5.0 ECONOMIC EFFECTS

This chapter focuses on the potential economic effects of the Central Corridor Light Rail Transit project and its impact on the local economy. With implementation of the Preferred Alternative, direct, indirect, and induced economic benefits related to the construction and long-term expenditures for operations and maintenance (O&M) of the selected alternative will occur. These effects would be realized to varying degrees throughout the region in terms of increased economic output, earnings, and employment. This chapter also describes the potential effects on station area development and land use and policy decisions aimed at encouraging transit-oriented development (TOD).

Section 5.1 provides an overview of the methodology and anticipated effects of the project on the local economy. This section summarizes the anticipated economic impacts from capital operations and maintenance expenditures.

Section 5.2 provides an overview of the potential economic effects of the project on commercial and residential development located near transit stations and programs and policies that have been developed to encourage development. This section provides a description of the potential development effects related to the Preferred Alternative.

Section 5.3 considers the development effects associated with the implementation of the Preferred Alternative.

5.1 Economic Conditions

In preparing the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU), legislators specifically included language for economic development as a selection criterion for fixed-guideway transit projects. This legislation called for documentation of the degree to which the project would have a positive impact on local economic development as part of the Federal Transit Administration (FTA) review process.

As shown in Chapter 1, the Metropolitan Council and the cities of Minneapolis and St. Paul are experiencing significant population and employment growth and are expecting to continue these trends through 2030. The Central Corridor LRT project will provide increased mobility to residents and access for businesses within the Central Corridor and is expected to contribute to this growth. New transportation capacity could create competitive advantages for businesses located in the corridor. The Preferred Alternative will also provide a critical connection in the region's transportation system by providing an important link in the metropolitan region's transit network. This corridor will link the three primary activity centers in the region, downtown St. Paul, downtown Minneapolis and the University of Minnesota.

Construction, continuing operation, and market reaction to the availability of this improved transit service is expected to influence economic activity in the local economy. Construction of these facilities will expand local earnings for the duration of the project's construction cycle. Operating the Preferred Alternative will also expand earnings, but, unlike the one-time construction impacts, the new jobs required to operate and maintain the Preferred Alternative will be long-term. These jobs represent the direct effects of investment in the Central Corridor. The earnings of these new construction and transit workers will translate into a proportional increase in consumer demand as these workers purchase goods and services in the region. A further increase of new employment across a wide variety of industrial sectors and occupational classifications is expected as employers hire to meet this increase in local consumer demand. This type of hiring represents the project's indirect impact.

The Preferred Alternative is also expected to have positive effects on commercial and residential development located1 near transit stations. The Preferred Alternative is anticipated to contribute economic benefits by encouraging and supporting higher-density residential and commercial land uses around station locations. It is anticipated that new development around station areas could also capture an increasing share of residential and employment growth as densities increase. Focused development in areas with existing infrastructure accrues benefits to the taxing jurisdictions. National experience with fixed-guideway rail transit systems has demonstrated that transit investments have had positive effects on residential and commercial development near the stations. National studies have shown that business output and personal income grow with transit investment. Transit investment impacts (see Section 5.1.1) create savings to business operations, and increase the overall efficiency of the economy by positively affecting business sales and household incomes.

The area of economic effect selected for this analysis is the Minneapolis-St. Paul-Bloomington Metropolitan Statistical Area (MSA), that includes the counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright in Minnesota, along with Pierce and St. Croix counties in Wisconsin. The economic effects associated with construction, operation, and maintenance expenditures for the

Preferred Alternative are measured using regional multipliers from the United States Department of Commerce, Bureau of Economic Analysis (BEA). Derived from the Regional Input-Output Modeling System (RIMS II), multipliers measure the total change (direct plus indirect effects) in output, employment, and earnings that results from an incremental change relative to a particular industry. The data set was constructed by BEA to reflect the local Minneapolis-St. Paul-Bloomington MSA economy. The multipliers are based on the 1997 Benchmark Input-Output Table for the nation and 2005 regional accounts data; they represent the version available at the time this analysis was prepared (BEA, August 2008).

Tax revenue impacts (see Section 5.1.3) are quantified by applying tax rate information obtained directly from the Ramsey County Department of Property Records and Revenue (St. Paul) and the City of Minneapolis Assessor's Office taxing jurisdictions to the estimated conversions of private property to public. This analysis assumes that transportation network improvements included in the No-Build Alternative are also included in the Preferred Alternative

5.1.1 Output, Earnings, and Employment Effects from Capital Expenditures

This section describes the anticipated economic impacts from capital expenditures. Construction of the Preferred Alternative represents substantial capital investment in the local economy. This spending will increase the employment, earnings, and output for the duration of the construction process. Capital cost estimates/construction values for this analysis are presented in year of expenditure (YOE) dollars.

5.1.1.1 Capital Expenditures

The capital expenditures for construction of the Preferred Alternative are shown in Table 5-1. The costs represent the gross capital expenditures for the Preferred Alternative. The analysis requires certain costs associated with real estate acquisition be reclassified as professional services.

Table 5-1 Summary of Preferred Alternative Capital Costs (in YOE dollars)

Alternative	General Construction Costs [1]	Vehicles	Right-of-Way [2]	Professional Services [3]	Finance Charges [4]	Total [5]
Central Corridor Preferred Alternative	$599,581,000	$125,922,000	$21,147,000	$162,240,000	$6,000,000	$914,890,000

Source: Metropolitan Council, September 2008

[1] Includes contingency costs, YOE dollars.

[2] ROW estimate is based on Ramsey and Hennepin County market values.

[3] Professional Services include real estate services, engineering, legal fees, and other agency costs.

[4] Finance charges include hedge costs, capitalized interest that accrues during the construction period, delay reserves, unavailability insurance, and costs of issuance.

[5] Total cost is a representation of all cost being rounded to the nearest thousand

Total capital expenditures are divided into five major categories. These include general construction: guideway elements, stations, storage and inspection facilities, sitework, systems, and contingencies.

- General Construction: guideway elements, stations, storage and inspection facilities, sitework, systems, and contingencies.

- Vehicles: vehicle manufacturing and assembly.
- Right-of-Way: all rights-of-way, land, and existing improvements.
- Professional Services: real estate services, engineering and design, legal fees, and other agency costs.
- Finance Charges: the finance charges associated with the financial plan includes the independent engineer, hedge costs, capitalized interest that accrues during the construction period, delay reserves, unavailability insurance, and costs of issuance. These costs are paid over the life of the bonds.

The economic impact of these expenditures varies substantially by activity and depends on the amount of goods and services procured locally. Construction goods and services will be purchased in the local economy. Although every building material required for the project is not produced locally, the RIMS II multipliers reflect the supplier linkages for the industry, and thus account for this leakage from the local economy. Leakage represents purchases made by local suppliers from sources outside the region.

The purchase of vehicles will not occur locally. Transit vehicles are not manufactured within the Minneapolis-St. Paul-Bloomington MSA, in turn limiting the potential impact this purchase can have. Thus, as no local labor is used to produce the vehicles, no local impact generated by their purchase is realized. There is likely to be some assembly required upon delivery of the vehicles, and it is possible that a component of the vehicle might be made by a local supplier; however, these possibilities represent a negligible share of the vehicles' cost and are excluded from this analysis.

Right-of-way expenditures shown are for real property only; the transaction costs, legal services, and required relocation assistance associated with these expenditures are included in the professional services (i.e., engineering, design, and other agency costs) cost category. Labor is not associated with the right-of-way expenditures; therefore, there is no economic impact to the pure land costs. Professional services costs are purchased in the local economy and have an impact in the local economy. Finance charges are reported in the overall capital cost of the project. However, since these costs are not a purchase in the local economy, there is not an impact on employment or output. Only two types of capital expenditures are expected to impact the economy: construction and professional services costs.

5.1.1.2 Funding Sources

To isolate the potential economic effects of the project on the local economy, it is necessary to distinguish those resources that are new to the economy from local resources that would still be spent in the region. Table 5-2 describes the funding sources and expenditure percentages that are planned for the Central Corridor Preferred Alternative and indicates whether these funds represent new resources that are being invested in the region because of the project.

Table 5-2 Summary of Funding Sources

Source	Funding Share	New or Existing Funding Source
Local Funding	50.0%	Existing/New
Counties Transit Improvement Board	30.0%	Existing
State of Minnesota Bonding	10.0%	New
Regional Rail Authorities	10.0%	Existing
Ramsey County Regional Rail Authority	7.0%	Existing
Hennepin County Regional Rail Authority	3.0%	Existing
FTA Funding	50.0%	New
5309 New Starts	49.5%	New
CMAQ	0.5%	New

Source: Metropolitan Council, 2008

Federal funds originate from outside Minneapolis and St. Paul's local economy; thus the funds represent new resources. Because the local Metropolitan Council funds originate within the Minneapolis-St. Paul-Bloomington MSA, they are considered existing revenue sources and do not represent new resources.

The capital costs representing expenditures that accrue to the region (e.g., construction and professional services costs) are adjusted to account only for new resources flowing into the region. Only funding levels that represent new resources flowing into the region generate effects with the Preferred Alternative. Table 5-3 shows the level of funding for the capital cost elements that will generate economic effects within the state and local Minneapolis and St. Paul economy. The expenditures with substantial local labor elements (i.e., construction cost of $600 million) that will yield impacts on the local economy are derived from the data in Table 5-1 and represent the sum of expenditures on construction and professional services costs for the Preferred Alternative. The amount of funding that represents new resources (e.g., 60 percent or $545 million) for the region is derived from Table 5-2 and represents the sum of those sources designated as "new."

Because the amount of funding that represents "new funding," 60 percent (50 percent Federal share/10 percent State share), is less than the total amount required for construction, this analysis assumes that the new funds are spent on general construction expenditures. For the Preferred Alternative, construction costs are more than the anticipated Federal and State participation in the project. Therefore, every single dollar of new resources is expected to yield an impact. This assumption does not bias the analysis as the multipliers for "construction" and for "professional, scientific, and technical services" (the multiplier that would be applied to the professional services cost category) are similar.

Table 5-3 Capital Costs Representing New Resources (in YOE dollars)

Alternative	General Construction Cost [1]	New Resources – Federal/State Funding [2]
Central Corridor Preferred Alternative	$599,581,000	$545,334,000

Source: Metropolitan Council, 2008

[1] Capital Cost that would impact local economy

[2] Represents Federal (50%) and State (10%) share of total project cost, not including finance charges

The interpretation of the multipliers shown in Table 5-4 is as follows (U.S. Department of Commerce BEA Regional Input-Output Modeling System, RIMS II 2008). The construction industry is used as an example.

The final demand output multiplier represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the construction industry. The final demand earnings multiplier represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the construction industry. The final demand employment multiplier represents the total change in number of jobs that occurs in all industries for each one million dollars of output delivered to final demand by the construction industry. The direct effect earnings multiplier represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the construction industry.

The direct effect employment multiplier represents the total change in number of jobs in all industries for each additional job in the construction industry.

Table 5-4 RIMS II Multipliers by Industry

Region	Industry	Multiplier				
		Final Demand			Direct Effects	
		Output ($)	Earnings ($)	Employments (Jobs)	Earnings ($)	Employments (Jobs)
Minneapolis-St. Paul-Bloomington MSA	Construction	1.5782	0.5217	12.9736	1.4602	1.4885
	Professional, Scientific, and Technical Services	1.3448	0.5613	12.2568	1.2319	1.3298
	Transit and Ground Passenger Transportation	1.5944	0.5565	25.4989	1.4358	1.1906

Source: U.S. Department of Commerce BEA, RIMS II 2008

Applying the final demand multipliers for the construction industry to the amount of new funding/resources that would be used for capital expenditures provides estimates of the net output, earnings, and employment impacts generated by each alternative in the short-term (construction phase). The results are summarized in Table 5-5. These are one-time impacts that would last for the duration of construction. One job is defined as a job for one person for one year. For example, a job for one person that lasts four years would equate to four person-year jobs.

Table 5-5 Net Effects of Construction (Short-Term) Activity

Alternative	New Capital Expenditure	Output	Earnings	Employment	Output (thousands)	Earnings (thousands)	Employment (Jobs)
Central Corridor Preferred Alternative	$545,334,000	1.5782	0.5217	12.9736	$860,646	$284,501	7,075

Source: U.S. Department of Commerce BEA, RIMS II 2008 and Metropolitan Council

5.1.1.3 Long-Term Effects

There are no long-term effects associated with the economic impacts generated by capital expenditures as construction-related impacts only last for the duration of the project's construction cycle.

5.1.1.4 Short-Term Effects

No-Build Alternative. The No-Build conditions consist of the future economic conditions (employment, output, and earnings) that would exist under the No-Build Alternative. The economic analysis focused on the incremental differences between the No-Build condition and implementation of the Preferred Alternative.

Preferred Alternative. For the Minneapolis-St. Paul-Bloomington MSA, the effect of construction spending for the Preferred Alternative will be approximately $861 million in output (YOE dollars). It is estimated that the Preferred Alternative will generate $285 million in net earnings and payroll expansion and generate 7,075 person-year jobs in the Minneapolis-St. Paul-Bloomington MSA.

5.1.2 Output, Earnings, and Employment Effects from Operations and Maintenance Expenditures

The Preferred Alternative is anticipated to create jobs and additional earnings as a result of O&M expenditures. The O&M cost model is resource-build up in structure and based upon Metro Transit's existing bus and light rail services. The analysis assumes that funding for O&M would be procured primarily from local Metropolitan Council funds and project-generated funds.

Although these expenses would originate from local sources, they represent spending that would not take place except for the implementation of this service. The expansion of transit service associated with the Preferred Alternative creates an expansion of economic activity in the counties of the Minneapolis-St. Paul-Bloomington MSA, thus generating recurring net economic impacts (long-term). Other potential sources of Federal funding for maintenance exist as grants and could be applied to preventative maintenance in later years. If future Federal funds are received and applied to maintenance activities, they could generate additional net economic effects to the local and state economies through increased employment and earnings.

The estimated net change in local earnings generated by the Preferred Alternative is shown on Table 5-6. The table describes anticipated payroll expansion beyond implementation of the No-Build Alternative. This analysis uses only the Direct Effect Multipliers to generate estimates of earnings impacts attributable to O&M activities because output measures are less reliable in the context of transit service where market prices are not available. The multipliers applied in this section of the analysis are for the industry labeled "Transit and Ground Passenger Transportation." The increased earnings would result in positive economic impacts to the local economy, both through direct hiring to fill transit jobs and indirectly as these transit workers spend their earnings, thus creating additional consumer demand and jobs to meet that demand. The transit earnings are derived by multiplying the incremental O&M cost over the No-Build Alternative by the transit on-site labor percentage (71%). The O&M labor component was derived from American Public Transportation Association (APTA) analysis of allocation of operating expenditures by object class from 1985-1995. The final transit earnings do not include benefits and only the wage element impacts transit earnings.

Table 5-6 Net Earnings Impacts from O&M Activities (in 2008 dollars)

Alternative	Transit Earnings over No-Build [1] (thousands)	Minneapolis and St. Paul MSA Earnings Multiplier[2]	Net Change in Local Earnings (thousands)
Central Corridor Preferred Alternative	$8,167	1.4358	$11,726

Source: Metropolitan Council, September 2008

[1] Transit Earnings are the incremental O&M costs multiplied by estimated on-site labor component. The O&M labor component was derived from APTA analysis of allocation of operating expenditures by object class 1985-1995. The full No-Build O&M cost is $297,018,079 (2008 dollars) and the Build O&M cost is $308,455,954 (2008 dollars).

[2] RIMS II Multiplier (Transit and ground passenger transportation) Direct Effect Earnings Multiplier.

5.1.2.1 Long-Term Effects

No-Build Alternative. The No-Build conditions consist of the future economic conditions (employment, output, and earnings) that would exist under the No-Build Alternative. The economic analysis focused on the incremental differences between the No-Build Alternative and implementation of the Preferred Alternative.

Preferred Alternative. For the Minneapolis-St. Paul-Bloomington MSA, the effect of local O&M spending for the Preferred Alternative will result in an estimated $11.7 million in local annual wages and salaries (2008 dollars). With implementation of the Preferred Alternative, the increased earnings is anticipated to result in positive economic impacts to the local economy, both through direct hiring to fill transit jobs and indirectly as these transit workers spend their earnings, thus creating additional consumer demand and jobs to meet that demand.

5.1.2.2 Short-Term Effects

O&M expenditures are not expected to create short-term economic effects. The earnings impacts generated by O&M expenditures are long-term recurring benefits.

5.1.3 Tax Revenue Effects

Construction of the Preferred Alternative would require the acquisition of some private land and/or improvements for easements, right-of-way, parking, and station facilities. This purchase would remove these properties from the existing local tax base. The annual tax revenue associated with the loss of properties due to right-of-way purchase, displacement, and relocation was identified in the development of the Preferred Alternative. Metropolitan Council developed the preliminary right-of-way cost estimate for the analysis. This amount of right-of-way to be acquired is preliminary and is subject to change as the design of the project proceeds into final design.

Table 5-7 summarizes the estimated tax value of the properties to be acquired and shows the expected annual tax revenue lost from removing properties from the Ramsey County Department of Property Records and Revenue (St. Paul) and the City of Minneapolis Assessor's Office (Minneapolis) taxing jurisdiction's tax base for the Preferred Alternative. The calculation of the lost annual property tax revenue associated with converting land from private to public use is estimated at $154,041. Ramsey and Hennepin Counties have different tax rates for residential and commercial properties. However, since the majority of the proposed property acquisition is commercial property, the commercial tax rate is used

for this estimate. The effect tax rates are 2.85 percent for Ramsey County and 3.07 percent for Hennepin County (commercial tax rate for each county).

