
B4-1
B4-2
B4S-1
B4S-2
C-1
C-2
C-3A
I-1
I-2
OR-1
OR-2
OR-3
R-1
R-1A
R-2B
R-3
R-4
R-5
R-6
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Traction Power Substation
Data Sources: City of Minneapolis, City of St. Paul, Minnesota Center for Environmental Advocacy, Mn/DOT
Map Document: (\\mspe-gis-file\GISProj\MetCouncil\65891\map_docs\mxd\FEIS\CH3_SocialZoning\Fig3_1-10_MinneapolisZoning_111808.mxd) 1/6/2009 -- csers

3.1.2.1 Downtown St. Paul

Land Use

As depicted in Figure 3.1-3, the Downtown St. Paul segment contains a compact concentration of offices, residential units, and entertainment venues, all of which are situated on a bluff above the Mississippi River. Cedar Street is lined by the largest office towers in downtown St. Paul and bisects the core into east and west sides. Jackson Street defines the eastern extent of the core and is the western boundary of the Lowertown Historic District, and includes Union Depot and large warehouse buildings that have been converted to office and residential uses. The Xcel Energy Center Arena and the Science Museum on the southwest edge of downtown St. Paul anchor a growing entertainment district that includes Roy Wilkins Auditorium and the RiverCentre convention venue.

As shown in Table 3.1-3, commercial and retail space account for nearly 16 percent of land use in the downtown area, which is approximately 8.4 percent of all commercial/retail land uses in the corridor. The largest portion of land use in the downtown area, however, is mixed use, defined as either mixed commercial, residential, or industrial land uses, comprising 17.3 percent of the segment and nearly 1.4 percent of the corridor total. Approximately 8.3 percent of the total corridor acreage is found in the downtown St. Paul segment.

Table 3.1-3 Existing Land Use for Downtown St. Paul

Land Use Category[a]	Acreage	Percentage of Segment Total	Percentage of Corridor Total
Multi-Family Residential	9	1.5	0.1
Commercial/Retail	95	15.7	1.3
Mixed Use	20	17.3	1.4
Office	62	10.3	0.9
Industrial	61	10.1	0.8
Public/Institutional	37	6.2	0.5
Parks/Open Space	51	8.4	0.7
Transportation	52	10.2	0.8
Unused	20	3.4	0.3
Water	101	16.8	1.4
Total	601	100.0	8.3

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

[a] All land use acreages and percentages shown are based on 2005 Metropolitan Council land use at a distance of one-half mile from the Preferred Alternative alignment.

Zoning

The majority of downtown St. Paul is zoned "B-4 Central Business District," which allows high-intensity commercial, residential, and institutional uses (Figure 3.1-8). The "B-5 Central Business Service District" is also represented, and it allows some manufacturing uses. An I-1 district, which allows wholesale, warehouse, and other industrial operations whose external influences will not affect areas beyond the zoning district, is also present to the east

of the downtown area. These zoning categories have effectively allowed for the substantial amount of commercial and industrial uses identified above.

Overlay zoning districts in the downtown area include "RC-4 River Corridor Urban Diversified Overlay District," which stresses the maintenance of the existing variety of land uses in the area, the preservation of natural areas and connections to the river, and the protection of historic sites. The applicable River Corridor Standards and Criteria, further, stress maintaining the natural and historic characteristics of the area through limiting poorly planned developments along the riverfront and river bluffs, limiting soil erosion, and protecting wildlife, natural vegetation, and water quality.

Airport zoning restrictions also apply to a portion of Downtown St. Paul, which prevents building within Zone A and imposes acreage and density requirements in Zone B. In the downtown segment, Zone A restrictions apply for land generally to the southeast of the Lafayette Bridge overlap of Kellogg Boulevard. Zone B extends to the northwest of this area, affecting a portion of the Operation and Maintenance Facility (OMF) site. These zoning restrictions are described more fully in Section 3.1.4.3.

3.1.2.2 Capitol Area

Land Use

As shown in Figure 3.1-3, the main land uses of this segment are institutional. The area is characterized by the Capitol and related government buildings, which are under the jurisdiction of the CAAPB. The Capitol Area planning segment is located at the eastern end of University Avenue. Hospitals/clinics with commercial uses and small businesses are located west of Rice Street.

As shown in Table 3.1-4, public and institutional land use accounts for 28.4 percent of the segment total, approximately 2.6 percent of the corridor total, and over 18.3 percent of all public and institutional land use. Other significant land use categories in this segment include transportation (17 percent) and multi-family residential (13.5 percent). The total acreage in this segment accounts for about 9.2 percent of the corridor total, the least acreage of any segment.

Table 3.1-4 Existing Land Use for the Capitol Area

Land Use Category[a]	Acreage	Percentage of Segment Total	Percentage of Corridor Total
Single-Family Residential	21	3.2	0.3
Multi-Family Residential	90	13.5	1.2
Commercial/Retail	85	12.7	1.2
Office	34	5.2	0.5
Mixed Use	13	2.0	0.2
Industrial	60	9.0	0.8
Public/Institutional	189	28.4	2.6
Parks/Open Space	46	6.9	0.6
Transportation	113	17.0	1.6
Unused	14	2.1	0.2
Total	666	100.0	9.2

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

[a] All land use acreages and percentages shown are based on 2005 Metropolitan Council land use at a distance of one-half mile from the Preferred Alternative alignment.

Zoning

Because the CAAPB controls the land use in the area around the Capitol, the majority of the Capitol Area segment is outside the authority of the City of St. Paul. Other portions within this segment, however, include City of St. Paul zoning district B-5, which allows a central business district with wholesale and warehouse operations, and RM-2 and RM-3 districts, which allow low- and medium-density multi-family dwellings (Figure 3.1-8).