Table 5-7 Right-of-Way Acquisition and Associated Loss of Tax Revenues (in 2007 dollars)

County	Right-of-Way Acquisition [1]	Base Tax Rate[2]	Lost Annual Revenue
Ramsey	5,147,637	2.85	146,708
Hennepin (City of Minneapolis)	238,868	3.07	7,333
Total	**5,386,505**		**154,041**

Source: Metropolitan Council, 2008

[1] Right-of-way costs assumes no add-on or professional services cost

[2] Base Tax Rate is for commercial property in Ramsey and Hennepin Counties and includes the following factors: market value-related tax capacity, tax capacity-related fiscal, disparity net tax capacity, local taxes, fiscal disparity tax, market tax, and state general tax.

It is important to note that the loss of annual revenue reported in this section is estimated based on the assessed values prepared by the Ramsey County Department of Property Records and Revenue (St. Paul) and the City of Minneapolis Assessor's Office (Minneapolis). County and city assessments rely on their internal policy of developing property values and tend to undervalue the true cost of purchasing right-of-way. The property values described in Table 5-7 are an estimate of actual value that will be removed from the taxing jurisdictions tax roll. The right-of-way acquisition cost described in the project capital cost estimate (Table 5-1, Summary of Preferred Alternative Capital Costs) is based on Metropolitan Council's recent experience in acquiring right-of-way and is substantially greater than the cost used in this analysis. These right-of-way acquisition costs assume that the property will be purchased for a price above the assessed value as speculation and market forces increase the parcels' sales price. There is a small and fixed amount of land along the Central Corridor alignment that will be purchased.

5.1.3.1 Long-Term Effects

No-Build Alternative. The No-Build Alternative would not require the acquisition of right-of-way and would not affect tax revenue.

Preferred Alternative. The lost tax revenues associated with this small reduction in the tax base due to the Preferred Alternative will be a recurring loss on an annual basis. Partially offsetting these losses; however, is an increase in other tax revenues. For example, the creation of new jobs and earnings associated with the recurring O&M spending will foster greater retail spending. The additional revenues from this spending are recurring gains. The construction of the Preferred Alternative is also expected to have positive effects on the value of residential and commercial properties within walking distance to the station areas. The increase in value translates into greater tax revenues and is expected to accrue to the local economy.

5.1.3.2 Short-Term Effects

The lost tax revenues associated with this small reduction in the tax base would create a short-term reduction in tax collections. This loss is expected to diminish as the value of residential and commercial properties within walking distance to the station areas increase. However, the long-term positive effects of implementation of the Preferred Alternative on the

value of residential and commercial properties within walking distance of station areas is expected to offset any short-term effects of lost tax revenues attributable to right-of-way acquisition.

5.2 Station Area Development

This section provides a description of the existing land use characteristics and an analysis of economic development potential around each of the proposed Central Corridor LRT station locations. Descriptions of transit supportive plans, public policies, and design guidelines for new transit-oriented development (TOD) at station locations are included in this plan. An analysis zone of one-half mile was defined around each proposed station location to analyze development impacts surrounding station locations based on the proposed infrastructure improvements. Direct impacts to current land uses were based on the comprehensive plans for both Minneapolis and St. Paul, along with planning documents from the Metropolitan Council, small-area plans for neighborhoods adjacent to the corridor, and established land use and zoning policies.

5.2.1 Station Area Planning and Design Guidelines

Minnesota State law enables cities to establish policies regulating land use and development, enforced through building and zoning codes, subdivision ordinances, design guidelines and standards. Growth patterns are directly related to the rules that govern land development and the standards for infrastructure that support development. Changes to these regulations and standards are the responsibilities of the Cities of Minneapolis and St. Paul, and directly influence how growth is distributed. In support of these standards, both cities have developed a variety of tools and incentive-based programs intended to encourage transit-supportive development. These include community economic development programs, housing rehabilitation programs, financial incentives, and planning regulations.

Both cities and the Metropolitan Council have made significant progress in addressing future land uses and development along the Central Corridor alignment and around station locations. The cities of Minneapolis and St. Paul, along with the University of Minnesota, have developed and adopted numerous plans and policies supportive of mass transit and the Central Corridor LRT project. Additionally, the Metropolitan Council has amended current regional plans and policies to reflect land use changes and strengthen design guidelines. Plans and policies of the Cities and the Metropolitan Council, along with new station area plans, are described below. The plans and zoning districts all address transit- and pedestrian-oriented building scales and densities, the real estate market, development character, pedestrian improvements, and parking, which influence development and design decisions. A detailed discussion of all small area plans as they relate to the Preferred Alternative is provided in Section 3.1.

5.2.1.1 City of Minneapolis Development Plans, Policies, and Design Guidelines

The City of Minneapolis has actively engaged urban growth and transportation development needs through a series of plans, policies, and design guidelines. To guide transportation investments and improvements, the City of Minneapolis has adopted two specific planning and policy documents, the *Minneapolis Plan for Sustainable Growth* (2008) (formerly *The Minneapolis Plan*), and *Access Minneapolis*. In addition to these documents, the City has also adopted transit supportive zoning overlay districts based on the success of the existing Hiawatha LRT Corridor, along with amending the current zoning code and certain zoning districts to incorporate.

Minneapolis Plan for Sustainable Growth

The *Minneapolis Plan for Sustainable Growth* (the MPSG) is the City of Minneapolis' comprehensive plan, replacing *The Minneapolis Plan* in 2008, and provides the vision and framework for the City's urban renaissance and continued growth. The plan supports the concentration of additional growth in activity centers along transit corridors, preserving neighborhoods, emphasizing access, and protecting natural environments and critical areas. The plan provides guidance for dense, transit-supportive development around station locations and within growth centers. The plan strongly supports mixed-use, transit- and pedestrian-oriented development at stations along transitways, the primary transit network, and high frequency transit corridors. The objective of the plan is to create walkable, transit-friendly communities and reduce reliance on automobile travel. The plan specifically supports the Central Corridor LRT and encourages growth and density around station locations.

The plan outlines the creation of Transit Station Areas (TSAs), a land use policy feature intended to promote growth specifically around transit stations along fixed-route transitways. Capitalizing on community development benefits and transit-supportive public policies, development in TSAs is guided with the pedestrian, bicyclist, and transit patron in mind, serving individuals who are more likely to use transit (such as residents of higher density housing and office or retail workers), and includes small-scale retail services.

Incorporated as part of small area station plans, the MPSG specifies that TSAs be located approximately one-half mile from transit stations, with development scaled to serve transit patrons, with a mix of land uses at the highest densities possible. The TSA encourages growth at "high" (defined as 50-120 dwelling units/acre) and "very high" (over 120 dwelling units/acre) densities in designated regions. These are therefore some of the densest areas in the city, by design. Likewise, station area plans consistently direct higher density development to be within close proximity to these station areas.

Along the Central Corridor alignment, TSAs correspond with designated growth and activity centers. The MPSG specifically designates the University and 29th Avenue Station as a future TSA location in addition to the existing stations of the current Hiawatha LRT corridor. While not explicitly identified by the MPSG as a TSA, the Cedar-Riverside West Bank Station is close to the existing Cedar Riverside Hiawatha LRT Station, a station that is identified as a TSA location for future planning. Minneapolis has created station area land use plans for 29th Avenue (University Avenue SE & 29th Avenue SE Development Objectives and Design Guidelines, 2007) and the Cedar Riverside Small Area Plan (2008). The University of Minnesota is currently updating the Campus Master Plan to incorporate the opportunities LRT will create around stations located on the campus grounds. These plans are discussed in detail in Section 3.1.

Access Minneapolis: Ten Year Transportation Action Plan

The City of Minneapolis recently completed a comprehensive transportation planning process culminating with the publication of *Access Minneapolis* (2008), the lead planning and policy document specifying transportation investments and opportunities in the City. The plan is intended as an enhancement to the transportation policies outlined in *The Minneapolis Plan* (2000), formerly the comprehensive master plan for the City of Minneapolis. Subdivided into five action plans specific to the geographic regions of the city, the vision for *Access Minneapolis* is based on five policy criteria, which include the following:

- Transportation is important to the economic viability of the City, the region, and the State. *Access Minneapolis* will lay the transportation groundwork for achieving the

long-range vision of Minneapolis as a vital and thriving metropolitan urban center that is a great place to live, work, play, visit, and conduct business.

- The City must remain livable and walkable to maintain its regional and national competitiveness. In most cases, it is not feasible or desirable to increase the curb-to curb width of roadways in the City. However, there are many opportunities for improving the operational capacity of the transportation system without street widening. *Access Minneapolis* will result in a City that is livable and walkable while optimizing the operational capacity of the transportation system.
- *Access Minneapolis* will result in a citywide transportation system that is multi-modal (pedestrian, bicycle, transit, automobile, freight), providing good transportation choices to people, including people with disabilities.
- *Access Minneapolis* will result in a citywide transportation system that serves anticipated employment and residential growth and optimizes access to destinations by all modes (pedestrian, bicycle, transit, automobile, freight) throughout the city, between neighborhoods, to/from and within downtown.
- Although all modes of transportation are important, transit is critical for maximizing the people-carrying capacity of the transportation system. *Access Minneapolis* will result in a transit system that operates efficiently and effectively in downtown and throughout the City. Transit will become the mode of choice for Minneapolis residents, workers, and visitors.

While *Access Minneapolis* does not specify development guidelines around transit stations or transitways, the plan plays an important role in the identification of emerging and potential transit corridors along which development could follow. The plan recognizes that land uses around stations are a function of land use policies as outlined in the MPSG. Improvements to transit facilities and stations within the downtown core area are outlined as part of the Access Minneapolis plan. The City outlines the creation of Primary Transit Networks (PTN), transitway corridors targeted for investment that meet or exceed certain service criteria, including density, service quality, and ridership.

Land Use and Zoning Regulations, Implementation Agencies, and Tools

Minneapolis has pursued a variety of land use and zoning strategies and programs to promote transit-oriented development. The City of Minneapolis has witnessed rapid growth in the rate of transit-oriented housing development along the existing Hiawatha LRT Corridor since the line's opening in 2004. During the planning and development efforts of the existing Hiawatha LRT corridor, both the City of Minneapolis and the Metropolitan Council took steps to support local planning efforts for land development around LRT stations. The City's efforts included the creation of the *Pedestrian Overlay District* and *Station Area Rezoning* efforts that provided information and opportunities to engage neighborhoods in defining redevelopment, identifying needed zoning changes, and understanding the linkages between density, design, affordability, and transit-oriented development.

The experience of the Hiawatha LRT corridor has provided policymakers, agency staff, the public, and developers with critical experience on how best to achieve desired development supportive of both transit and area needs. The experiences of the Hiawatha LRT line have determined that additional policy tools were needed to encourage TOD in non-downtown areas. As a result, public-private partnerships involving collaboration between public and private organizations and land owners have aided in the redevelopment and rehabilitation of land areas surrounding LRT stations. Development patterns around the Hiawatha LRT have been principally concentrated around housing development that has occurred around four

stations in Minneapolis. In an effort to continue this trend, the City of Minneapolis enacted *Transit Station Area Pedestrian-Oriented (TSAPO) Overlay Zoning Districts* (2006) around the 29th Avenue Southeast and Stadium Village Station Area, and the Cedar-Riverside LRT Station that feature minimum site densities, density bonuses, and applicable parking requirements reduced to 75-90% of required amount. Additionally, the city approved the *Downtown East/North Loop* re-zoning in October of 2006. This district calls for the re-zoning of large parcels in the Downtown East Area (surrounding the Downtown East/Metrodome Station) and the North Loop Area (surrounding the future Multimodal Station) allowing for more intensive, transit-oriented development.

In support of the City of Minneapolis, the Metropolitan Council's Livable Communities Demonstration Account has helped to provide needed funding for transitway development projects. Established as part of the Livable Communities Act, Minnesota Statutes section 473.25(b), the account provides funds for development or redevelopment connecting transit, land use intensity, housing and employment, and public infrastructure to connect communities and attract investment.

In addition to policies regulating land use and development, affordable housing policies and programs play a key role in transit-supportive development near station areas. The City of Minneapolis, Hennepin County, the Metropolitan Council, and the State of Minnesota have a variety of TOD and affordable housing programs available to households throughout the region. Gap financing is provided by Minneapolis and Hennepin County for building affordable housing for low-income groups and includes an incentive for proximity to transit. Hennepin County also has a TOD program for redevelopment and construction within or adjacent to the county's transit corridors. In May 2007, the County Housing and Redevelopment Authority (HRA) approved $4.4 million for affordable housing projects and $2 million for transit-oriented development (TOD) located along transit corridors. Both programs – the Transit-Oriented Development Fund and Affordable Housing Incentive Fund (AHIF) – support projects throughout the county, leveraging millions of dollars of additional public and private resources.

5.2.1.2 City of St. Paul Development Plans, Policies, and Design Guidelines

Recognizing the significance the Central Corridor LRT will have as a substantive public infrastructure investment in St. Paul, the City has conducted several planning exercises and established a series of plans, policies, and zoning overlay districts specifically for the Central Corridor LRT project. These strategies are intended to address development issues along University Avenue, in downtown St. Paul, and around the State Capitol area. Of these plans and amendments to the city zoning code, the *Central Corridor Development Strategy* (CCDS) serves as the leading policy document for development along the corridor.

Central Corridor Development Strategy

The City of St. Paul adopted the *Central Corridor Development Strategy* (CCDS) (2007) as a chapter of the St. Paul Comprehensive Plan, intended to create a vision for maximizing the development and redevelopment potential around Central Corridor LRT stations built in St. Paul. The large public infrastructure investment brought by construction of the Preferred Alternative along University Avenue represents an opportunity to transform the City of St. Paul and its place in the region. The CCDS addresses development issues, making strategic recommendations to guide future growth and development within the corridor and control market forces to protect small businesses and current residents. The CCDS outlines development standards and policies that are focused on the Central Corridor becoming a vibrant, pedestrian-oriented area that preserves diversity, helps to safely balance various

modes of transportation, and takes full advantage of the "once-in-a-century" investment to attract visitors and new economic opportunities.

The CCDS outlines a number of development and marketing strategies, policies, initiatives and goals to implement throughout the corridor to achieve the aforementioned principles. Some are directed to specific locations along the corridor, such as the creation of a gateway to St. Paul after the Westgate Station while others are more broadly defined, such as the rehabilitation of single-family homes throughout residential neighborhoods along University Avenue. Some require public funding; others, such as the creation of a walkable streetscape through wide sidewalks and street cafes, must sometimes be incorporated into new development and will evolve over time.

The recommended implementation strategy for the CCDS is discussed in Part 4, "How We Get There." This section discusses the establishment of location-specific Transit Opportunity Zones (TOZ), overlaying zoning districts intended to promote and facilitate a desired change or improvement through redevelopment and rehabilitation activities that both incorporate transit while preserving the current underlying zoning. These zoning districts are comprised of two layers, an enabling layer that establishes a priority approach for a range of financial and policy incentives, planning efforts, infrastructure investments, economic development initiatives and capital improvements, and a regulatory layer that consists of a set of transit-supportive planning and development directions. A detailed discussion of the CCDS is included in Section 3.1 of the FEIS.

St. Paul's Station Area Plans

The City of St. Paul has conducted an extensive planning process for the station areas and neighborhoods surrounding proposed Central Corridor LRT stations along University Avenue. The City has approved these station area plans for the areas around the Rice, Dale, Lexington, Snelling, Fairview, Raymond, and Westgate station areas. These plans were adopted in October 2008 as addenda to the Central Corridor Development Strategy, and therefore, are also part of the St. Paul's comprehensive plan. Using the CCDS as a foundation, the plans establish a vision and set of strategies for how the Corridor should grow and change in response to the LRT investment. While each of the plans establishes a vision for development around individual stations, the City has also approved an overarching implementation component for each of the plans.

Each of the station area plans encourages a broad range of land uses and densities at station areas, including medium-to-high density residential, office uses, retail commercial activity, public or institutional land uses, along with other transit-supportive land uses that result in housing and employment opportunities and complete communities with daytime and evening activities. Public open spaces and gathering centers are embraced as part of each plan, helping to create an urban character that enhances the relationships between the built environment and open spaces around stations. Additionally, each of the plans recommend transit-supportive development practices, such as street and block structures that improve connectivity and allow urban development patterns to evolve. Building on the concept of connectivity, the plans also discuss the importance of non-motorized transportation, movement principles, and context sensitive solutions such as the expansion of bicycle networks and facilities, and the enhancement of pedestrian-friendly environments. Each of these plans is discussed in detail in Section 3.1.

Land Use and Zoning Regulations

St. Paul's Traditional Neighborhood District (TN), a zoning district applicable to many of the surrounding neighborhoods adjacent to the proposed Central Corridor LRT station locations,

provides for increased densities through compact, pedestrian-oriented mixed-use areas for infill on large and small sites, applicable within one-quarter and one-half mile of major intersections and transit stations, and transit street density bonuses. Additionally, St. Paul adopted the *Central Corridor Overlay District* (adopted April of 2008 to replace the *Central Corridor Interim Overlay* which expired in 2008), a district that applies to areas along University Avenue, with more stringent regulations for areas within one-quarter mile of planned LRT stations. The overlay requires the following:

- A minimum 1.0 floor area ratio within one quarter mile of stations, and a minimum 0.5 FAR beyond one quarter mile from stations.
- Two story building height minimums with one-quarter mile of station areas.
- Prohibits establishment of new auto-oriented uses within one-quarter mile of station locations.

5.2.1.3 Metropolitan Council Development Plans, Policies, and Design Guidelines

The Metropolitan Council publishes a variety of plans, policy documents, and reports providing guidance to local government agencies within the seven-county metropolitan region. As the regional metropolitan planning organization (MPO), the Metropolitan Council is responsible for ensuring a coordinated approach to the region's development, and coordinating the plans of municipalities to ensure consistency in service.

Transportation Policy Plan - 2008 Amendment

In 2004, the Metropolitan Council published the *2030 Regional Development Framework* (the Framework), a document intended to help guide regional public infrastructure expansion investments and coordinate the metropolitan region's growth. A significant component of the Framework is the *2030 Transportation Policy Plan* (TPP) (2004), which outlines regional transportation priorities, system enhancements, and commits funding to identified transportation priority projects, including transitways. A guiding principle of both documents is the need for intensified development within transit corridors that support attractive, walkable neighborhoods, green space, and public places.