3.1.2.3 Midway East

Land Use

The Midway East segment, shown in Figure 3.1-4, has a mix of land uses and urban forms including older storefronts on small parcels adjacent to sidewalks; large regional shopping centers; small and large office and medical buildings; commercial warehouses; and automobile sales and service businesses. The dominant land use pattern immediately adjacent to University Avenue is commercial at main intersections, with residential uses increasing as one moves away from University Avenue. This pattern is especially consistent to the north of University Avenue.

The majority of the housing units were originally constructed as single-family dwellings. A few nodes of higher population density can be found, however, and some single-family dwellings were subsequently divided into flats. Although there are only a few large apartment buildings, the resulting number of housing units is substantial.

As shown in Table 3.1-5, nearly half of the Midway East segment is devoted to single-family dwellings—the major land use category in this segment. This segment accounts for more than a quarter of total corridor acreage, and land devoted to single-family homes in this

segment accounts for over 11 percent of the total corridor acreage, which is more than any other land use in a single segment. Other significant land use categories for Midway East include commercial and retail (14 percent of the segment) and public and institutional (11.2 percent of the segment).

Table 3.1-5 Existing Land Use for Midway East

Land Use Category[a]	Acreage	Percentage of Segment Total	Percentage of Corridor Total
Single-Family Residential	826	41.6	11.4
Multi-Family Residential	331	16.7	4.6
Commercial/Retail	278	14.0	3.8
Office	33	1.7	0.5
Mixed Use	16	0.8	0.2
Industrial	25	1.3	0.3
Public/Institutional	223	11.2	3.1
Parks/Open Space	59	3.0	0.8
Transportation	143	7.2	2.0
Unused	49	2.5	0.7
Total	1,984	100.0	27.3

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

[a] All land use acreages and percentages shown are based on 2005 Metropolitan Council land use at a distance of one-half mile from the Preferred Alternative alignment.

Zoning

Existing zoning along University Avenue in St. Paul is predominantly “B-3 General Business District," as shown in Figure 3.1-8 and Figure 3.1-9. This commercial zoning designation "is intended to provide sites for more diversified types of businesses than those in the B-1 and B-2 Business Districts, and is intended for location along major traffic arteries" (St. Paul, 2008). This zoning district allows a wide variety of commercial uses including small and large retail establishments, automobile dealerships and service stations, printing and small-scale manufacturing, and hospitals and motels. Indeed, all these uses are found within the University Avenue corridor, resulting in a broad mix of businesses occupying a wide variety of structures.

The "OS-l Office Service" classification is more restrictive than the "B-2" and “B-3 General Business" classifications. The "OS-I" and "B-2" classifications are applied to some parcels in the corridor. The shopping center area at Snelling Avenue and University Avenue is classified “B-2,” and a small number of "Office Service" parcels are defined along University Avenue.

Many blocks along University Avenue that are zoned for commercial uses include parcels fronting the Avenue (half of the block depth); the half-block behind is zoned for residential use. Large portions of these residential areas carry the classification of "R-4 One-Family Residential District," but "RT-l Two-Family Residential District," "RM-1," and "RM-2" are also included. These districts allow low- and medium-density multiple-family dwellings. A number of parcels are zoned "P-l Vehicular Parking District," which is used for parking lots ancillary to businesses, institutions, or multiple family residences.

3.1.2.4 Midway West

Land Use

The fourth corridor-planning segment, Midway West, is illustrated on Figure 3.1-5. Part of Midway West continues the variety of land uses evident in Midway East, with commercial uses fronting University Avenue and residential uses starting on rear half-blocks south and north of University Avenue.

West of Prior Avenue, industrial uses become much more common and occupy significant portions of land in both directions from University Avenue. Other areas remain bordered by commercial uses, with industrial facilities to the north and south. The Westgate development, on the north side of University Avenue, lies between Prospect Park and TH 280 in St. Paul. This area consists of a growing business park and an area of mixed land uses to the south. A single block of houses is surrounded by industrial plants and warehouses along Curfew Street.

As shown in Table 3.1-6, the largest percentage of the acreage in this segment is devoted to industrial land uses (34.4 percent of the segment total). Although not as dominant a land use as in Midway East (because over 400 acres are devoted to industrial land use), single-family housing in this segment accounts for over 16.3 percent of total land use in the segment, and 2.8 percent of the corridor total. Commercial and retail, as well as public and institutional land uses, are not as significant in this area as in the previous segments, with 12.2 and 2.7 percent of land use, respectively. The Midway West segment accounts for over 1,250 acres as a whole—the third largest segment.

Table 3.1-6 Existing Land Use for Midway West

Land Use Category[a]	Acreage	Percentage of Segment Total	Percentage of Corridor Total
Single-Family Residential	206	16.3	2.8
Multi-Family Residential	119	9.4	1.6
Commercial/Retail	155	12.2	2.1
Office	49	3.9	0.7
Mixed Use	57	4.5	0.8
Industrial	435	34.4	6.0
Public/Institutional	35	2.7	0.5
Parks/Open Space	36	2.9	0.5
Transportation	174	13.7	2.4
Total	1,266	100.0	17.5

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

[a] All land use acreages and percentages shown are based on 2005 Metropolitan Council land use at a distance of one-half mile from the Preferred Alternative alignment.

Zoning

Zoning in the Midway West segment (Figure 3.1-5) is similar to that of Midway East, with a handful of parcels along University Avenue zoned "I-1 Industrial District." This is St. Paul's lightest industrial classification, allowing warehouse, wholesale, and assembly uses. The

heavier industrial classification of "I-2" is found in the Midway Industrial District, which is located between TH 280 and Prior Avenue to the north and south of University Avenue.