In 2008, the Metropolitan Council drafted an amended version of the 2030 TPP that sets forth several new policies emphasizing the importance of higher-intensity development near transitways and transit stations. The policies and strategies in the amended 2030 TPP emphasize the Metropolitan Council's direction regarding intensification of development along transit corridors in an effort to meet the Council's goal of doubling transit ridership by 2030. These policies include the enhanced coordination and connection between land use and transportation, intensified job concentrations and mixed-use developments, improving accessibility to destinations, reinvestment in centers that combine transit, housing, office space, retail and commercial services, open space, and street connections that support walking and bicycle use. These policies are outlined in the "Planning and Implementation to Enhance Transitway Corridor Potential" section of the 2030 TPP. This section is intended to identify factors contributing to transit ridership and the symbiotic relationship between investments in transit infrastructure and land development. These factors include population and population density, employment and clustering of jobs, employment center commuter sheds, economic incentives to use transit, and "Fine-grain" land use development patterns. Such development enables those persons seeking to reduce their automobile use or use public transportation to meet their daily needs.

From a systems planning perspective, the 2030 TPP identifies Transit Centers and Stations as connecting points for different transportation modes, enhancing the connection to local

land use planning, and helping to provide service to a greater geographic area through connections with different transit service providers. The 2030 TPP specifies that local comprehensive plans incorporate development policies, compatible land uses, and forecasted growth allocated to transportation analysis zones (TAZs) at appropriate densities. Growth forecasts developed by the Metropolitan Council as part of the Framework provide the basis for forecasting regional infrastructure needs for roads and highways, transit service, wastewater infrastructure, and parks. The local comprehensive plans must coordinate among key elements: forecast growth, planned land use, residential and employment densities, and infrastructure plans.

Metropolitan Council Guide to Transit Oriented Development

The Metropolitan Council's *"Guide to Transit-Oriented Development (TOD),"* (the Guidebook), was developed in 2006 as an online tool and practical resource on TOD concepts for cities and developers. The Guidebook utilizes local examples and focuses on how TOD can be used to address community issues, opportunities, and needs. The Guidebook serves as a resource for communities seeking to implement TOD policies as part of their comprehensive plans and development visions. The Guidebook is also intended to provide developers with innovative and effective methods to coordinate land use, transit-supportive investments, and community design principles as part of their proposed developments. Topics such as site selection, land use patterns and density, street configuration, parking, transit frequency, pedestrian and bike facilities, building design, block geometry, and compact development are addressed by the Guidebook.

Land Acquisition for Affordable New Development Initiative

The Metropolitan Council, in partnership with Minnesota Housing and the Family Housing Fund, established the Land Acquisition for Affordable New Development (LAAND) Initiative. Through this initiative, the Metropolitan Council has authorized millions of dollars in loans to metro-area cities for the purchase of land to be used for affordable housing in the future. These loans are made through the Council's Livable Communities program. To date, up to $1.0 million has been allocated to the City of St. Paul specifically for land acquisition around the Preferred Alternative.

5.2.1.4 Minnesota State Capitol Area Comprehensive Plan

The Capitol Area Architectural and Planning Board (CAAPB) has jurisdictional land use and zoning authority for the land area encompassing the Capitol Area. The CAAPB publishes the Comprehensive Plan for the Capitol Area and Zoning Regulations and Design Guidelines. The CAAPB comprehensive plan outlines several goals for the Capitol Area, including the promotion of existing and new transit services to the Capitol Area, transit-supportive policies encouraging state employees to use transit when traveling to and from the Capitol Area, and the establishment of a capitol trolley system for travel by employees or visitors around the capitol grounds and to points in downtown St. Paul. Minnesota Administrative Rules Chapter 2400 establishes the Capitol Area Zoning and Design guidelines for the land area within the purview of the CAAPB. The Rules establish four zoning districts around the Capitol Area, three of which the Central Corridor LRT would pass through, including Governmental Districts G-1 and G-2, and the Mixed Use District (MX). While neither of these documents explicitly address the Central Corridor LRT project, portions of the Preferred Alternative would travel through the Capitol Area under the jurisdiction of the CAAPB, specifically along University Avenue and Robert Street. The CAAPB is currently revising its zoning ordinance to respond to economic development

opportunities at the Rice Street station and in the five blocks south of I-94 within the CAAPB's jurisdiction.

5.2.2 Station Area Characteristics and Development Potential

The following section describes the existing land use patterns, urban forms, and potential changes in the level of development around each station area due to the construction and operation of the Central Corridor LRT project. The station area TOD analysis focuses on the immediate land area around each proposed station, approximately one-half mile (see Figure 5.2-1 through Figure 5.2-16). It is within this one-half mile radius that a transit station concentrates pedestrian activity and increases the accessibility to land and markets for certain types of development. The TOD potential of each proposed station (and station area within a one-half mile radius) was determined based on the existing land use patterns, urban form, infill and redevelopment potential, planned development, and potential major trip generators.

5.2.2.1 Union Depot Station

Land Use Pattern

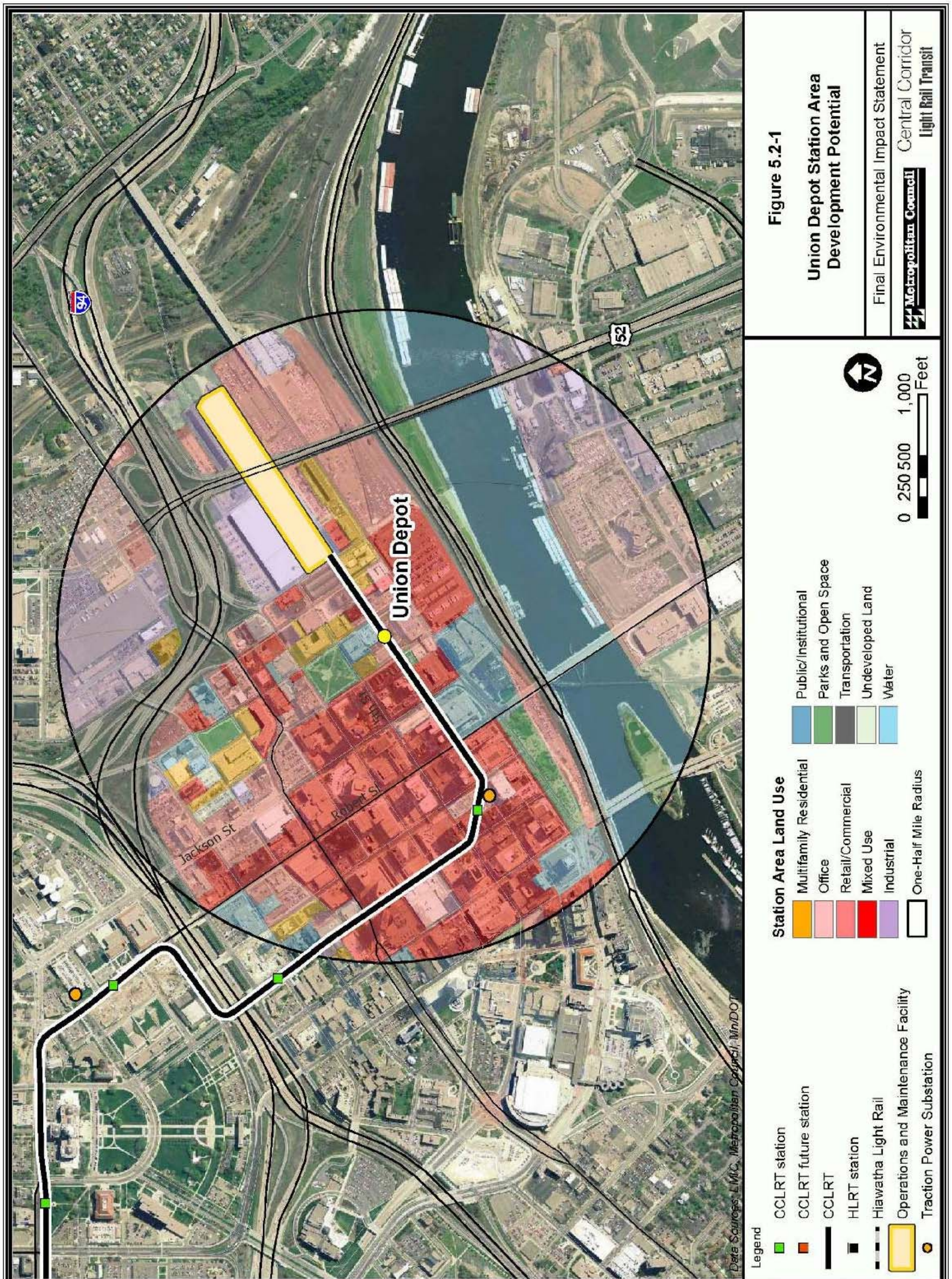
Located in downtown St. Paul, the Union Depot Station would be located along East 4th Street between Wacouta and Sibley Streets. The standard walk radius from the proposed Union Depot Station encompasses most of the eastern portion of downtown St. Paul. The land use pattern includes mixed high-density office, residential, and commercial uses. The office towers located west of Jackson Street form the core of the St. Paul central business district. Located east of Jackson Street, the historic Lowertown Historic District surrounds Mears Park with retail and hospitality businesses on the first floor of large office buildings, along with several warehouses recently converted to housing. Union Depot's former railroad yard has been converted to a parking structure. The Ramsey County and downtown post office buildings are located next to the Union Depot site. A farmer's market is located adjacent to a large industrial building on the eastern edge of the Lowertown Historic District.

Urban Form

The eastern portion of downtown St. Paul is intensely developed on short, square blocks. Street right-of-way is relatively narrow, and on-street parking is available on most blocks. The key urban feature is Mears Park and the historic brick buildings that surround it as part of the Lowertown Historic District. Sibley Street is located at the eastern edge of the skyway system. Several buildings in the Lowertown Historic District are not connected by skyways, which creates more pedestrian activity at the street level.

Infill and Redevelopment Potential

Redevelopment in the Union Depot Station area must recognize and be compatible with the several historic structures listed on the National Register of Historic Places (NRHP) and the Lowertown Historic District itself, which is also listed. This sets a level of expectation for high-quality and compatible infill and redevelopment, which can positively affect the area. Recent investment in new office towers in the business core may also limit additional redevelopment to some extent. However, if the Union Depot is developed as a multi-modal transportation facility it may act as a catalyst for some redevelopment in the immediate area. Potential infill and redevelopment opportunity sites can be found on both the north and south sides of the proposed LRT alignment, with many of the sites currently unoccupied vacant lots or street-level parking facilities. As cited in the CCDS, infill development and redevelopment could occur on vacant parcels as well as existing parking facilities. Figure 5.2-1 provides a description of the station area.



Map Document: (\\msp-gis-file\gispro\MetCouncil\6689\map_docs\mxd\FEIS\CH5_Station Area Land Use\Fig5.2-1_Union Depot Station Area Land Use.mxd)

The potential infill developments and/or redevelopments could include comparatively higher intensity commercial, residential, or mixed uses. The off-street parking supply that is currently being provided on the opportunity sites can be replaced by incorporating off-street parking into the structure of an infill development or a redevelopment.

Planned Development

Market Lofts, planned for the southwest corner of 5th and Wacouta, would provide a year-round indoor farmers' market at street level, and 41 housing units above. The Union Depot Concourse could serve as a massive mixed-use transit hub linking LRT with commuter rail from Hastings on the south and Rush City/Forest Lake to the north.

Potential Major Trip Generators

Potential major trip generators include the St. Paul central business district office core, the Lowertown Historic District, and the multi-modal transit hub.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the proposed Union Depot Station area is considered to be excellent.

5.2.2.2 4th and Cedar Streets Station

Land Use Pattern

The 4th and Cedar Streets Station would be located diagonally between Cedar and Minnesota Streets in downtown St. Paul on land currently occupied by surface parking lots and a vacant building. The central business district office core in downtown St. Paul is centered on Cedar Street between 5th and 6th Streets, and nearly all the land within the standard walk radius of the proposed 4th Street Station is high density office land use. The exceptions are a Radisson hotel, Macy's retail, and the residential Galtier Plaza high-rise condominium building and Commerce Building housing. There are also stand-alone parking ramps as well as parking garages built as part of office structures. A network of second-level skyways connects most buildings in the area.

Residential high rises are also found north of 7th Street on Minnesota and Wabasha Streets. Small shops and restaurants are found at the skyway level and street level of some office buildings, with the highest concentration on St. Peter and Wabasha Streets. A burgeoning entertainment district is located to the west of the office core just outside the one-half mile walkshed radius of the proposed station. Major destinations include the Xcel Energy Center arena, the Ordway Theater, the St. Paul River Centre convention facility, and the Science Museum of Minnesota. Kellogg Mall Park provides a scenic overlook from the downtown bluff to the Mississippi River.

Urban Form

The overall urban form in the immediate vicinity of the 4th Street Station is a compact core of office towers connected via a skyway system arranged on a grid of square blocks aligned to the northwest. However, streets and parcels to the west of St. Peter Street are not aligned to the rest of the grid. The juncture of the two street alignments creates an interesting block-end visual enclosure, especially on 4th Street. Many of the larger buildings in the office core were developed as single projects that occupy whole blocks. The blocks facing Cedar Street south of 7th Street present unbroken facade walls to the sidewalk and lack street amenities.

The introduction of the Norwest Center parking garage over Cedar Street at 6th Street is an imposition into the streetscape, blocking light and a view to the open sky over the

Mississippi River. Wabasha and St. Peter Streets to the west of Cedar Street are much livelier, with an assortment of shops and a new streetscape. The wedge-shaped blocks between Washington and Market Streets are especially satisfying in their urban form, with the Landmark Center and Central Library highlighting the shape of their parcels in their relationship to Rice Park. Seventh Place between St. Peter and Wabasha Streets is a pedestrian mall leading directly into the skyway system at the Norwest Center. The skyway system is extensive and useful given the extreme climate; however, the retail aspects of the skyway have not been as successful as in Minneapolis, and some shops are being converted to office space.

While 5th and 6th Streets play a specialized role as heavy-traffic, one-way pairs that connect to freeway ramps, 4th Street is narrower and leads to "T" intersections at both the west and east ends. The newer buildings in the office core are complemented by the older, historic structures east of Jackson Street in the Lowertown Historic District.

Infill and Redevelopment Potential

With the downtown office core experiencing major new construction and investment over the last decade and with most structures and land uses seemingly established and set at this time, redevelopment potential in the vicinity of the proposed 4th Street Station may not be as explosive as it was in the recent past. However, the development of an LRT-focused pedestrian plaza, in association with the Station, presents an opportunity to enliven the area with pedestrian activity and positively impact infill and redevelopment activities.

Nearly all of the property within the one-half mile walk radius of the proposed 4th Street Station is intensely developed. However, two identified parcels have been highlighted in the CCDS as a major redevelopment area, as both parcels are to be partially used for the diagonal LRT alignment and station area. The first is an existing two-story building on Cedar Street that is to be demolished, and the second is an existing surface parking lot mainly on Minnesota Street. The CCDS suggests that development of these two parcels be combined into a single project that incorporates the station and nearby plaza into the building design. Figure 5.2-2 provides a description of the station area.

A third opportunity site is an existing parking ramp at the intersection of Kellogg Boulevard and Minnesota Street. A potential redevelopment project on this site could incorporate a replacement parking facility into its structure, meeting parking demand for a number of parking generators in the area.

Potential Major Trip Generators

Potential major trip generators for the proposed 4th and Cedar Streets Station include the St. Paul central business district office core, Xcel Energy Center arena, other entertainment venues, and high-rise residential towers.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the proposed 4th and Cedar Streets Station area is considered to be good.

5.2.2.3 10th Street Station

Land Use Pattern

The 10th Street Station would be located near the intersection of 10th Street West and Cedar Street. The I-94 and I-35E freeway corridor occupies a full block of land between 12th Street and 16th Street. The land use pattern north of the freeway is controlled by the Capitol Area Architectural and Planning Board (CAAPB) to provide for development of the State Capitol

campus. State office buildings are arranged around landscaped spaces and surface parking lots. South of the I-94 and I-35E corridor to 7th Street is a mixed-use area of downtown St. Paul. Institutional land uses in this area include churches, Health East St. Joseph Hospital, City of St. Paul Public Safety Building, and Ramsey County Services. Residential land uses are found at older buildings with shops on the ground floor and in high-rise towers. A fair amount of land is used for surface parking south of the freeway and east of Cedar Street. A strong demarcation is found between the office core south of 7th Street and the relatively undefined pattern to the north.

Urban Form

The proposed 10th Street Station is located between the Capitol area and the downtown office core. The most prominent feature is the I-94 and I-35E freeway corridor, which divides the two districts. The street grid is irregular and Cedar Street has a steep slope from 10th Street to 7th Street.

Infill and Redevelopment Potential

Previous public and private development efforts in downtown St. Paul have been concentrated around the downtown office core and along the Mississippi River area. More recently however, the proposed 10th Street Station has been seen as an improvement that links the area of the Minnesota State Capitol and the downtown office core. Recent developments in the area include:

- Minnesota Public Radio (MPR) Building, on Cedar Street and within a half block of the proposed station platform. The building houses administrative offices and production studios.
- State of Minnesota office building, between Cedar and Minnesota Streets, directly east of the proposed station. The building site was a parcel that was previously developed as a surface parking lot for state employees.
- St. Paul Public Housing Authority administrative offices on Wabasha Street, one block west of the station platform.
- A recent housing development (Wacouta Commons) east of Jackson Street consisting of approximately 700 owner-occupied and rental dwelling units. At least two more phases of housing development are planned but have been delayed due to the housing crisis. These are anticipated to be completed within the next five years.

There is potential for additional infill development in the vicinity of the 10th Street Station. Figure 5.2-3 provides a description of the station area.

Planned Development

St. Joseph's Hospital expansion of 400 beds is located four blocks from the proposed station.

Potential Major Trip Generators

Potential major trip generators for the proposed 10th Street Station include state and city office buildings, Health East St. Joseph's Hospital, high-rise residential towers, and Wacouta Commons housing.