3.1.2.5 University/Prospect Park

Land Use

The University/Prospect Park segment, illustrated in Figure 3.1-6, extends from the St. Paul/ Minneapolis city limit to the eastern portion of downtown Minneapolis. Between the Minneapolis limit and the U of M, land use is predominantly residential south of University Avenue. This residential area is one of the oldest in the city and has many large, well-kept homes. North of University Avenue, the SEMI area is the predominant feature, containing warehouses and grain elevators. Adjacent to University Avenue, mixed uses include student housing, retail, offices, and residences.

Areas surrounding the U of M, such as Stadium Village and Dinkytown, are composed of older storefronts with small businesses that serve students. A particular focus of traditional storefronts along the alignment can be found at the intersection of Oak Street and Washington Avenue, as well as between Walnut and Harvard Streets on Washington. Also in this area are the Fairview Hospitals and Clinics to the south of Washington Avenue, and a complex of sports facilities to the north, including Mariucci Hockey Arena, Williams Arena, and TCF Bank Stadium.

The U of M campus is located on both sides of the Mississippi River east of downtown Minneapolis. The Washington Avenue Bridge connects the West Bank of the campus, with its concentration of classrooms and libraries, to the East Bank with its very dense concentration of classrooms, lecture halls, laboratories, and the University Hospital and clinics. Along Cedar Avenue between the U of M and downtown Minneapolis, high-density housing and retail nodes can be found. To the south of the alignment and the West Bank is Augsburg College.

As shown in Table 3.1-7, the predominant land use in this planning segment is public and institutional (26.7 percent), mainly attributable to the presence of the U of M campus in this segment. The University/Prospect Park segment accounts for 21 percent of the total corridor acreage and contains nearly 40 percent of all public and institutional land use in the corridor. Industrial land use accounts for 13 percent of the segment acreage. Single-family residential land use accounts for approximately 7 percent of the segment. Multi-family housing comprises 10.6 percent of the area and 2.2 percent of the corridor, which reflects the presence of the Cedar-Riverside housing complex in this segment. Housing units alone (excluding potential mixed-use residential buildings) therefore comprise over 17 percent of the land use in this segment. The total area of the segment is over 1,500 acres, which is slightly larger than the land area of the Downtown Minneapolis segment.

Table 3.1-7 Existing Land Use for University/Prospect Park

Land Use Category[a]	Acreage	Percentage of Segment Total	Percentage of Corridor Total
Single-Family Residential	107	7.0	1.5
Multi-Family Residential	162	10.6	2.2
Commercial/Retail	110	7.2	1.5
Office	7	0.5	0.1
Mixed Use	29	1.9	0.4
Industrial	197	13.0	2.7
Public/Institutional	406	26.7	5.6
Parks/Open Space	127	8.3	1.7
Transportation	247	16.2	3.4
Unused	46	3.0	0.6
Water	84	5.5	1.2
Total	1,521	100.0	21.0

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

[a] All land use acreages and percentages shown are based on 2005 Metropolitan Council land use at a distance of one-half mile from the Preferred Alternative alignment.

Zoning

The U of M campus is an entity with home rule powers independent of the City of Minneapolis and State of Minnesota, and is not covered by the City of Minneapolis' zoning regulations. The U of M has control of the land uses within its boundaries. Stadium Village, within the City of Minneapolis, is a mix of "C-3A, C-l, and C-2" districts, which allow various scales of commercial development. Parcels fronting on University Avenue are zoned for a mix of office residential and commercial uses, backed by large areas of industrial zoning to the north and residential zoning to the south. This enables projects such as the biomedical research facility expansion, which is a legislatively-bonded, 60-acre development with an estimated value of $250 million. For the Cedar-Riverside area, a zoning district of "R-6" allows high-density apartments and cluster developments. Figure 3.1-10 illustrates the location of the zoning districts.

3.1.2.6 Downtown Minneapolis

Land Use

As shown on Figure 3.1-7, downtown Minneapolis is the westernmost segment of the Central Corridor LRT project. Downtown Minneapolis is the major employment center in the Twin Cities Metropolitan Area. Its office core has a large number of high-rise office towers and related retail and hospitality establishments. High and medium density residential land uses are located along Hennepin Avenue, the riverfront, and in the neighborhoods that surround the downtown core.

Land use is divided into functional zones, including the Warehouse District entertainment area to the west, the central business district (CBD), which includes Nicollet Mall retail businesses and parking areas, and the Hubert H. Humphrey Metrodome stadium in the eastern part of downtown. The Hiawatha LRT line operates through downtown Minneapolis on Fifth Street.

As shown in Table 3.1-8, the largest percentage of land use in the area (33.4 percent) is commercial and retail; overall, this use accounts for roughly 5.6 percent of corridor land use. A substantial amount of the segment is devoted to industrial land (19.4 percent), followed by public and institutional land uses comprising 11.4 percent of the segment's total land use. Downtown Minneapolis also has the largest concentration of multi-family housing in the corridor (8.6 percent for the segment and 1.4 percent of the corridor total). The total acreage in the downtown Minneapolis segment is slightly less than the acreage of the University/Prospect Park segment - 1,217 acres or 16.8 percent of the corridor total.

Table 3.1-8 Existing Land Use for Downtown Minneapolis

Land Use Category[a]	Acreage	Percentage of Segment Total	Percentage of Corridor Total
Single-Family Residential	2	0.1	0.0
Multi-Family Residential	104	8.6	1.4
Commercial/Retail	407	33.4	5.6
Office	82	6.7	1.1
Mixed Use	85	7.0	1.2
Industrial	236	19.4	3.2
Public/Institutional	139	11.4	1.9
Parks/Open Space	33	2.7	0.5
Transportation	67	5.5	0.9
Unused	4	0.4	0.1
Water	59	4.8	0.8
Total	1,217	100.0	16.8

Source: Metropolitan Council, MetroGIS Datafinder, Generalized Land Use, 2005

[a] All land use acreages and percentages shown are based on 2005 Metropolitan Council land use at a distance of one-half mile from the Preferred Alternative alignment.