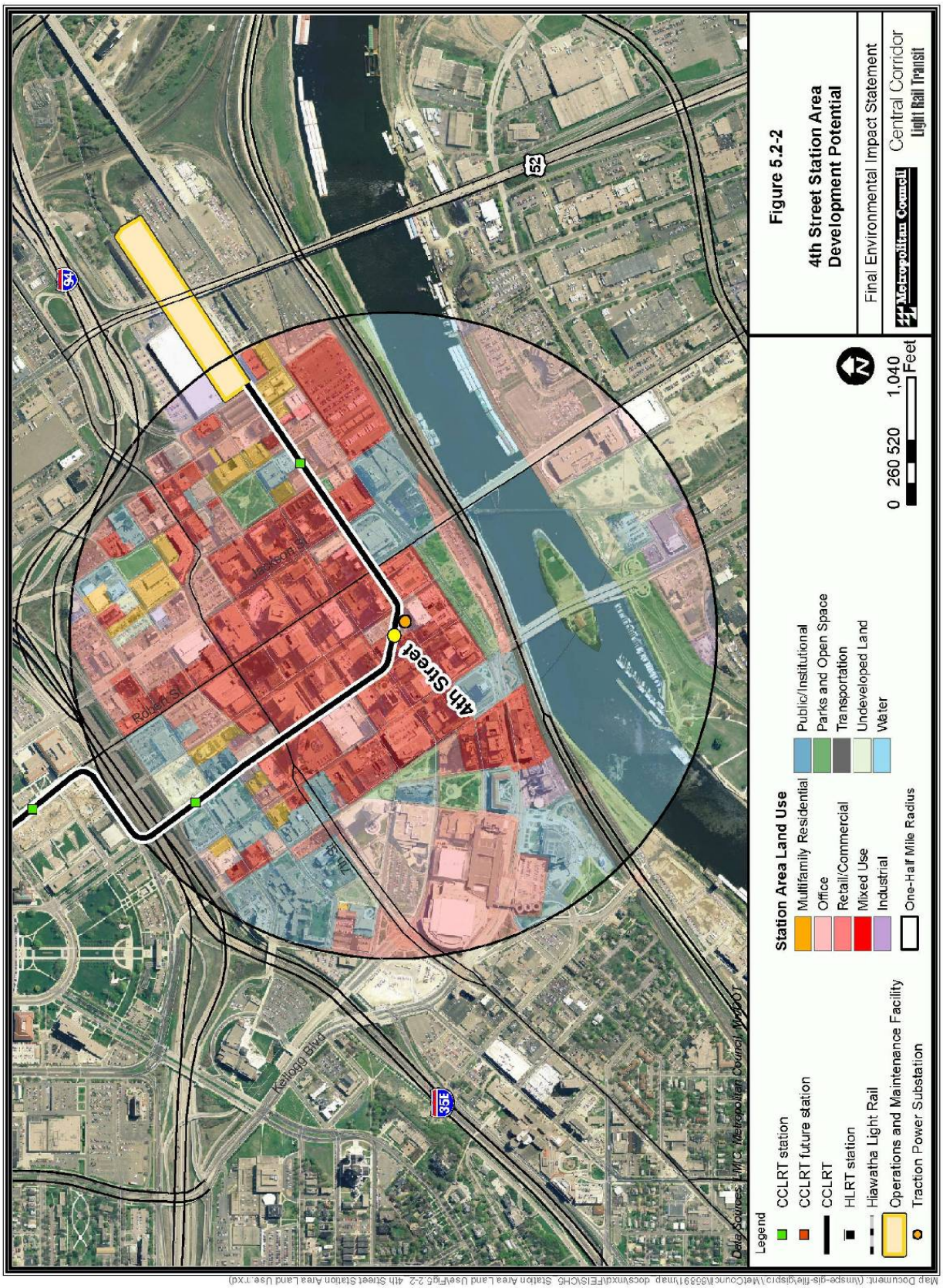
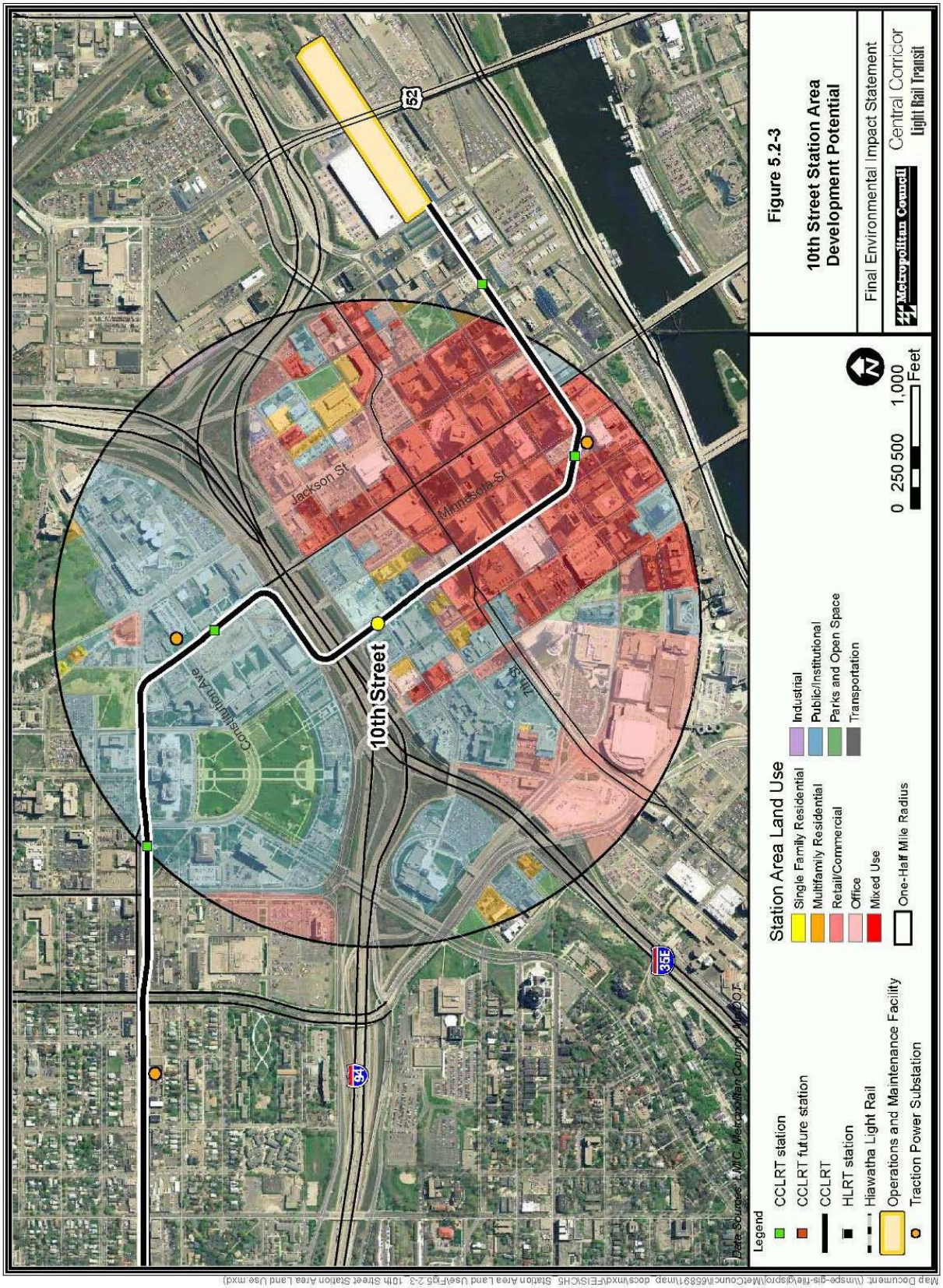


Figure 5.2-2
4th Street Station Area
Development Potential
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
4th Street
Robert St
Jackson St
Kellogg Blvd
35E
94
52
Station Area Land Use
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation
Undeveloped Land
Water
One-Half Mile Radius
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
0 260 520 1,040 Feet
Data Sources: MC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\gispro\MetCouncil\5359\1\mxd\FEIS\CH5 Station Area Land Use\Fig5.2-2 4th Street Station Area Land Use.mxd)


10th Street
Jackson St
Minnesota St
7th St
Constitution Ave
52
35E
94
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Retail/Commercial
Office
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation
One-Half Mile Radius
0 250 500 1,000 Feet
Data Sources: LMC, Metropolitan Council, MnDOT
Figure 5.2-3
10th Street Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Map Document: (\\mspe-gis-file\gisproj\MetCouncil\658971\map_docs\mxd\FEIS\CH5_Station Area Land Use\Fig5 2-3_10th Street Station Area Land Use.mxd)

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the proposed 10th Street Station area is considered to be good, primarily due to presence of the hospital and the existence of a public Health block as a prime redevelopment site, but somewhat hampered by the I-94 and I-35E freeway corridor.

5.2.2.4 Capitol East Station

Land Use Pattern

The Capitol East Station would be located along Robert Street near Columbus Avenue. The Regions Hospital medical complex occupies the parcel of land east of Jackson Street and south of University Avenue. The complex is a high-density concentration of medical laboratories, hospital rooms, offices, and parking ramps. State office buildings are located to the west of Jackson Street, including the Department of Revenue and State Supreme Court. Surface parking and a large parking ramp occupy roughly a third of the land adjacent to the state offices. The dominant feature in this area is the I-94 and I-35E freeway corridor, which separates the State Capitol campus from downtown St. Paul.

Urban Form

The eastern portion of the State Capitol campus has a disjointed pattern of streets, with 12th Street providing the only direct connection between Cedar and Jackson Streets. Bridges are provided over the freeway for all streets on the regular block grid. Three distinct districts are adjacent to the proposed Capitol East Station location: the State Capitol campus, the Regions Hospital complex, and downtown St. Paul. Although these districts are adjacent, they are functionally separate.

Infill and Redevelopment Potential

The Comprehensive Plan for the Minnesota State Capitol Area identifies the eastern part of the State Capitol campus as having the highest potential for new development of state office buildings. Two governmental office buildings have been constructed in this area since the Comprehensive Plan was prepared. However, a major parking ramp is located one block west of Robert Street that could be redeveloped if additional office space is needed, with replacement parking included in the project.

All three districts around the proposed station are likely to continue intensification of development. Regions Hospital has just completed an expansion program, and future expansions are likely. There are also several surface parking lots within the one-half mile station influence area. Figure 5.2-4 provides a description of the station area.

These are adjacent to state office buildings, and any infill and redevelopment activities would need to reviewed and approved by the CAAPB.

Planned Development

Planned development activities include a mix of commercial and institutional uses throughout neighborhoods adjacent to the Capitol area. The Capitol Heights Boys and Girls Club, on Jackson Street just east of the Capitol area, is planning a facility expansion that would include administrative offices and a day care facility.

Potential Major Trip Generators

Potential major trip generators include Regions Hospital, the State Department of Revenue, and the State Supreme Court.

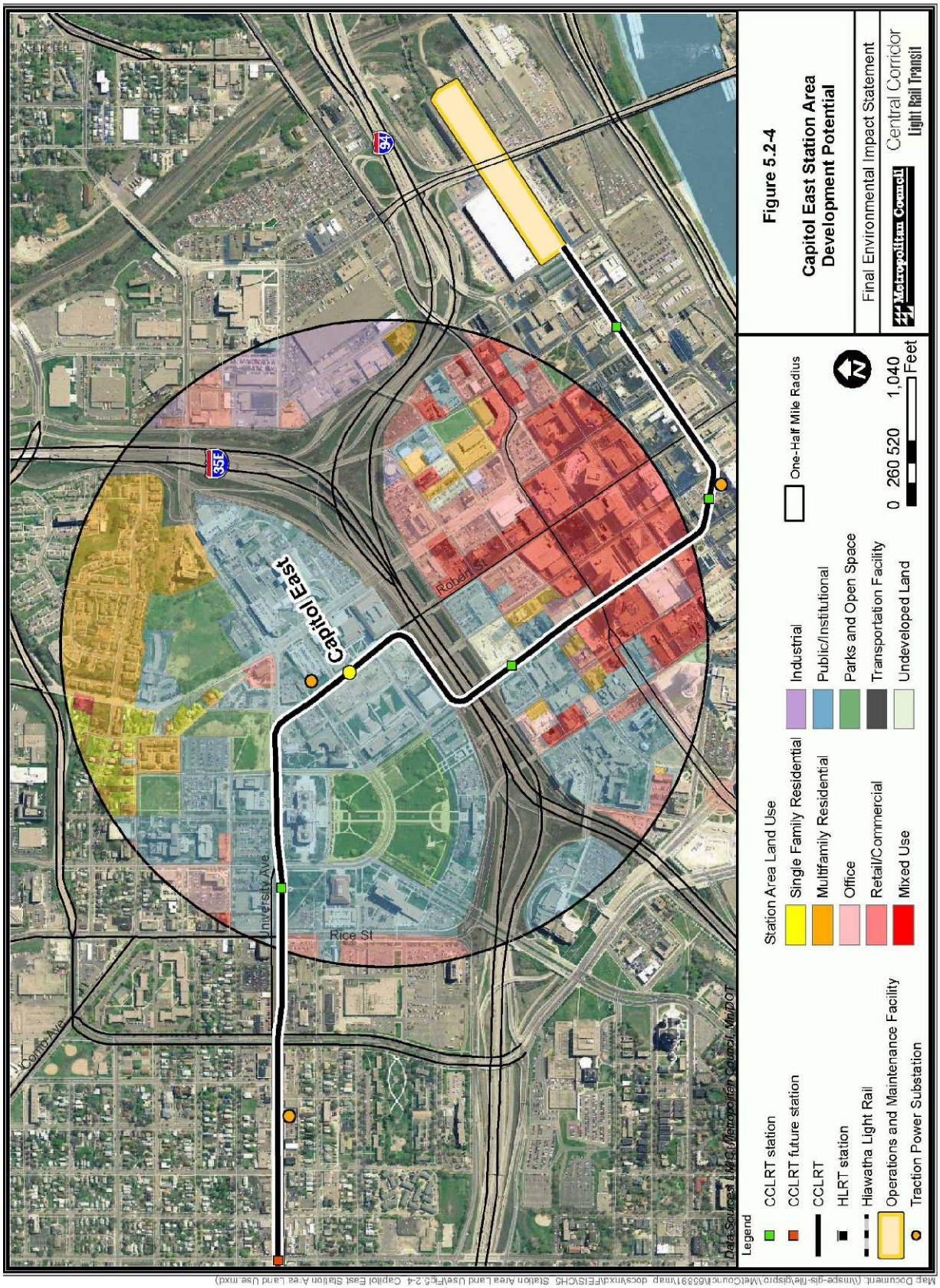


Figure 5.2-4
Capitol East Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Capitol East
Robert St
Rice St
University Ave
Como Ave
35E
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
Undeveloped Land
One-Half Mile Radius
0 260 520 1,040 Feet
N
Data Sources: LMIC, Metropolitan Council, MnDOT

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the proposed Capitol East Station area is considered to be good.

5.2.2.5 Rice Street Station

Land Use Pattern

The Rice Street Station would be located east of the University Avenue and Rice Street intersection. Land use at the proposed Rice Street Station includes institutional and commercial uses. The quadrant southeast of the Rice Street and University Avenue intersection is the heart of the Capitol area. This includes the Capitol and headquarters offices for the Department of Transportation (DOT), Supreme Court, and other agencies. In addition, the campus includes a generous amount of landscaped open space centered on the Capitol Mall, which is used for political rallies and civic events. A Sears department store and associated parking lots are located in the southwest quadrant. Bethesda Hospital is located north of the State Capitol, in an area that also contains more state offices.

Urban Form

The Capitol sits at the crest of a hill that descends to downtown St. Paul and the Mississippi River bluff. The landscaped hill, trees, and adjacent buildings form a mall, which is the central feature of the government agency campus and a major civic space. The urban form associated with the Capitol is degraded somewhat in the area between Rice Street and Marion Street due to the large amount of land used for surface parking. Consistent frontage along University Avenue is lacking.

Infill and Redevelopment Potential

Surface parking currently occupies a large amount of land within the proposed Rice Street Station influence area, and this provides an opportunity for new infill development. The Minnesota Department of Transportation has indicated an interest in constructing a west addition to the Department of Transportation Building. The southwest quadrant, currently occupied by a Sears department store, has potential as a major redevelopment site, and has been identified by the CCDS and Station Area Plan for the Rice Street Station as the site for a transit-oriented urban village.

There are a number of surface parking lots in the vicinity of the Rice Street Station that could be redeveloped. However, several surface lots associated with the Capitol would fall under the regulatory control of the CAAPB. Figure 5.2-5 provides a description of the station area.

Potential Major Trip Generators

Potential major trip generators include existing and planned Capitol and state agency destinations as well as the Rice Street Urban Village.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Rice Street Station area is considered to be excellent, primarily due to the number of surface parking lots within the one-half mile station influence area and the station platform's proximity of the Capitol.

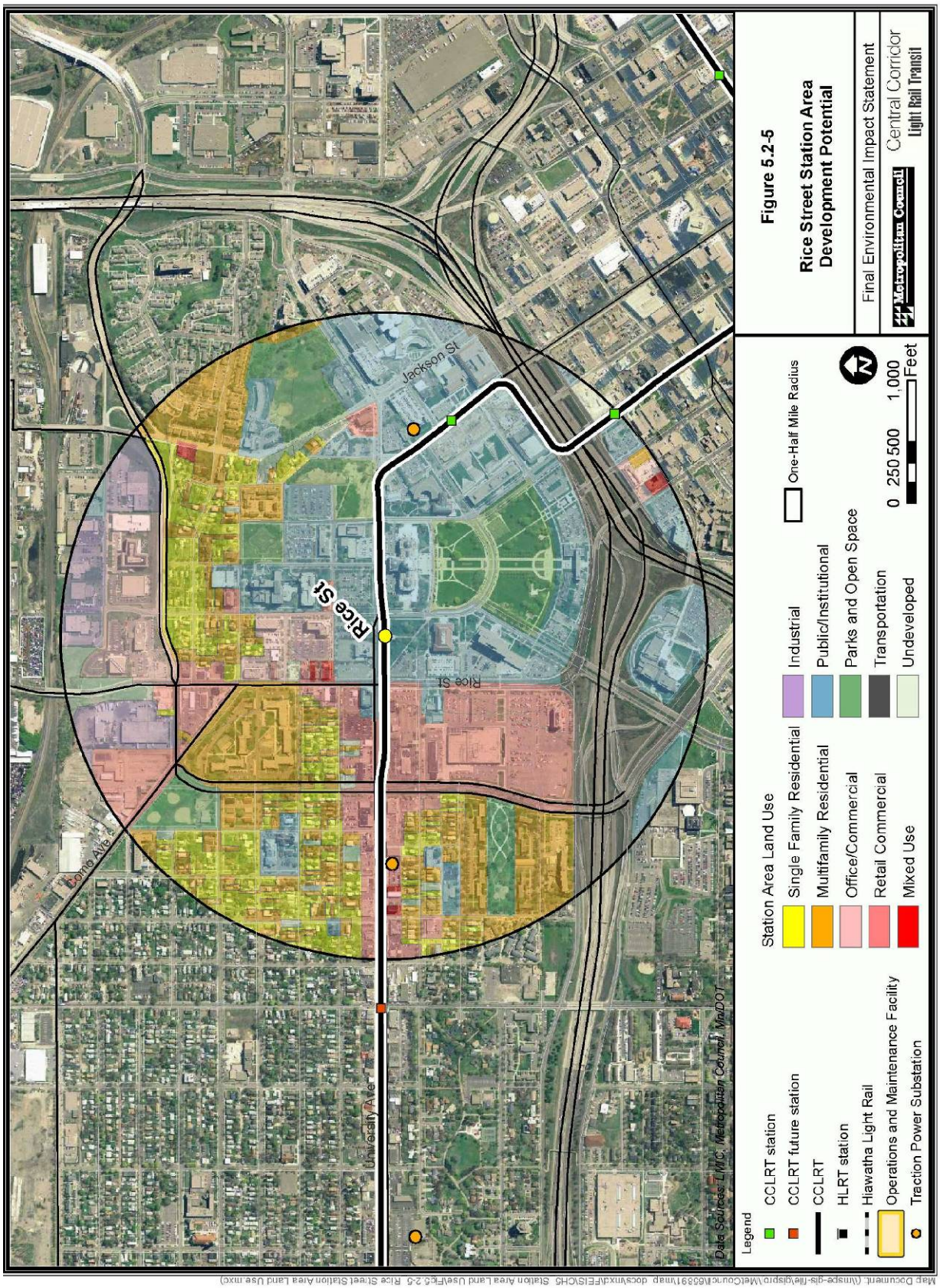


Figure 5.2-5
Rice Street Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office/Commercial
Retail Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation
Undeveloped
One-Half Mile Radius
0 250 500 1,000 Feet
Rice St
Jackson St
University Ave
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\Mspe-gis-file\gispro\MetCouncil\653291\map docs\mxd\FEIS\CH5 Station Area Land Use\Fig5 2-5 Rice Street Station Area Land Use.mxd)

5.2.2.6 Dale Street Station

Land Use Pattern

The Dale Street Station would be located near the intersection of Dale Street and University Avenue. Land use patterns around the proposed station are a simple blend of commercial establishments along University Avenue and residential uses on city blocks to the north and south of University Avenue.

Urban Form

Much of the land area surrounding the proposed station area is developed around the traditional urban street grid pattern, with single-family houses lining streets aligned on an east-west axis. The exception to the regular street grid is southeast of the intersection of Dale Street and University Avenue in an area developed with internal landscaped courtyards and dwelling units grouped around roadway circles. The development pattern along University Avenue includes commercial buildings interrupted by parking lots. Many of the commercial buildings are turn of the century, brick buildings that were constructed during the streetcar era. The Unidale Mall at the southeast comer of Dale Street and University Avenue has a typical suburban strip mall site plan with a large parking area along University Avenue and the mall structure set well back from the street. The southwest corner of the intersection is the location of the new Rondo Community Outreach Library. The library occupies the ground level of the new building, and residential uses are on the upper stories.

Infill and Redevelopment Potential

There are a number of underutilized areas and surface parking lots within the Dale Street Station's one-half mile walk area. The Station Area Plan for the Dale Street Station identifies the Unidale Mall in the southeast quadrant of the University/Dale intersection as a major opportunity for development. As outlined in the plan, it presents a location where a high intensity use could be developed to mirror the recently developed Rondo Community Outreach Library. New development at this location is also recommended to allow for an extension of Central Village Park, which would enable a connection between the park and University Avenue.

Figure 5.2-6 provides a description of the station area.

Potential Major Trip Generators

Potential major trip generators include the Rondo Community Outreach Library and small specialty shops and restaurants.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Dale Street Station area is considered to be good, but with potential for improvement related to planned development.

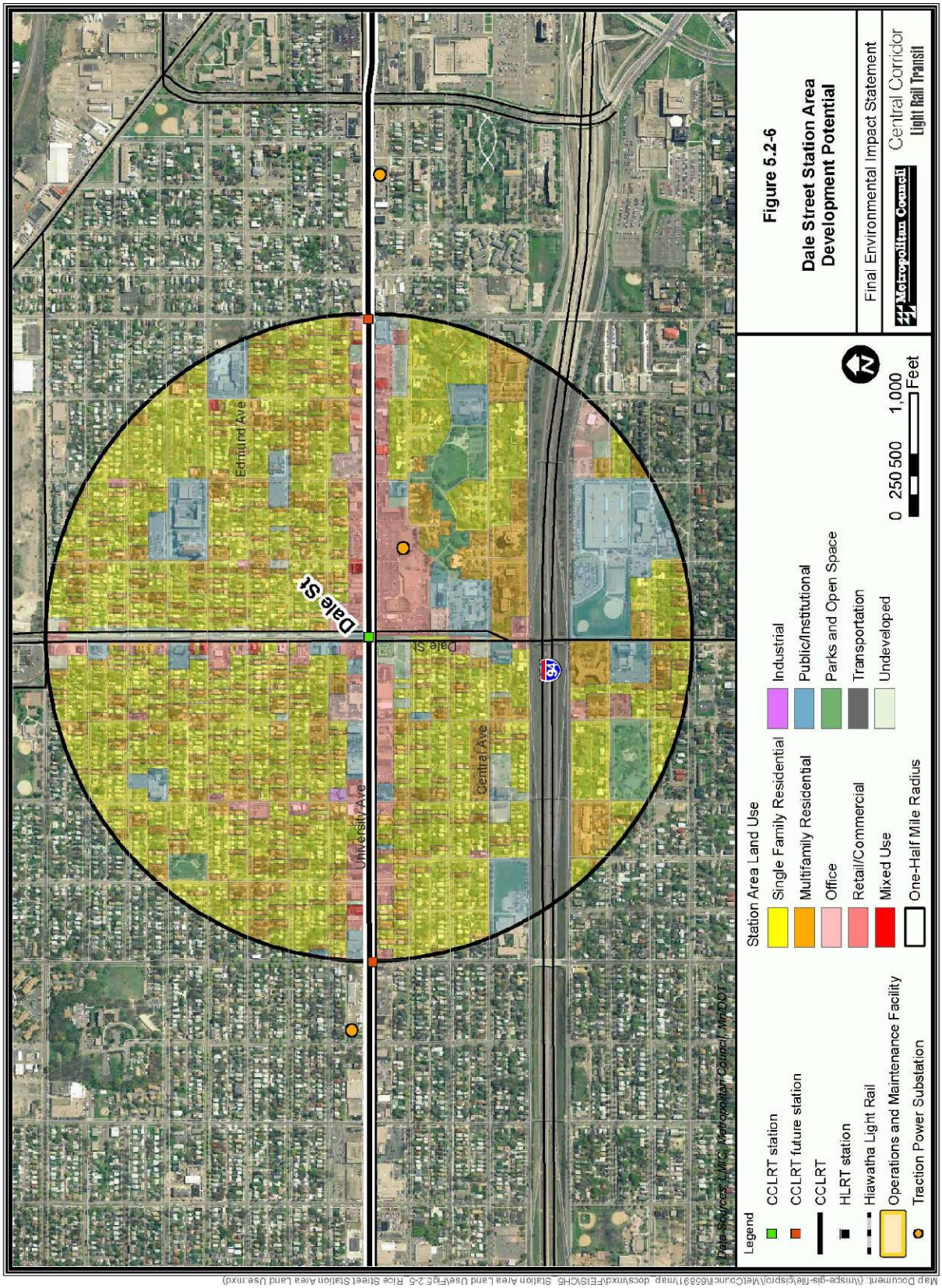


Figure 5.2-6
Dale Street Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
One-Half Mile Radius
Industrial
Public/Institutional
Parks and Open Space
Transportation
Undeveloped
0 250 500 1,000
Feet
N
Dale St
University Ave
Central Ave
Edmund Ave
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\gispro\MetCouncil\655691\map docs\mxd\FEIS\CH5 Station Area Land Use\Fig5 2-5 Rice Street Station Area Land Use.mxd)

5.2.2.7 Lexington Parkway Station

Land Use Pattern

The Lexington Parkway Station would be located at the intersection of University Avenue and Lexington Parkway. The land use pattern north of University Avenue at Lexington Parkway consists of a half block of commercial buildings backed by many blocks of single-family homes, duplexes, and apartments. Land use patterns are essentially the same on the southern side of University Avenue and east of Lexington Parkway, with residential properties comprising the largest land use type between I-94 and University Avenue. Commercial retail, residential, and institutional uses are located between University Avenue and I-94 on the west side of Lexington Parkway. The Skyline Tower is a large low-income high-rise apartment complex located between University Avenue and I-94. The building is run by CommonBond Communities, and is the largest single HUD-subsidized building in Minnesota. Skyline Tower and the Central Medical Clinic are located just outside the walkshed radius for the proposed station area.

The four corners at the intersection of Lexington Parkway and University Avenue are occupied by a mixture of commercial buildings including a new Aldi grocery store, fast food restaurants on the northeast and southwest quadrants, a new restaurant development on the northwest corner, and restaurants and specialty shops in a single story building on the southeast quadrant that fronts both University Avenue and Lexington Parkway. East of this commercial building, on the south side of University Avenue is a former public library building. It is now used as a meeting space for community meetings and as the City of St. Paul Central Corridor Resource Center. The Wilder Foundation has also constructed a new facility to the southwest of the University/Lexington intersection.

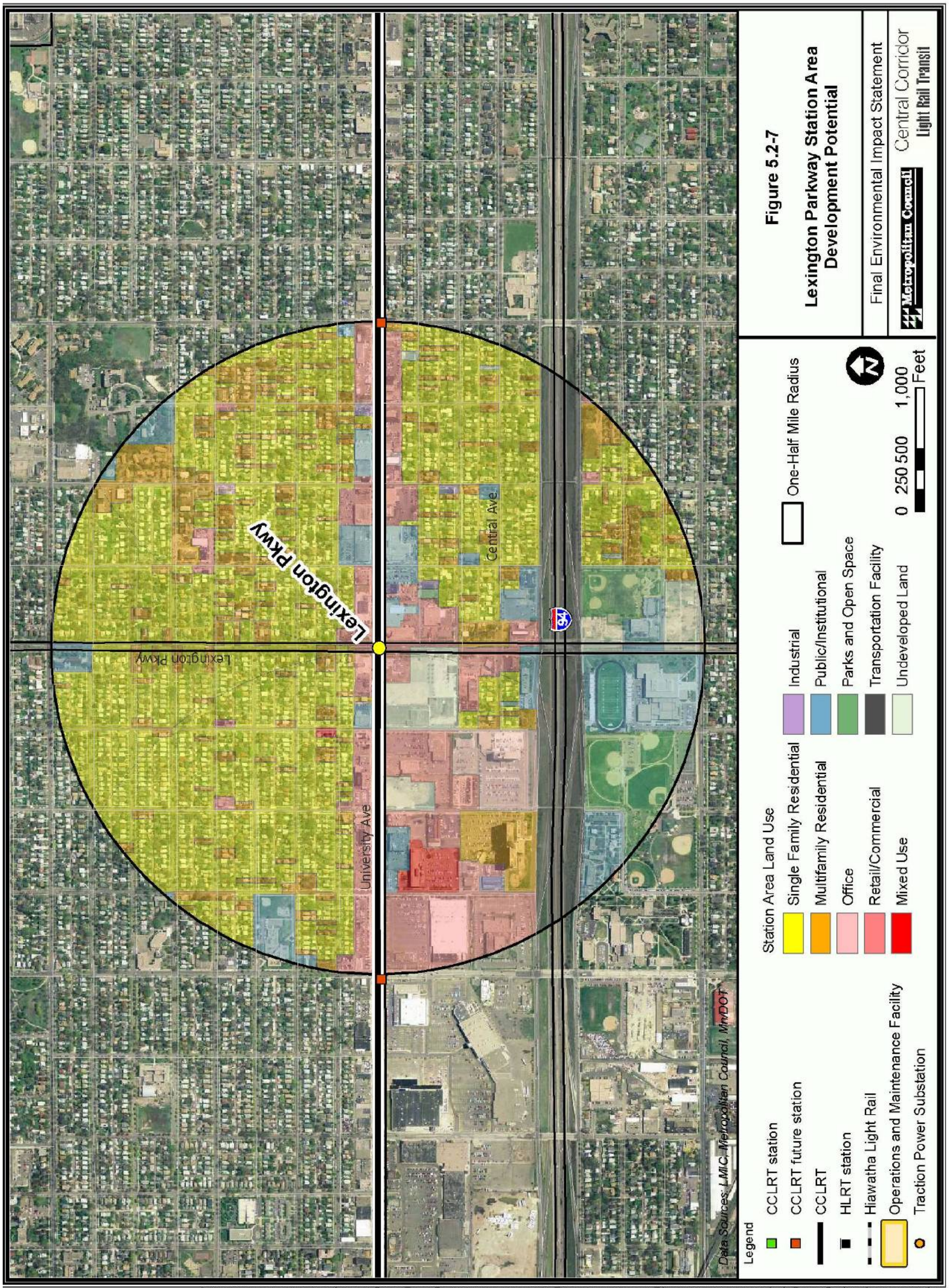
Urban Form

The overall urban form within the one-half mile radius of the Lexington Parkway Station includes the north-south, east-west grid. The residential areas have houses that front on the east-west cross streets. Residences on Lexington Parkway itself face a wide parkway with landscaped medians. This parkway streetscape was reconstructed during the 1990s.

Infill and Redevelopment Potential

There are approximately eight locations within the Lexington Parkway Station area where infill and redevelopment could take place. The sites include surface parking lots, vacant lots, and underutilized land. The underutilized land is low intensity, single story buildings that could be redeveloped with higher intensity uses.

The presence of many vacant parcels, underutilized land, and outdated structures presents an opportunity for redevelopment projects. The north side of University Avenue, both east and west of Lexington Parkway, has many parcels that are vacant and underutilized, with obsolete structures and low value land uses. The CCDS and Station Area Plan for the Lexington Parkway Station recommend the intensification of uses along Lexington and University, and stresses the redevelopment of the southwest quadrant of the intersection. Also identified in the Station Area Plan and the CCDS are areas slightly beyond the one-half mile radius from the station platform, mainly the vacant land and surface parking lots around Central Medical and the Skyline Tower. The plans recommend the creation of an urban village in these areas that is centered around a new park. Figure 5.2-7 provides a description of the station area.



Map Document: (\\mspe-gis-file\gisproj\MetCouncil\65891\map_docs\mxd\FEIS\CH5_Station Area Land Use\Fig5.2-7_Lexington Pkwy Station Area Land Use.mxd)

Planned Development

The southwest quadrant of the Lexington Parkway/University Avenue intersection was recently redeveloped with a multilevel facility for the Wilder Foundation and a single story building that houses an Aldi grocery store. The White Castle fast food restaurant, the most successful White Castle in the Twin Cities, was not acquired when the Aldi grocery store was developed. Efforts are underway today to retrofit the Aldi grocery store to provide above ground level uses. Additional efforts are underway to construct high density housing south of the Aldi grocery store.

Potential Major Trip Generators

Potential major trip generators include the Central Medical clinic, Wilder Foundation, Skyline Tower, and residential areas.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Lexington Parkway Station area is considered to be very good due to the amount of land available for intensification, but with lower transit demand than in downtown or around the Capitol.