Zoning

Downtown Minneapolis, within the study area, has specific regulations under the "B-4" zoning classification that permit a broad mix of residential, business, service, and commercial uses (Figure 3.1-10). Along the eastern edge of the downtown area, such as around the Metrodome, an Industrial Living Overlay District encourages the adaptive reuse of industrial buildings for residential and retail use. Around the existing Downtown East station, zoning allows for more intensive and transit-oriented development. Rezoning has been approved for the area surrounding the Downtown Minneapolis Ballpark Station, now under construction, which encourages more intensive mixed-use development that would support the multi-modal station, the new Minnesota Twins ballpark, and areas such as the Warehouse District and the North Loop.

3.1.2.7 Construction Trends

Building permit data from 2004 to 2008 demonstrate recent construction trends in the Central Corridor. Table 3.1-9 provides information on building permits issued during this period.

Table 3.1-9 Building Permits 2004-2008 by Segment

Segment	Number of Permits Issued	Percentage of Number of Permits	New Residential Units	Percentage New Residential Units	New Commercial Square Feet	Percentage New Commercial Square Feet
Downtown St. Paul	10	11.4	41	1.3	393,647	8.5
Capitol Area	14	15.9	124	3.9	2,151,377	46.2
Midway East	28	31.8	367	11.6	736,034	15.8
Midway West	11	12.5	383	12.1	1,219,997	26.2
University/ Prospect Park	9	10.2	376	11.8	23,700	0.5
Downtown Minneapolis	16	18.2	1,884	59.3	131,929	2.8
Total	88	100.0	3,175	100.0	4,656,684	100.0

Source: Minneapolis Department of Planning and Economic Development (CPED) and St. Paul Planning and Economic Development (PED).

As demonstrated in Table 3.1-9, within one-half-mile of the alignment, nearly 90 building permits were issued between 2004 and mid-2008. Over 3,000 new residential units have been created or are in the process of being completed, with the highest concentration located in the Downtown Minneapolis segment (nearly 60 percent). Furthermore, 4,656,684 new commercial square feet have been constructed or are in the process of being completed, with nearly half concentrated in the Capitol Area segment.

The majority of building permits issued—31.8 percent—were issued in Midway East. Midway East contains the largest number of acres of the six segments as shown in Table 3.1-2 to Table 3.1-8. The Capitol Area, however, with the smallest number of acres—8.6 percent of the overall area in the corridor—has gained the substantial majority of new commercial space.

3.1.3 Socioeconomics

This section discusses the socioeconomic characteristics of the study area. The section also discusses characteristics of the neighborhoods within the study area and draws comparisons between the study area and the seven-county metropolitan region, Hennepin and Ramsey counties, and the cities of Minneapolis and St. Paul. Socioeconomic factors considered in this analysis include the total number of people and households, population by age, race and ethnicity, employment, household income and poverty, and vehicle availability. Pursuant to federal guidelines, an enhanced analysis and discussion of impacts

to sensitive communities, such as minority and low-income populations, is provided in Section 3.8.

3.1.3.1 Total Population and Households

Population characteristics considered relevant to the social setting of the study area include the total population, population by age, race and ethnicity, households, household income, and poverty status. Population, household characteristics, and employment data for 2000 and 2030 are derived from the 2000 U.S. Census and the Metropolitan Transportation Policy Plan presented in Chapter 1. Based on the 2000 U.S. Census, the study area population was estimated to be approximately 119,038, comprising roughly 4.5 percent of the seven-county metropolitan region's total population. According to Census block-group data, 49,309 households were located in the study area in 2000.

3.1.3.2 Population by Age

Table 3.1-10 identifies the number and percentage of population by age group. The data indicate that the majority of the study area population is between the ages of 18 and 64, with children and young adults under the age of 18 comprising the second largest age cohort.

Table 3.1-10 Study Area Population by Age

Age Cohort	Number of persons	Percentage of total
Under 18 Years	24,405	21
18 to 64 Years	83,772	70
65 Years and Over	10,861	9
Total	119,038	100

Source: U.S. Census Bureau, Census 2000 Summary File 3 (S F 3), 2001

3.1.3.3 Population by Race and Ethnicity

The study area is composed of a variety of racial and ethnic groups, all of whom contribute to the unique urban character of the study area and the greater Minneapolis-St. Paul metropolitan region. Race may be defined as a self-identification data item based on an individual's perception of his or her racial identity. Respondents to the 2000 Census selected the race(s) with which they most closely identified themselves. Ethnicity is defined as the classification of a population that share common characteristics such as religion, cultural traditions, language, tribal heritage, or national origin. In the 2000 Census population by race/ethnicity data, the Hispanic/Latino population is included in the following seven racial categories: White, Black or African American, American Indian and Alaskan Native, Asian, Native Hawaiian and other Pacific Islander, Some Other Race, or Two or More Races. Table 3.1-11 provides an overview of the study area population by race and ethnicity. The substantial majority of the population in the study area is Caucasian (54 percent), followed by Black or African-American (20 percent), Hispanic or Latino (7 percent), and Asian (3 percent). When citywide figures are referenced, the proportion for Minneapolis residents remains roughly the same. In St. Paul, however, Asian and Black or African-American communities are roughly identical in size and are the largest minority groups.