5.2.2.8 Snelling Avenue Station

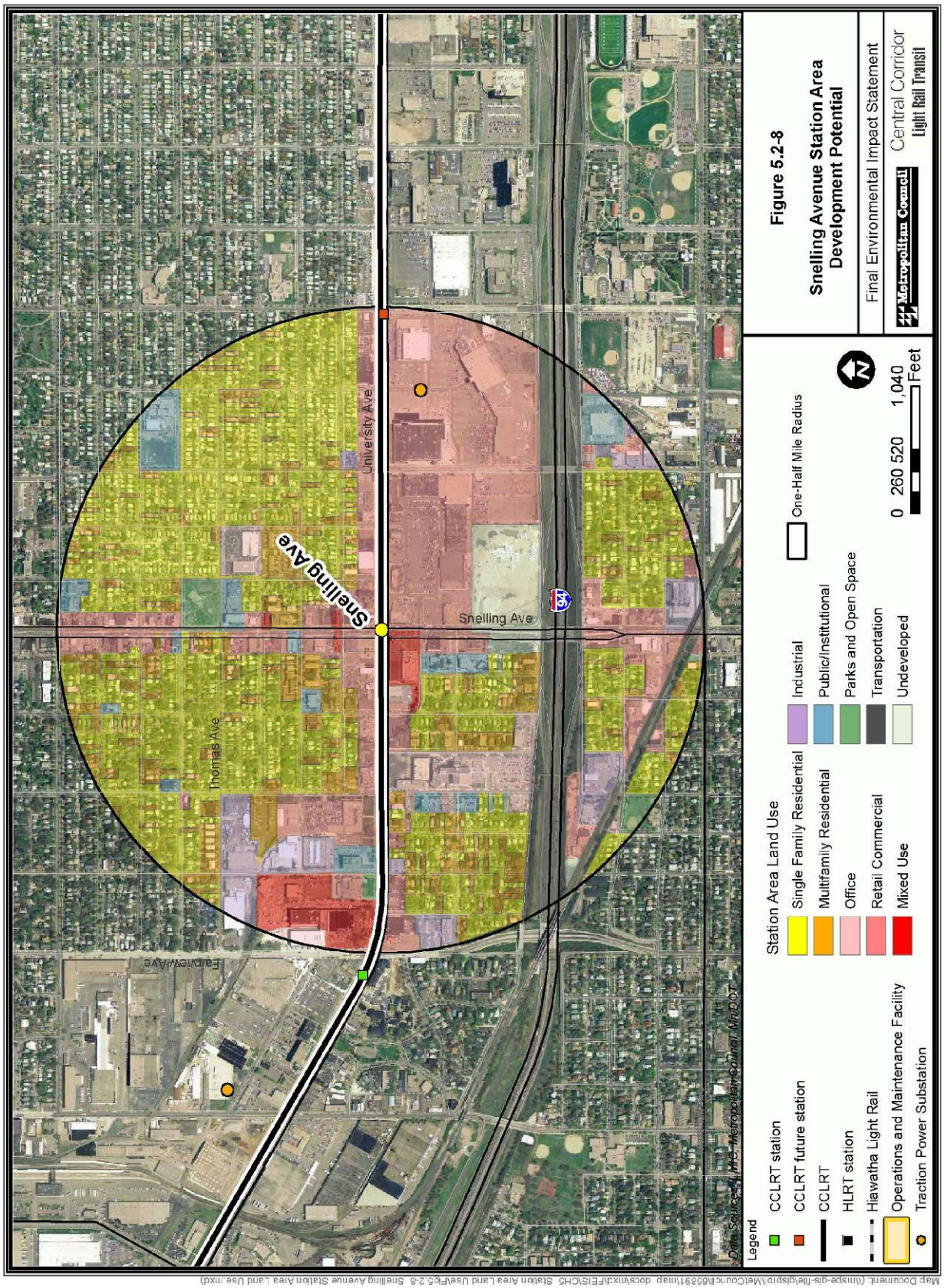
Land Use Pattern

The Snelling Avenue Station would be located at the intersection of University Avenue and Snelling Avenue. Land use within the Snelling Avenue Station area is mixed commercial and residential. This pattern originated at the intersection of two streetcar lines roughly halfway between the two downtowns. The intersection has been an important community node since its formation. The southeast corner was the site of a major streetcar maintenance and storage facility, and a portion of this old site is still a parking facility for Metro Transit buses. The northern half of the old streetcar facility has been redeveloped as the Midway Shopping Center, a major regional shopping center that has half of its site devoted to parking.

The southwest quadrant of the intersection between University Avenue and I-94 is a mix of office, institutional, and residential land uses. The Spruce Tree Center, on the southwest corner of the Snelling Avenue/University Avenue intersection, contains meeting rooms and professional offices. The Health East Midway campus occupies a sliver of land between residential streets. Commercial land uses, backed by a dense area of housing, line Snelling Avenue to the north of the University Avenue intersection. Apartment buildings, townhouses, duplexes, and flats are all found within the walking radius.

Urban Form

The Snelling Avenue intersection with University Avenue displays a variety of urban types from successive eras of interaction between transportation technologies and built form. The area is a mix of older storefronts and big box retail stores. The north side of the block between Snelling Avenue and Pascal Street is a remnant from the streetcar era: an unbroken line of small storefronts with zero setbacks line the sidewalk. Located across the street on the south side of University Avenue is an example of contemporary retailing with large footprint buildings ("big boxes") and a parking area taking half the site. Fast-food restaurants with drive-through lanes and parking are located next to the sidewalk. This type of site plan necessitates longer walks for pedestrians using transit to reach the retailing areas, yet the Midway Shopping Center is a major transit stop served by a number of bus routes.



Map Document: (\\mspe-gis-file\gispro\MetCouncil\663391\map docs\mxd\FEIS\CH5 Station Area Land Use\Fig5 2-8 Snelling Avenue Station Area Land Use.mxd)

Infill and Redevelopment Potential

Although the level of development is fairly intense, there are a few underutilized parcels facing the University Avenue and Snelling Avenue intersection that could be developed. These comprise small, single story commercial uses and the surface parking lot of the Midway Shopping Center. As outlined in the CCDS and the Station Area Plan for the Snelling Avenue Station, the large amount of land currently used for parking at Midway Shopping Center might be reduced through a reconfiguration of the overall site plan that maximizes shared parking potential, thereby allowing the development of more street frontage. The plans also stress reestablishing the grid in the large surface parking lots to aid in connectivity and the establishment of a park to focus new development. The land at the corner of Snelling Avenue and St. Anthony Avenue (I-94 frontage road) is also vacant and provides a large redevelopment site. These sites provide opportunities for higher-density development such as office, institutional, or residential projects, especially if a transit station is present. Figure 5.2-8 provides a description of the station area.

Planned Development

The City of St. Paul and the Metropolitan Council are seeking redevelopment proposals for the Bus Barn site and areas around the Midway Shopping Center.

Potential Major Trip Generators

Potential major trip generators include the Midway Shopping Center, medium- to high-density residential areas, Health East Midway, and Spruce Tree Center.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Snelling Avenue Station area is considered to be excellent.

5.2.2.9 Fairview Avenue Station

Land Use Pattern

The Fairview Avenue Station would be located along University Avenue to the west of Fairview Avenue. The intersection of Fairview and University Avenues is where the eastern portion of the Midway Industrial District ends and a pattern of commercial areas backed by residential areas begins, resulting in a complex land mix of industrial, commercial, and residential uses. Residential land use is predominant at Fairview Avenue from south of University Avenue to I-94. Episcopal Health and Housing Services recently added 120 additional units of senior housing to their senior campus on the southwest comer of the Fairview Avenue and University Avenue intersection. Industrial plants and related parking lots, vacant land, commercial, and institutional land uses occur north of University Avenue. On the northeast corner of the Fairview Avenue and University Avenue intersection is a former industrial plant that was converted to a mixed-use facility with offices and retail shops. (The Central Corridor LRT Project Office is located in this facility.) The southeast corner of the intersection is the site of a fast-food restaurant. Approximately 650,000 square feet of office space is also located in various buildings within proximity of the proposed Fairview Avenue Station.

Urban Form

Industrial buildings are sited on large parcels north of University Avenue, which interrupt the regular street grid. The quadrant southeast of the Fairview Avenue intersection is mainly residential, but the grid is set with the long side of blocks oriented along the north-south axis, which is unusual in St. Paul. The southwest quadrant has a curvilinear pattern of streets designed as an early suburb around Iris Park. The intersection at Fairview Avenue is where the alignment of University Avenue curves from its northwest orientation to an alignment oriented directly to the west and east.

Infill and Redevelopment Potential

A number of parcels within walking distance of the proposed Fairview Avenue Station are vacant or underutilized. Several opportunity sites comprising surface parking lots, fast food restaurants, and small scale, single story commercial uses are available. The Station Area Plan for the Fairview Avenue Station stresses the development of the surface parking lots facing University Avenue to strengthen the traditional, pedestrian-oriented character of the street. In addition, the plan recommends the implementation of an employment campus in the area, using both University and Fairview Avenues as major access points. Recommended land for this use includes areas further to the north of University, to the east and west of the recently built Goodwill facility on Charles Avenue. Figure 5.2-9 provides a description of the station area.

Planned Development

The City of St. Paul has worked with Goodwill Industries to construct a corporate office, warehouse, job-training center, and retail outlet on the northwest comer of Charles Avenue and Fairview Avenue. A new YMCA facility is also being planned for the site of the existing YMCA, which would include a child care and community recreation center.

Potential Major Trip Generators

Potential major trip generators include senior housing, commercial and industrial businesses, and residential neighborhoods.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Fairview Avenue Station area is considered to be good.

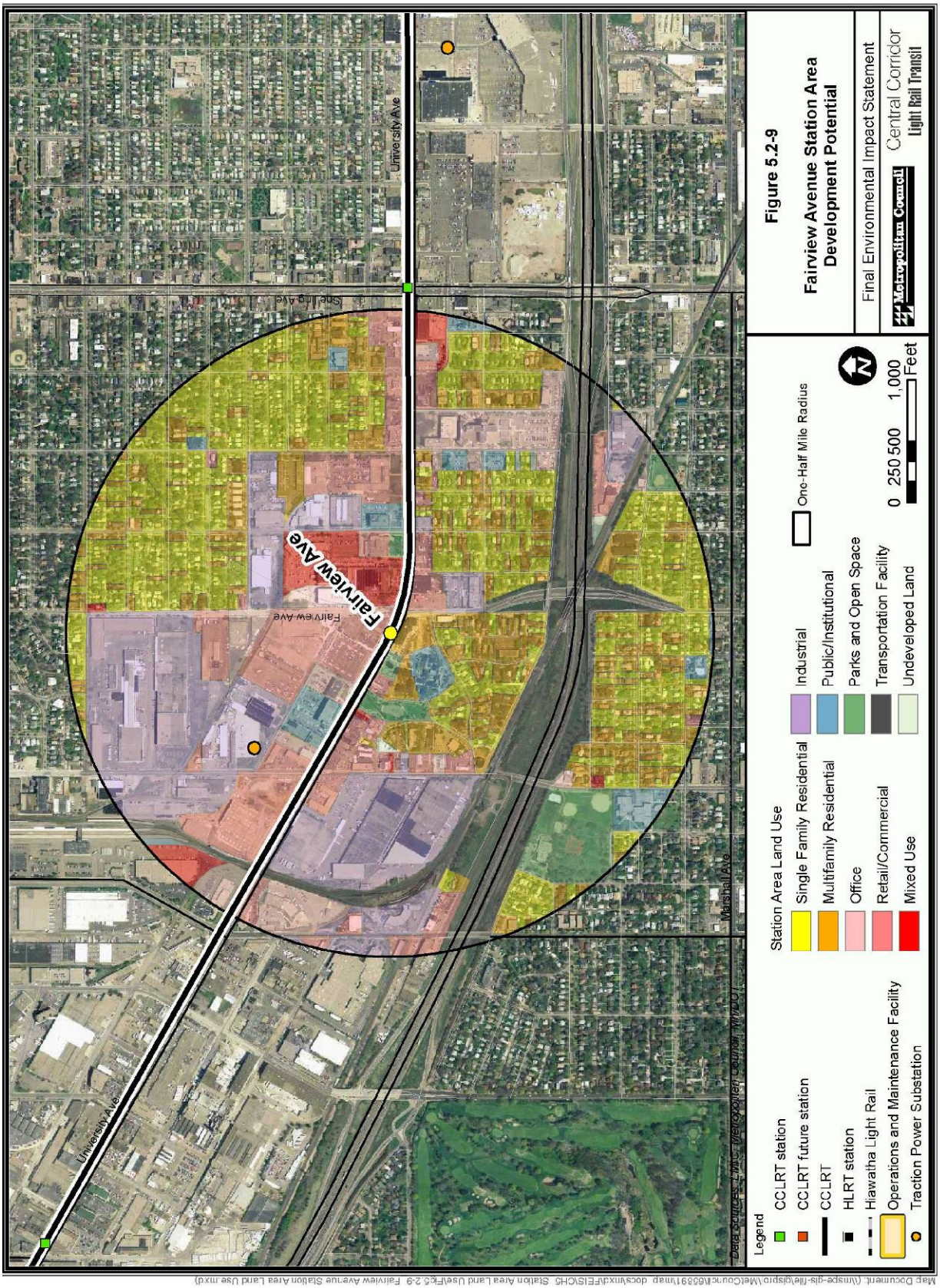


Figure 5.2-9
Fairview Avenue Station Area
Development Potential
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
Undeveloped Land
One-Half Mile Radius
0 250 500 1,000 Feet
N
Fairview Ave
University Ave
Snelling Ave
Marshall Ave
Data Sources: Twin Metropolitan Council, MnDOT

5.2.2.10 Raymond Avenue Station

Land Use Pattern

The Raymond Avenue Station would be located along University Avenue, southeast of the University and Raymond Avenue intersection. The land use pattern around the proposed Raymond Avenue Station includes storefront retail, both at the Raymond Avenue/University Avenue node and along University Avenue both east and west of the intersection. The mix of commercial businesses is varied and includes two coffee shops, a diner, sit-down restaurant, hardware store, art gallery, bank, an exotic pet store, the long- established Twin Cities Aikido Center, and a liquor store, all within one and a half blocks of the proposed station site. Beyond the one and a half block distance are commercial showrooms, wholesalers, retail shops, offices, and small industries.

The one-half mile station influence area for the Raymond Avenue Station also includes residential uses, which are north of Territorial Road. Most notable among these are: the story Seal High Rise, a home to many seniors and college students, medium density townhomes and duplexes, and single-family areas just north of the proposed station site. More than 40 artist studios are located in the area and an African marketplace provides space for 80 small businesses. To the south and west of the proposed station intersection, light and heavy industries predominate.

Urban Form

The complex mix of land uses combined with quality brick commercial buildings at the Raymond Avenue intersection forms an interesting urban node. The vibrant storefronts along University and Raymond Avenues provide a consistent facade to the pedestrian zone.

Infill and Redevelopment Potential

The Raymond Avenue area has seen substantial revitalization in the last decade. Three historic warehouses have been refurbished into 170 units of artists' loft apartments adjacent to the planned station platform. Older brick warehouses have been refurbished into office space, and storefronts have been reoccupied. Buildings fronting University Avenue between TH 280 and Hampden are within the City's designated University-Raymond Commercial Historic District. Redevelopment here is subject to review by the City of St. Paul's Heritage Preservation Commission to ensure it is consistent with the character and pattern of District development. The opportunity sites near the Raymond Avenue Station consist of surface parking lots, vacant parcels, and small scale single-story buildings. As outlined in the Raymond Station Area Plan, there is potential to develop mixed use buildings on University Avenue and townhomes west of the Seal High Rise building. The plan also identifies underutilized industrial lots and buildings along TH 280 that could be redevelopment sites for corporate offices, forming the eastern portion of a prestigious corporate address with sites near the Westgate Station. Figure 5.2-10 provides a description of the station area.

Planned Development

The City of St. Paul continues to provide planning assistance to projects in the designated "Raymond Avenue Urban Village." There has been a conversion of 100,000 square feet of warehouse space into office space and storage with ground floor restaurants within the area. The City is also pursuing options for redeveloping the northeast comer of the intersection.

Potential Major Trip Generators

Potential major trip generators include the St. Anthony Park residential areas, Seal High Rise, the Raymond Avenue commercial node, and other offices and industries.

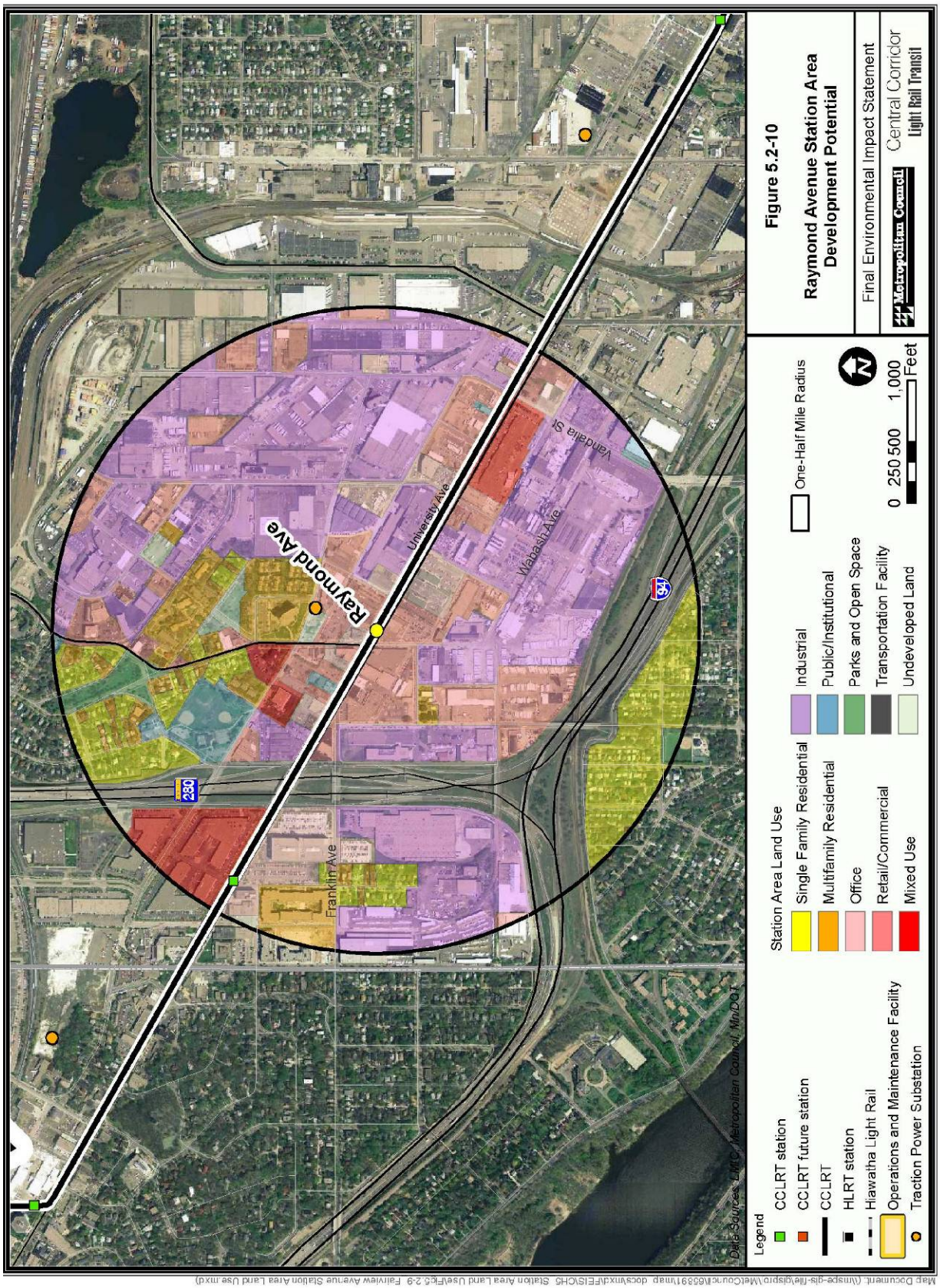


Figure 5.2-10
Raymond Avenue Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Raymond Ave
University Ave
Wabash Ave
Vandalia St
Franklin Ave
280
94
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
Undeveloped Land
One-Half Mile Radius
0 250 500 1,000 Feet
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\gispro\MetCouncil\602391\map docs\mxd\FEIS\CH5 Station Area Land Use\Fig5 2-9 Fairview Avenue Station Area Land Use.mxd)

Overall TOD Potential

Overall TOD potential for the Raymond Avenue Station area is considered to be very good.