Table 3.1-11 Population by Race and Ethnicity

Race/Ethnicity	Hennepin County		Ramsey County		Central Corridor study area	
	Number of Persons	Percentage of Total	Number of Persons	Percentage of Total	Number of Persons	Percentage of Total
White (Non-Hispanic)	898,921	80	395,406	77	64,573	54
Black or African-American	99,943	9	38,900	8	24,121	20
Hispanic or Latino[a]	45,439	4	26,979	5	8,310	7
Asian	53,555	4	44,836	9	15,101	13
All Others[c]	63,781	6	31,893	6	6,933	6
Total[b]	1,116,200	100	511,035	100	119,038	100

Source: U.S. Census Bureau, Census 2000 Summary File 1 (S F 1), 2001

[a] By definition, the ethnic category "Hispanic or Latino" includes persons of any race; however, for purposes of this study, Hispanic or Latino persons comprise their own ethnic category and their number are included with the race categories (White, Black, Asian, etc.). However, the Census Bureau excludes Hispanic or Latino from the race categories when considering the racial composition of the city population to avoid double counting of persons. The category "all others" includes American Indian and Alaska Native, Native Hawaiian or other Pacific Islander, "some other race," and persons of two or more races.

[b] The final totals for number of persons and percentage of totals in the counties exclude the Hispanic or Latino ethnic category to avoid double counting. When the columns are summed including the Hispanic or Latino ethnic category, the total number of persons is higher than the stated final total, and the percentage of total is greater than 100%.

[c] The category "All Others" includes American Indian and Alaska Native, Native Hawaiian and other Pacific Islander, "some other race," and persons who identified themselves as being of two or more races.

3.1.3.4 Income and Poverty

Using Census 2000 data, the study area median household income was calculated to be $29,912, based on 1999 dollars. This figure represents a weighted average of the median incomes for the census block groups located within the Central Corridor LRT Study Area. A weighted average was used because median household incomes for census block groups within the corridor are varied. Median household income ranged from $10,503 to $62,490 for the block groups considered. As displayed in Table 1-1 of Chapter 1, the median household income for the study area in 2000 was significantly lower than the cities of Minneapolis and St. Paul, Hennepin and Ramsey counties, and the greater metropolitan area.

The 2000 Census data indicate that 22.9 percent, or 27,338 persons, living in the study area had incomes at or below the poverty level. Poverty rates were greatest in the Midway East, University/Prospect Park (clustered nearer the U of M and the Cedar Riverside community), and portions of Downtown Minneapolis planning segments. It should be noted that student populations near the U of M likely are responsible for the segment displaying a higher poverty rate. Students represent a group of persons whose incomes are relatively limited, and who are considered residents of the census block groups during their time at the U of M.

3.1.3.5 Housing

As displayed in Table 3.1-12, the number of housing units in the study area totaled 52,061 in year 2000. The number of renter-occupied units (34,531) surpassed the number of owner-occupied units (14,779), a difference of 19,752 occupied housing units. An estimated 2,751 units, or 5 percent of all housing units within the study area, were considered vacant. The table compares home ownership and tenure rates of the study area with the cities of Minneapolis and St. Paul.

Table 3.1-12 Housing by Occupancy and Tenure

Occupancy/Tenure	Study Area		City of Minneapolis		City of St. Paul	
	Number of units	Percentage of total	Number of units	Percentage of total	Number of units	Percentage of total
Owner-occupied	14,779	28.4	83,408	49.5	61,464	53.1
Renter-occupied	34,531	66.3	78,944	46.8	50,645	43.8
Vacant	2,751	5.3	6,254	3.7	3,604	3.1
Total	52,061	100.0	168,606	100.0	115,713	100.0

Source: U.S. Census Bureau, Census 2000 Summary File 3 (S F 3), 2001

3.1.3.6 Employment

As shown in Table 3.1-13, total employment for the study area was estimated to be approximately 324,410 in 2000. Of this number, approximately 1151,990 jobs were located in downtown Minneapolis and 46,920 jobs were located in downtown St. Paul. Using Metropolitan Council TAZ projections, employment in the study area is expected to grow by 32 percent to nearly 428,320 jobs corridor wide in 2030. Downtown St. Paul and Downtown Minneapolis segments are expected to absorb the majority of the job growth, but the Midway East segment is also expected to grow dramatically. Figures 1-6 through 1-8 (see Chapter 1) display the shifting nature of employment projected within the study area, suggesting changes in land use patterns and relocation of jobs and housing in the study area. (Unlike Census data, which provide data for the number of employed persons within a Census block group, TAZ data provide an estimate of the number of jobs based on geographic area. Table 3.1-13 provides the current and projected employment numbers for the study area based on TAZ data.)

Table 3.1-13 Central Corridor Employment by Segment

Study Area Segment*	2000	Projected 2010[a]	Projected 2030	Percent change from 2000 to 2010	Percent change from 2000 to 2030
Downtown St. Paul	46,920	49,420	72,610	5	55
Capitol Area	33,180	31,060	31,910	-6	-4
Midway East	16,500	19,810	20,070	20	22
Midway West	30,840	31,070	30,990	1	0
University of Minnesota	44,980	46,130	46,990	3	4
Downtown Minneapolis	151,990	150,010	195,260	-1	28
Total Corridor Study Area	324,410	327,500	428,320	1	32

Source: Metropolitan Council, MetroGIS Datafinder, Transportation Analysis Zones 2000

[a] All employment forecast data were derived from the most recent TAZ data supplied by the Metropolitan Council in June/2008.