5.2.2.11 Westgate Station

Land Use Pattern

The Westgate area is immediately east of the Minneapolis/St. Paul border, and west of TH 280. The Westgate Station would be located along University Avenue at Berry Street. The Westgate business park is located on the north side of University Avenue, with land use consisting of light industry, showrooms, and offices. The Hubbard Broadcasting facility is a major employer located next to the business park. South of University Avenue, the border between the two cities is clearly marked by single-family homes on the west side of Emerald Street and industrial land and medium-density residential uses on the east side. The Court International and Court West buildings south of University Avenue are mixed-use office buildings. Numerous developments have occurred in the last four years along University Avenue. including Emerald Gardens (214 condo units), 808 Berry Place (267 rental units), The Metro (67 Condo units), and Jefferson Commons student apartments (135 units). A four-story mixed-use development including a first floor grocery store and office space above is planned on the south side of the intersection at University Avenue and Emerald Street.

Urban Form

The Westgate development is setback from University Avenue, but does allow some street frontage. The street grid is broken in and around the Westgate Station area, resulting in disjointed through streets, especially in the north-south direction. The interchange at TH 280 is a significant physical element somewhat isolating the Westgate Station area and offices from the adjacent Raymond Avenue Station area.

Infill and Redevelopment Potential

Infill and redevelopment opportunity sites are available within this station area. These include surface parking lots scattered throughout the area, as well as older structures between University Avenue and I-94 that include industrial buildings and some housing units. As outlined in the Westgate Station Area Plan, these industrial buildings could be redeveloped as corporate offices that benefit from exposure to the interstate highway, forming the western portion of a corporate address at TH 280 and I-94.

Other redevelopment opportunities outlined in the Station Area Plan include the intensification of the area north of University, recommended to become a high tech employment campus that stretches to the Intercampus Transitway. Intensifying uses along University is also stressed, as several vacant lots and parking areas currently detract from creating a traditional, pedestrian-oriented streetscape near the station platforms. Finally, the plan outlines continued residential development to the south of University, which could share access to a new central park with the office development along TH 280 and I-94. Figure 5.2-11 provides a description of the station area.

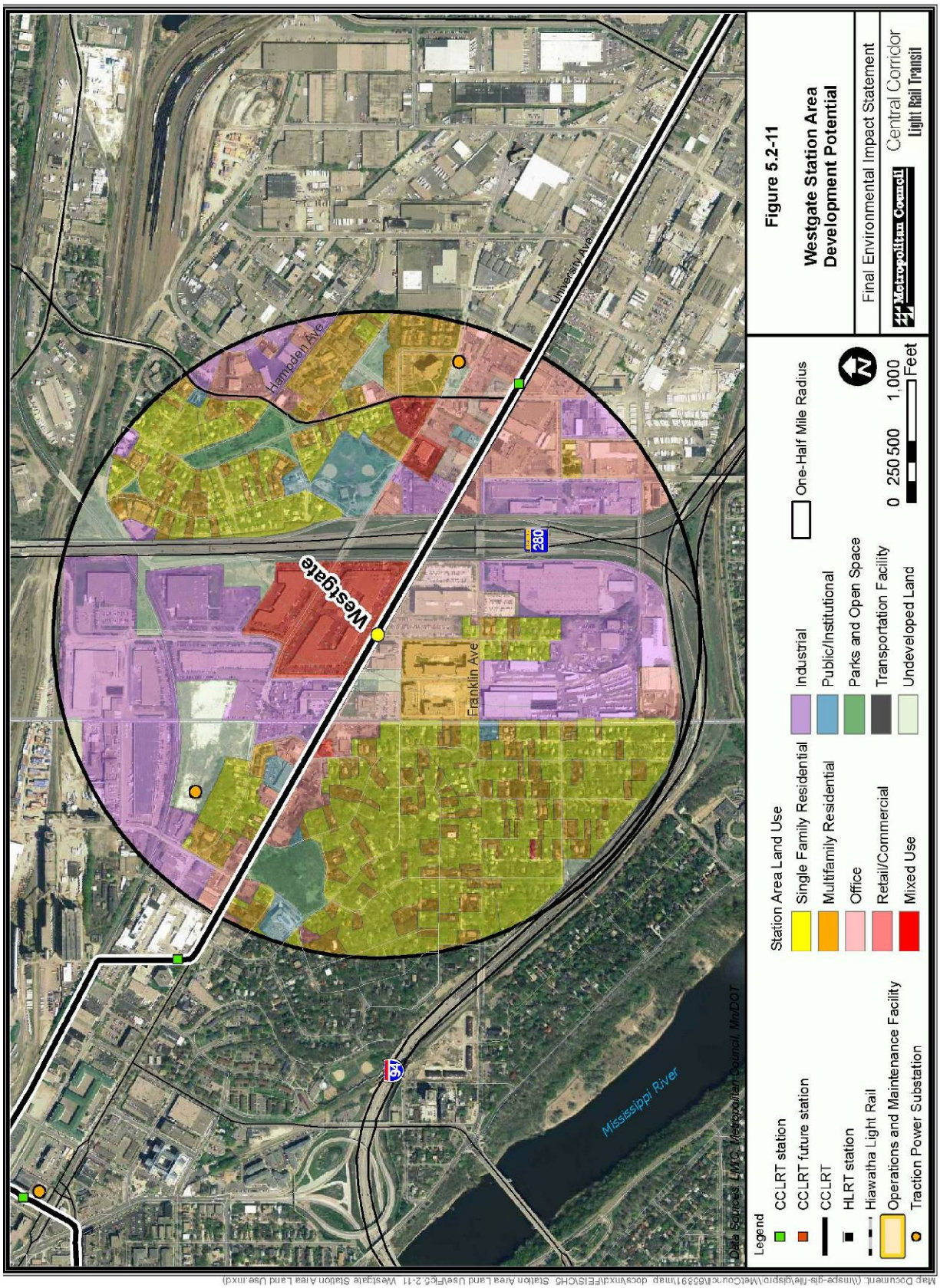


Figure 5.2-11
Westgate Station Area
Development Potential
Final Environmental Impact Statement
Central Corridor
Light Rail Transit
Metropolitan Council
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
Undeveloped Land
One-Half Mile Radius
0 250 500 1,000 Feet
Westgate
Hampden Ave
Franklin Ave
University Ave
280
94
Mississippi River
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\gispro\MetCouncil\602391\map docs\mxd\FEIS\CH5 Station Area Land Use\Fig5 2-11 Westgate Station Area Land Use.mxd)

Planned Development

The City of St. Paul recently approved a residential development on the north side of University Avenue between Emerald and Curfew Streets. The development, 350-units of medium density housing, was approved under the city's Traditional Neighborhood Development (TND) zoning ordinance, which recognizes a mix of uses and access to transit services and facilities as primary objectives. In addition, other transit-oriented housing developments have been approved and constructed within this same area in St. Paul. These are along the south side of University Avenue and between University Avenue and Franklin Avenue.

Potential Major Trip Generators

The potential major trip generators include the Westgate Business Cark, Court International and Court West, the Prospect Park residential neighborhood, and new TND and TOD housing developments.

Overall TOD Potential

Based on the above analysis, and primarily due to work trips to the business park and offices, the overall TOD potential for the Westgate Station is considered to be very good.

5.2.2.12 29th Avenue Station

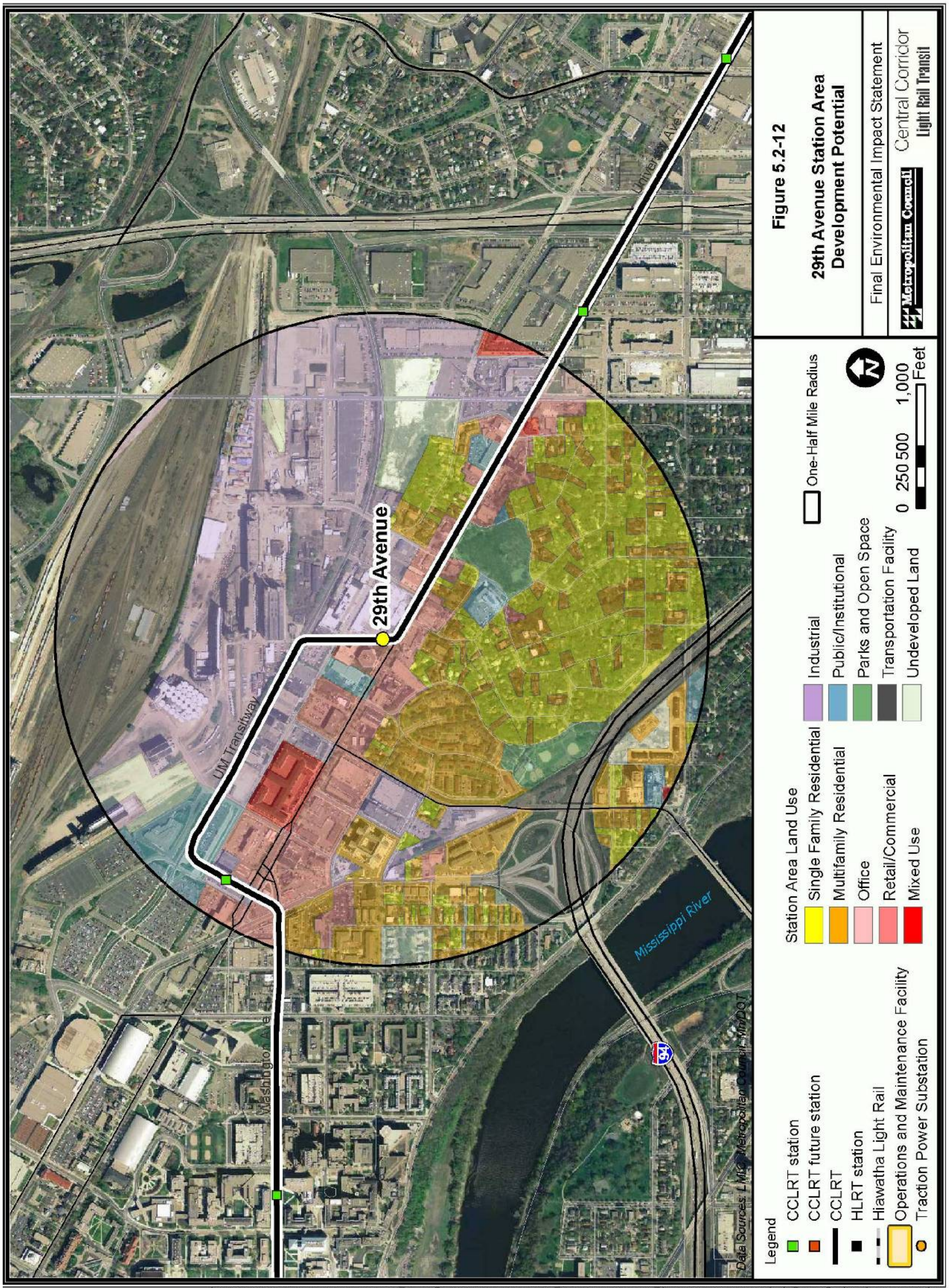
Land Use Pattern

The 29th Avenue Station would be located between 4th Street and University Avenue on 29th Avenue Southeast. Four areas with distinct land use patterns come together to form a highly mixed commercial, industrial, and residential land use pattern within the standard walking radius of the 29th Avenue Station. The first of the four areas is the Southeast Minneapolis Industrial area (SEMI), which is north of the Intercampus Transitway. SEMI includes a

Burlington Northern Railroad rail yard, grain elevators, and industrial businesses. Many, but not all of the businesses, rely on the railroad for receiving and shipping. The second area lies between the Transitway and University Avenue. This area comprises industrial, commercial office (including the nine story University Park Plaza office building), and retail establishments.

The third area comprises commercial and residential uses that front on University Avenue between Emerald Street and University Village, which is between 25th and 26th Avenues. University Village, a mixed-use facility, is on the western edge of the 29th Avenue Station area. It includes first floor retail shops with apartments above and is a model for the kind of residential developments that have been constructed near the campus in recent years. Other uses within this area are restaurants, a post office, and office buildings.

The fourth area is between Huron Boulevard and 27th Avenue SE. This area is an area of mixed commercial uses, including a small hotel. East of 27th Avenue SE and south of University Avenue is a large area of multifamily and single-family dwelling units in the Prospect Park neighborhood.



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Urban Form

Due to the confluence of the University of Minnesota campus, the SEMI area, and Prospect Park in the 29th Avenue Station area, the overall street pattern is joined in a number of strained alignments. Odd shaped parcels are created along Huron Boulevard, as a former railroad right-of-way is incorporated into the urban pattern. Because of the curvilinear streets in the residential area of Prospect Park, 27th Avenue SE provides the only direct route south to Franklin Avenue. The design form for new retail shops with apartments along University Avenue is a balance between the desire for street frontage and parking through a minimum setback.

Infill and Redevelopment Potential

There are a number of locations where infill and redevelopment could occur. These include surface parking lots, vacant parcels, small scale commercial buildings, and underutilized industrial buildings. The main redevelopment opportunity is in the SEMI area north of 4th Street. Master planning for SEMI recommended a mix of employment (light industrial and research and technology laboratories), residential, and commercial retail that would front on University Avenue for this portion of SEMI. Figure 5.2-12 provides a description of the station area.

Planned Development

The SEMI master plan completed by the Minneapolis Community Development Agency in 2000 outlines a major redevelopment project to create a new light industrial and business park out of underutilized and vacant railroad land. If constructed, this business park would become a major trip generator for the 29th Avenue Station.

Potential Major Trip Generators

The potential major trip generators include University Park Plaza, Prospect Park residential neighborhood and the new SEMI area development.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the 29th Avenue SE Station is considered to be good.

5.2.2.13 Stadium Village Station

Land Use Pattern

The Stadium Village Station will be located just north of University Avenue along 23rd Avenue Southeast. The one-half mile radius surrounding the Stadium Village and East Bank Stations overlap one another. The development potential surrounding these station areas is considered to be very good given recent developments, current land uses, and major activity centers. The overlapping area includes the University of Minnesota medical campus. The Radisson Hotel is located on the northeast corner of Washington Avenue and Harvard Street. This area, once the site of Memorial Stadium, is a focus of campus redevelopment, with an indoor swimming pool, campus visitor center, and a parking structure already completed. The new TCF Bank Stadium is currently under construction and slated to open in September 2009.

Along University Avenue between Harvard Street and Huron Boulevard is a commercial node with storefront restaurants, taverns, and shops serving the student population. An area of student housing is located south of Delaware Street. Surface lots to the northeast provide parking for the large number of commuter students and for sporting events held in Williams Arena and Mariucci Arena located north of University Avenue.

Urban Form

Structures in the vicinity of the proposed Stadium Village Station are a mix of large university facilities and smaller, older storefronts. The Stadium Village node centered at University Avenue and Oak Street plays an important role in campus life where private businesses serve the campus population.

Infill and Redevelopment Potential

There are several surface parking lots, underutilized parcels, and an auto-oriented commercial use that would be available for development and redevelopment.. Seven such opportunity sites have been identified as possible locations for infill and/or redevelopment. These parcels are potentially available for continued expansion of the campus on properties where the stadium once stood. In addition, surface parking lots north of 4th Street have potential for infill development. The infill potential for the area surrounding the proposed Stadium Village Station is considered to be high. Recent housing redevelopment on the southeast edge of campus may continue. Figure 5.2-13 provides a description of the station area.