3.1.3.7 Neighborhood and District Characteristics

Table 3.1-14 demonstrates the ethnic and racial diversity of the corridor, as well as the total population for each of the neighborhoods and districts. The area with the greatest population is the Union Park district, composed of the Merriam Park, Snelling-Hamline, and Lexington-Hamline neighborhoods and home to nearly 19,000 residents. (See Figure 3.2.1 in Section 3.2, Neighborhood and Community District Boundaries). The Union Park district is also home to the largest concentration of Caucasian residents in the corridor, with over 15,000 people. Summit-University, the second largest area, is home to over 18,000 residents and also contains the largest Black or African-American population in the corridor.

The Thomas-Dale area is a close third in population size, with over 17,000 residents. Thomas-Dale can be considered the most racially and ethnically diverse area, with the largest concentrations of Asian residents, Hispanic or Latino residents, and residents of two or more races in the corridor. Thomas-Dale is also home to the second largest concentration of Black or African-American residents in the corridor.

As shown in Table 3.1-15, the 2000 median household income (1999 income data) in Hennepin County was $51,711, and the median household income in Ramsey County was $45,722. All Central Corridor neighborhoods and districts have median household incomes below the median incomes of the two counties, with the median household income for the study area at just under $30,000.

Table 3.1-14 Year 2000 Race or Ethnicity Composition by Neighborhood

Neighborhood or District (From St. Paul to Minneapolis)	Race						Total Population for One Race	Ethnicity
	White Alone	Black or African American Alone	American Indian and Alaska Native Alone	Asian, Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Population of Two or More Races		Hispanic or Latino
Downtown St. Paul[a]	4,374	934	64	276	137	111	5,896	353
Summit-University[a]	8,117	6,532	181	1,958	396	855	18,039	850
Thomas-Dale[a]	4,697	3,884	238	6,650	690	1,089	17,248	1,507
Hamline-Midway[a]	8,967	1,541	129	538	203	444	11,822	524
Union Park[a]	15,294	1,850	138	646	268	607	18,803	594
Saint Anthony Park[a]	4,982	300	30	562	65	137	6,076	172
Prospect Park/East River Road[b]	4,839	481	70	639	53	244	6,326	155
University of Minnesota[b]	3,540	130	10	216	32	98	4,026	98
Cedar-Riverside[b]	3,174	2,428	67	1,190	286	400	7,545	426
Elliot Park[b]	3,361	2,037	182	215	213	468	6,476	500
Downtown East – Minneapolis[bc]	81	32	1	3	8	3	128	12
Downtown West – Minneapolis[b]	3,072	1,047	80	221	38	123	4,581	139
Total	64,498	21,196	1,190	13,114	2,389	4,579	106,966	5,330

Note: Data for the above table were obtained from the cities of Minneapolis and St. Paul. These neighborhood and district boundaries do not match census tracts and do not conform to Study Area boundaries. Totals by neighborhood or district do not match Study Area totals.

[a] City of Saint Paul, Department of Planning and Economic Development. Data Resources: U.S. Census; ESRI Inc.; Wilder Research Center

[b] City of Minneapolis, Department of Community Planning and Economic Development. Data Resources: U.S. Census Bureau

[c] Some 2000 Census Data not available for Downtown East neighborhood.

Table 3.1-15 2000 Census Population Characteristics

Characteristic	Hennepin County		Ramsey County		Study Area	
	Population	Percentage of Total County Population	Population	Percentage of Total County Population	Population	Percentage of Total Study Area Population
Persons Below Poverty Level[b]	90,384	8.3	52,673	10.6	27,338	22.9
Median Household Income	$51,711		$45,722		$29,912[a]	

Source: U.S. Census Bureau, Census 2000 Summary File 3 (SF 3), 2001.

[a] This figure represents the weighted average of median incomes for the Census block groups located within the Central Corridor LRT study area. A weighted average was used because median household incomes for Census block groups within the corridor varied. In order to determine the median household income for the entire corridor, the total number of households in each Census block group were weighted against the median household incomes for the block group, and averaged across the entire number of households in the study area.

[b] U.S. Census Bureau Poverty Definition: "Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty.

3.1.4 Long-Term Effects

This section discusses the potential effects of the No-Build and Preferred Alternatives on land use and zoning in the Central Corridor Study Area, and whether the project is in accordance with local and regional plans.

3.1.4.1 Regional Land Use

Potential land use effects from the No-Build and Preferred Alternatives are discussed below.

No-Build Alternative

The expected growth and development throughout the region are likely to continue under the No-Build Alternative. Not establishing an important element of the planned regional transit system under the No-Build Alternative, however, would mean a continued reliance on the private automobile and the existing bus transit system. Development patterns that are more oriented towards rail transit, as proposed in multiple planning documents throughout the region, would not be supported.

Preferred Alternative

The Preferred Alternative, by establishing an attractive and efficient regional transit system, of which Central Corridor LRT would be a crucial part, would encourage transit-oriented development throughout the region. As described in numerous city, county, and regional plans in Sections 3.1.1.1 and 3.1.1.5, focusing new development around mass transit will help decrease dependency on the private automobile, establish pedestrian-oriented land

uses, and begin to accommodate the population growth expected for the region in a land-efficient and responsible manner.

3.1.4.2 Consistency with Local Plans

No-Build Alternative

The No-Build Alternative represents no change and would not be supportive of local and regional plans because it would not aid in increasing mobility, decreasing congestion, and encouraging the types of mixed-use, pedestrian-oriented communities stressed in the local plans.

Preferred Alternative

The Preferred Alternative would result in a substantial public investment in the Central Corridor, which has the potential to leverage other long-term public investments. The Preferred Alternative is consistent with local and regional plans, all of which are discussed in detail in Sections 3.1.1.1, and 3.1.1.5, with the exception of land use plans concerning the reuse of the Diamond Products site in downtown St. Paul. Current plans, namely the *Report of the Diamond Products Task Force*, call for urban scale residential and mixed commercial, institutional, and entertainment uses in this portion of downtown St. Paul. However, the City of St. Paul approved the OMF location on March 18, 2009 in the Municipal Consent process (see Appendix E). Overall, although some documents are more concerned with Central Corridor LRT than others, each is generally supportive of improving transit and establishing more pedestrian-friendly environments, which would be aided through the implementation of Central Corridor LRT.

3.1.4.3 Local Land Use

No-Build Alternative

Current land use and development trends that increase housing density through redevelopment of former commercial and industrial buildings may continue, but would not be stimulated by increased access to transit services. No improvements to mobility or transit development would be accomplished under the No-Build Alternative, and there is no other major public investment for the Central Corridor in the foreseeable future that could stimulate positive community reinvestment and redevelopment.

Preferred Alternative

Future Development

The Preferred Alternative will be a major public investment in the Central Corridor, which provides the opportunity to encourage substantial new development and improvements in the area. Investments from private developers, coupled with location-specific land use controls, can create the desired development pattern of a higher-density, transit- and pedestrian-oriented environment. Development is likely to be focused at each transit station, because the increase in activity and desire for transit-supportive, mixed-use developments will be best suited for areas within one-quarter mile of each station. Although development is likely to be less intense between stations, many other major development areas have also been identified by the *Central Corridor Development Strategy* (CCDS) and associated Station Area Plans for land beyond one-quarter mile of the station platforms.

In downtown St. Paul, the focus of new development will be at the diagonal alignment between Cedar and Minnesota Streets. Due to the proposed demolition of a vacant building and use of existing surface parking lots to accommodate the alignment, a significant opportunity for new construction exists in this dense urban center. As outlined in the CCDS, this new development can incorporate the 4th and Cedar Streets Station and its associated plaza into the base of the building, thereby creating a new center of activity.

As outlined in the CCDS and associated Station Area Plans, the Capitol Area, Midway East, and Midway West will also see significant investment and redevelopment through the coming decades. Examples of major redevelopment possibilities include the creation of an urban village at the Sears site near the Rice Street Station, the development of vacant land and surface parking near Lexington Parkway, and the intensification of the Midway regional shopping area to encourage pedestrian activity and transit use.

Loss of on-street parking may affect current land use types, mainly due to the lack of direct vehicular access to certain businesses. As the corridor becomes more intensely developed over time, automobile-oriented uses and lower-density uses near major intersections will likely be redeveloped to denser, pedestrian-oriented uses. Near the Westgate and Raymond Avenue stations, a prestigious office area on industrial land near the intersection of TH 280 and I-94 has been suggested.

The design for proposed modifications to the access ramps to Washington Avenue from I-35W has been refined to limit impacts to development opportunities near Cedar-Riverside, and to enhance transit-oriented development potential to the south of the trench.

Operations and Maintenance Facility (OMF)

In downtown St. Paul, the location of the OMF may affect nearby residential and commercial development due to its reuse of the Diamond Products building, which will prevent a portion of it from being redeveloped in an area where renovations of historic buildings have been common. Due to airport zoning restrictions and industrial land use zoning, however, potential residential and commercial development would be limited in the immediate area. Depending on real estate development trends, overall commercial and residential development near the facility may be limited in nature.

A City of St. Paul land use zoning change will be needed to accommodate the OMF. Because the facility is proposed to be located mainly in a B-5 zoning district, which permits railroad right of way but would not permit the OMF, a zone change to an I-1 district will be necessary. An I-1 district borders the B-5 district where the Diamond Products site is located, and would not result in a substantial change. Further, a portion of the OMF extends into the existing I-1 district, and this zone change would create a single zoning district for the facility. A zone change request will likely be submitted at the end of 2009 or the beginning of 2010 to meet the requirements of the City of St. Paul Code of Ordinances, Chapter 61, Zoning Code--Administration and Enforcement, Sec. 61.301, paragraph (d) Rezoning. The zone change must be approved before a building permit for the OMF can be issued, and will undergo a 60-day review process that can be extended to a maximum of 120 days.

Due to the proximity of the St. Paul Downtown Airport, Holman Field airspace zoning restrictions also apply to the OMF. A portion of the OMF is proposed to be located within Zone B, including a small section of the Diamond Products building, a stormwater pond to be shared with the Lafayette Bridge, and the tracks that would extend northeast of the

building. Zone B would permit the OMF because it allows the construction of a building as long as the site is at least 3 acres in size and meets density requirements.

University of Minnesota Transit/Pedestrian Mall

The Transit/Pedestrian Mall along Washington Avenue from Walnut Street to Pleasant Street will prevent direct vehicular access to businesses fronting on Washington, as on-street parking will be eliminated and the street will be closed to private automobiles. Although this may have some impact on the businesses, the area around the U of M is easily—and typically—reached by pedestrians and transit users. With the implementation of the Transit/Pedestrian Mall, further emphasis will be placed on transit use, which may create additional support for pedestrian-oriented businesses. Automobile-oriented businesses in the area, such as an automobile repair shop on the corner of Washington and Walnut Street, will have their access limited to side streets. Alterations to vehicular access to the U of M, medical facilities, and other surrounding land uses are addressed in Chapter 6.

Traction Power Substations

TPSS are needed throughout the corridor, and must be spaced at regular intervals to provide consistent power, be placed near the alignment to minimize costs, and provide ease of access for maintenance. In downtown St. Paul, one TPSS is proposed at the OMF and another is proposed to be incorporated into the 4th and Cedar Streets Station. The Capitol Area TPSS is proposed to be near the Capitol East Station, and would likely occupy land adjacent to a parking ramp.

The Preferred Alternative includes four locations for TPSS in Midway East. All of the locations are at cross streets to University Avenue: near Farrington Street, Mackubin Street, Milton Street, and Albert Street. At Farrington Street, the TPSS would likely be located on a surface parking lot formerly used for car sales. At Mackubin Street, a portion of the surface lot near the Unidale Mall will be used, and the TPSS would likely be located away from University Avenue to allow development to occur along the alignment. A similar approach would be taken at Albert Street, using surface parking near Wal-Mart to allow development along University Avenue as the area becomes more densely developed. At Milton Street, a small portion of land adjacent to a U-Haul parking lot will be used to site the TPSS required for this project segment.

The two TPSS locations proposed for Midway West planning segment are near the Prior and Charles avenues intersection and the Raymond and Wabash avenues intersection. At Prior Avenue, the TPSS may be located on the surface parking lot of an industrial building one block north of University Avenue. At Raymond Avenue, a portion of an additional surface parking lot may be used, located approximately one-and-one-half block south of University Avenue.

The three TPSS locations in the University/Prospect Park segment will be at the Stadium Village Station, the West Bank Station, and on a vacant parcel of land near the Intercampus Transitway north of University Avenue near the St. Paul city limits. Currently unused land adjacent to a parking lot will be used at the Stadium Village Station, some of which will be used for the station itself. At the West Bank Station, a small portion of unused land between the station and an off-ramp will be used for the TPSS.

One TPSS is needed in the freeway ROW near the I-35W interchange in the Downtown Minneapolis segment.

3.1.5 Short-Term Construction Effects

No-Build Alternative

No construction effects to land use would occur under the No-Build Alternative.

Preferred Alternative

Land use would not be affected during construction.

One skyway bridge in downtown St. Paul will be removed to allow for construction of the diagonal alignment between 4th and Cedar Streets and the 4th and Cedar Streets Station platform.

3.1.6 Mitigation

3.1.6.1 Long-term

Traction Power Substations

To limit the number of land use impacts while meeting these needs, efforts have been made to select underutilized parcels for the TPSS near the alignment, such as surface parking lots or vacant land, thereby preventing demolition of any structures or modification of land use in the corridor. Sites partially obscured by vegetation or grade changes would be used where possible to further minimize impacts to surrounding land uses. Five of the 13 TPSS will be incorporated at the OMF or near LRT station locations to limit use of more remote parcels. Further, in certain locations, underutilized areas to the north and south of the alignment were selected to maintain development opportunities along University Avenue.

Operations and Maintenance Facility

To help ensure that surrounding residential and commercial uses are enhanced by the construction of an OMF at the Diamond Products site, the proposed design includes façade treatments to the Diamond Products building and the accommodation of leasable commercial space on Broadway Street. Treatment of the southern and western façades of the Diamond Products building will be compatible with surrounding development, which may include the placement of architectural treatments to break up the building façade. Efforts will also be made to ensure that openings in the Diamond Products building, including those used by LRVs, will be appropriate for surrounding land use. To address further concerns raised by the Lowertown neighborhood, the alignment on 4th Street between Wacouta Street and Broadway was refined to maintain two-way traffic and provide alternative access for the adjacent St. Paul Farmers' Market from 5th Street, as a means to reduce access conflicts. Potential treatments will be developed in partnership with the City of St. Paul and other stakeholders. Any required operational procedures will be in place prior to beginning revenue service.

Future Development in Corridor

Increased development and redevelopment along the Central Corridor LRT, particularly in station areas, is being addressed by both cities. As described above in Section 3.1.1.1, stabilization of natural market forces in the neighborhoods is the goal of such plans as the Central Corridor Development Strategy (CCDS), which was adopted as a chapter to the

St. Paul Comprehensive Plan in 2007, wherein St. Paul has created a set of guidelines for the development of the light rail line and surrounding areas. Input from the cities, counties, and community groups will be used in the design of stations and station support. Metropolitan Council will continue on-going coordination with local neighborhood and community groups.

3.1.6.2 Short-term

The project includes funds for a skyway bridge connection to be reconstructed to reconnect the downtown St. Paul skyway system between 4th and 5th Streets. The structure will be temporary in nature but built to current design and safety standards, and will be in the same general location as the existing bridge and will maintain current pedestrian access. This connection will be permanently restored with redevelopment of this site.

Short-term impacts will be minimized by using standard construction best management practices (BMPs) such as dust control, erosion control, proper mufflers on equipment, and restricted times for construction. Although specific plans for maintaining access are still being established, BMPs would include working with residents and business-owners to provide alternative access to their neighborhoods and businesses, giving them adequate notice about construction plans and phasing, keeping access to bus stops and school routes, and alerting the public to detours.

In the construction documents, provisions will be included for maximum number of lanes closed during peak traffic hours, maintenance and removal of traffic control devices, efficient traffic rerouting measures, and scheduling of construction activities within the roadways for times other than peak traffic periods. The contractor will comply with appropriate state and local requirements concerning the closing of roadways as stated in the specifications and plans, MnDOT's *Temporary Traffic Control Handbook* and the *Minnesota Manual on Uniform Traffic Control Devices*. Construction documents and mitigation measures must be approved by local traffic engineering authorities prior to initiation of construction.

The mitigation measures required by the city/county for roadway access and traffic control will also apply to disruption of area businesses. Permits will be acquired by project contractors from the appropriate city offices for roadway disruptions and blockages. Notification of roadway disruptions will be provided to neighboring property owners/operators. In cases of roadway blockages, neighboring property owners/operators will be notified and provided with descriptions of alternative routes. The Central Corridor Partnership, an alliance of St. Paul and Midway area business leaders, will provide assistance to help businesses with marketing strategies and business planning to survive the construction process and let their customers know they are still open. The partnership is developing a business management plan and seeking funding sources. The Central Corridor LRT Project will be handling construction, which includes providing information about detours, signs, etc.

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