Planned Development

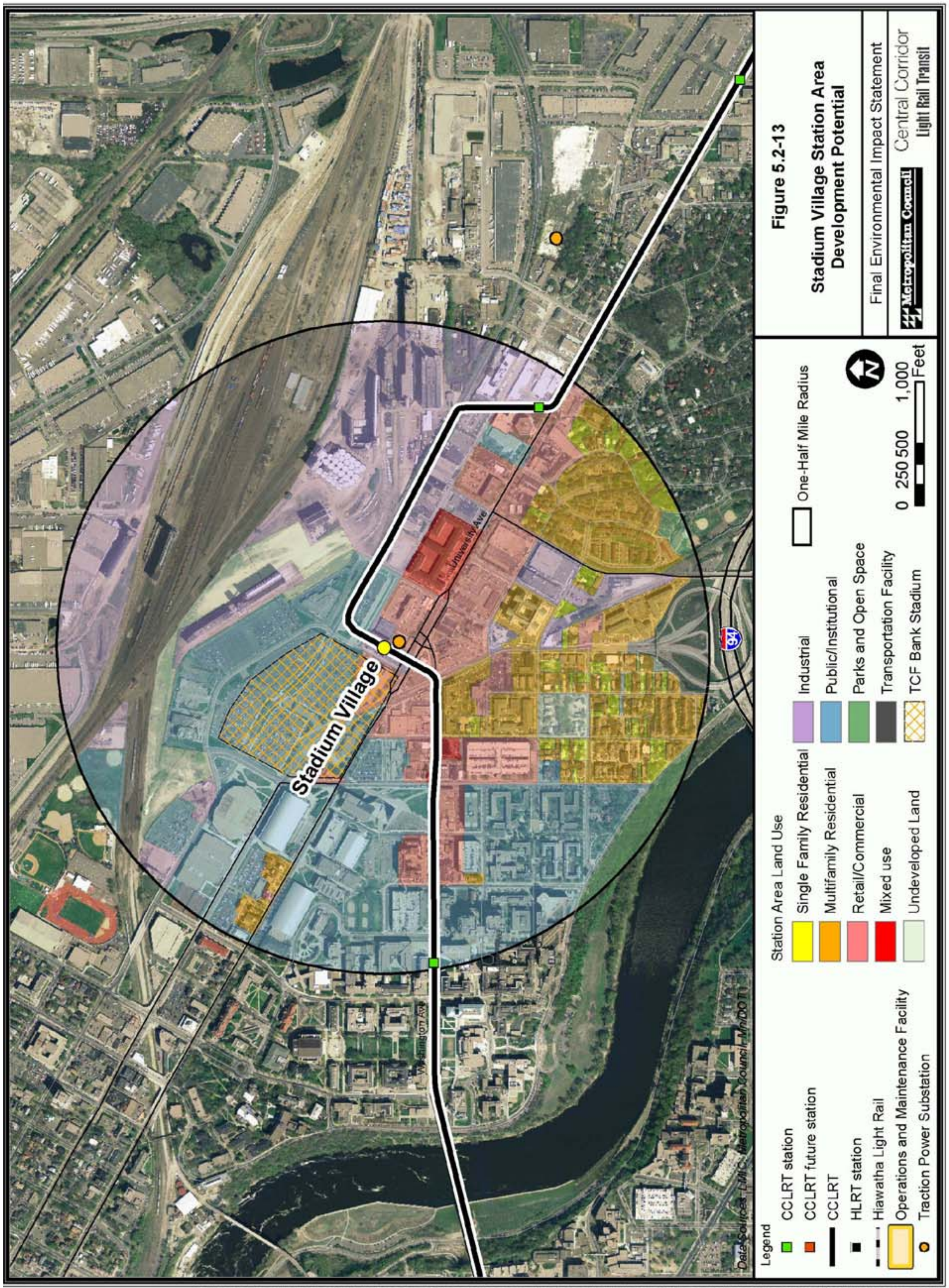
The University of Minnesota will continue to build new structures in the area surrounding the Stadium Village Station and the TCF Bank Stadium, which is nearing completion. It is hoped that the new stadium will help to create an economic center around the Stadium Village area.

Potential Major Trip Generators

The potential major trip generators include the University of Minnesota East Bank campus, Fairview-University Medical center, Stadium Village commercial node, Williams Arena, Mariucci Arena, TCF Bank Stadium and student housing.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Stadium Village Station is considered to be very good.



Map Document: (\\mspe-gis-file\gis\proj\MetCouncil\65681\map_docs\mxd\FEIS\CH5_Station Area Land Use\Fig5.2-13_Stadium Village Station Area Land Use.mxd)

5.2.2.14 East Bank Station

Land Use Pattern

The East Bank Station will be located on the Transit/Pedestrian mall along Washington Avenue at Union Street. The predominant land uses surrounding the East Bank Station are the academic and medical center buildings at the University of Minnesota. These buildings include classrooms, offices, laboratories, libraries, a parking garage, and dormitories. The Fairview-University Medical Center is a major medical center located south of Washington Avenue and east of Church Street.

Urban Form

The East Bank of the campus sits on the bluffs of the Mississippi River where the river makes a dramatic turn to the east. The main part of the campus is south of University Avenue and bisected by Washington Avenue. The Northrop Mall, located along Washington Avenue, is the focal point of the campus, with Northrop Auditorium located at the north end and Coffman Memorial Union located at the south end. While the campus design is oriented to pedestrian movement, Washington Avenue can become a considerable barrier during rush-hour, but problems have been mitigated by pedestrian bridges and will be further mitigated with the implementation of the Transit/Pedestrian mall. A system of tunnels and building connections allows climate-controlled movement during harsh winter conditions.

Infill and Redevelopment Potential

Nearly all the land on the East Bank is developed for high density land uses, leaving little to no area available for additional infill development. Three parcels of land are prime locations for infill or redevelopment around the East Bank Station. Each of these sites is currently used for surface parking near commercial uses on Washington Avenue, located to the east of the East Bank Station. Figure 5.2-14 provides a description of the station area.

Planned Development

The Science Classroom Building, on the north side of Washington Avenue and across the street from the Weisman Art Museum, is planned to be redeveloped. Recently completed projects include construction of new dormitories along East River Road and the expansion of the Biological Sciences Campus. Constraints in the East Bank area have caused redevelopment and expansion plans to focus on the Stadium Village area and areas located to the north of University Avenue.

Potential Major Trip Generators

The potential major trip generators include the University of Minnesota East Bank campus and Fairview-University Medical Center.

Overall TOD Potential

The overall TOD potential for the East Bank Station is considered to be fair.

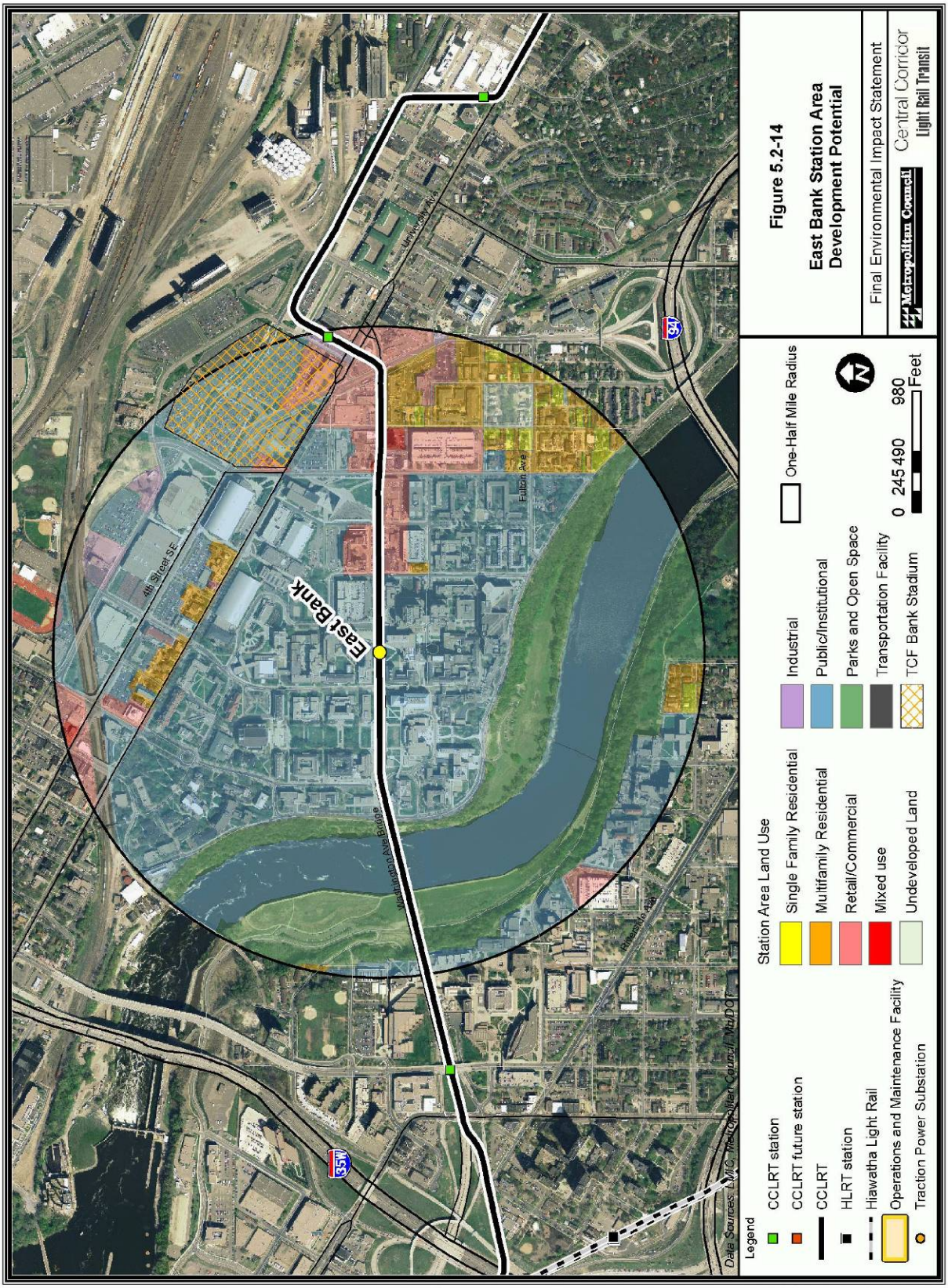


Figure 5.2-14
East Bank Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
East Bank
4th Street SE
Washington Ave Bridge
35W
94
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Retail/Commercial
Mixed use
Undeveloped Land
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
TCF Bank Stadium
One-Half Mile Radius
0 245 490 980 Feet
N
Data Sources: MIC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\gispro\MetCouncil\6559\1\map_docs\mxd\FEIS\CH5_Station Area Land Use\Fig5.2-14_East Bank Station Area Land Use.mxd)

5.2.2.15 West Bank Station

Land Use Pattern

The West Bank Station will be located along Washington Avenue near 19th Avenue South. The station area includes the West Bank of the University of Minnesota campus and commercial nodes at Seven Corners and along Cedar and Riverside avenues. The campus is an intense conglomeration of classrooms, laboratories, libraries, and dormitories. Seven Corners, located at the intersection of Washington and Cedar avenues, is a commercial node of restaurants, taverns, shops, theaters, and dwelling units. It also includes the Holiday Inn Metrodome, its largest structure. The Cedar-Riverside area includes very high-density residential towers west of Cedar Avenue and a node of commercial storefronts, restaurants, and taverns.

Urban Form

The West Bank campus is organized in the Modernist style around pedestrian plazas, walkways, and older commercial nodes. The upper deck of the Washington Avenue Bridge, built exclusively for pedestrians and bicyclists, meets the plaza level of the campus. Drive lanes at the Washington Avenue bridgehead are below the grade of the campus plaza, where a transit hub is now located. Stairways connect from the plaza level to the transit hub. Connections through the Seven Corners area to Cedar-Riverside are convoluted due to the separation of the bridge lanes and connections to the major freeway interchange to the west. Riverside Avenue dead ends near the Cedar-Riverside project, a group of high-rise residential structures. The Riverview Condominium tower and townhouse public housing units are in an isolated location north of Second Street and east of Tenth Avenue. New open space along West River Parkway lacks connections to the campus level and areas to the west.

Infill and Redevelopment Potential

Infill and redevelopment potential is high for sites within the West Bank Station area. .There are a number of surface parking lots where dense mixed-use developments could occur. Parking for the new mixed uses and for the businesses that currently use the surface lots could be accommodated on-site in the new buildings. Open space currently used for intramural athletics is available for continued development of the campus to the north. Figure 5.2-15 provides a description of the station area.

Planned Development

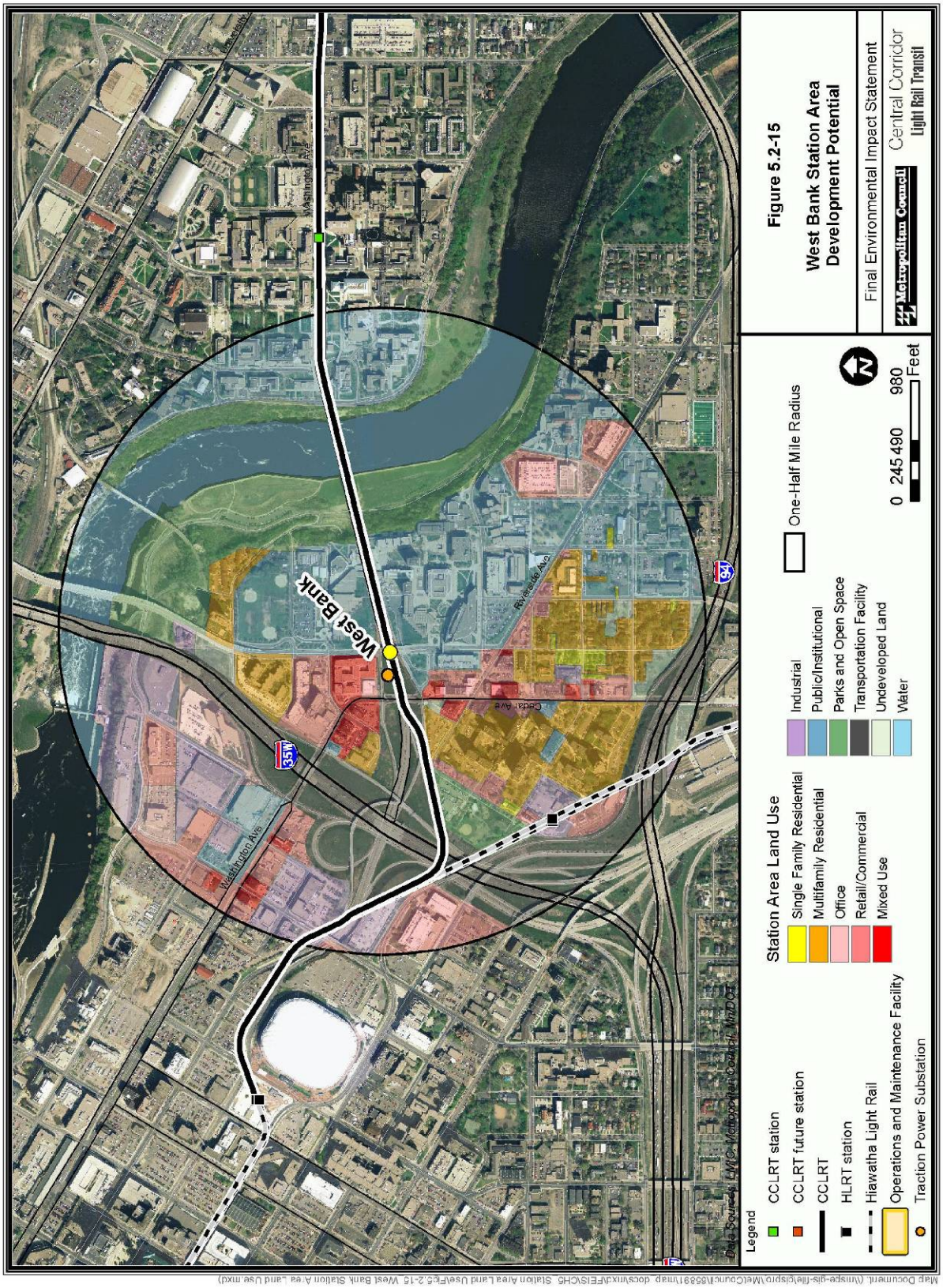
The University of Minnesota continues to expand on the West Bank. Additions were recently completed to the Law School and to an underground library archive created north of the Washington Avenue Bridge. A major project to construct new apartment units between Cedar and 10th avenues at Seven Corners was completed in 2001.

Potential Major Trip Generators

The potential major trip generators include the University of Minnesota West Bank campus, Seven Corners, the Cedar-Riverside commercial node, and the Cedar-Riverside Towers.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the West Bank Station is considered to be good.


West Bank
Washington Ave
Riverside Ave
Cedar Ave
35W
94
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Office
Retail/Commercial
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
Undeveloped Land
Water
One-Half Mile Radius
0 245 490 980 Feet
N
Figure 5.2-15
West Bank Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit

5.2.2.16 Downtown East/Metrodome Station

Land Use Pattern

The Downtown East/Metrodome Station will be the easternmost joint station between the Central Corridor and Hiawatha LRT lines, and is located north of 5th Street South between Chicago and Park avenues. The Hubert H. Humphrey Metrodome Stadium and parking lots dominate land use around the station area. Surface parking serves the downtown office core as well as sporting events. The Hennepin County Medical Center is located to the south of 6th Street. This is a major regional medical complex spanning four blocks. Other uses include the Star Tribune editorial offices, Hennepin County facilities, and offices, restaurants, and warehousing located in older industrial structures scattered among the surface parking.

Urban Form

4th and 5th streets bend around the Metrodome Stadium and north-south streets are interrupted; otherwise, the area is organized on the downtown street grid. The vast amount of land devoted to surface and structured parking results in partially developed blocks without a cohesive urban form. The construction of the Hiawatha LRT line on 5th Street added a new element to the area and helped make the Downtown East Station a new focal point.

Infill and Redevelopment Potential

There numerous locations where infill development and redevelopment could occur within the walkshed of the Metrodome Station. A number of these sites are surface parking lots that currently provide parking supply for Metrodome event parking. The future of the aging Metrodome is the subject of much discussion and planning. The Minnesota Twins are building a new stadium located west of I-394, and college football will be played on the U of M campus in the new stadium. The Metrodome site may become a redevelopment opportunity in the near future, as outlined in the Downtown East and North Loop Master Plan. Figure 5.2-16 provides a description of the station area.

Planned Development

Considerable development has recently occurred in this area, all of which has helped to establish a high quality, historically-sensitive residential and institutional area along the riverfront. The foremost recent development is the new facility for the Guthrie Theatre, in addition to rehabilitation of historic buildings to residential uses, the establishment of the Mill City Museum, the renovation of the Milwaukee Rail Depot, and the construction of a new facility for the McPhail Center for Music. Many new residential buildings have recently been completed to the south of the riverfront as well, some of which are currently under construction or are awaiting purchase commitments.

Potential Major Trip Generators

The potential major trip generators include the Metrodome Stadium, the Guthrie Theatre, and Hennepin County Medical Center.

Overall TOD Potential

Based on the above analysis, the overall TOD potential for the Downtown East Station is considered to be excellent due to the amount of available land and its proximity to downtown Minneapolis and other high activity areas like the Metrodome.

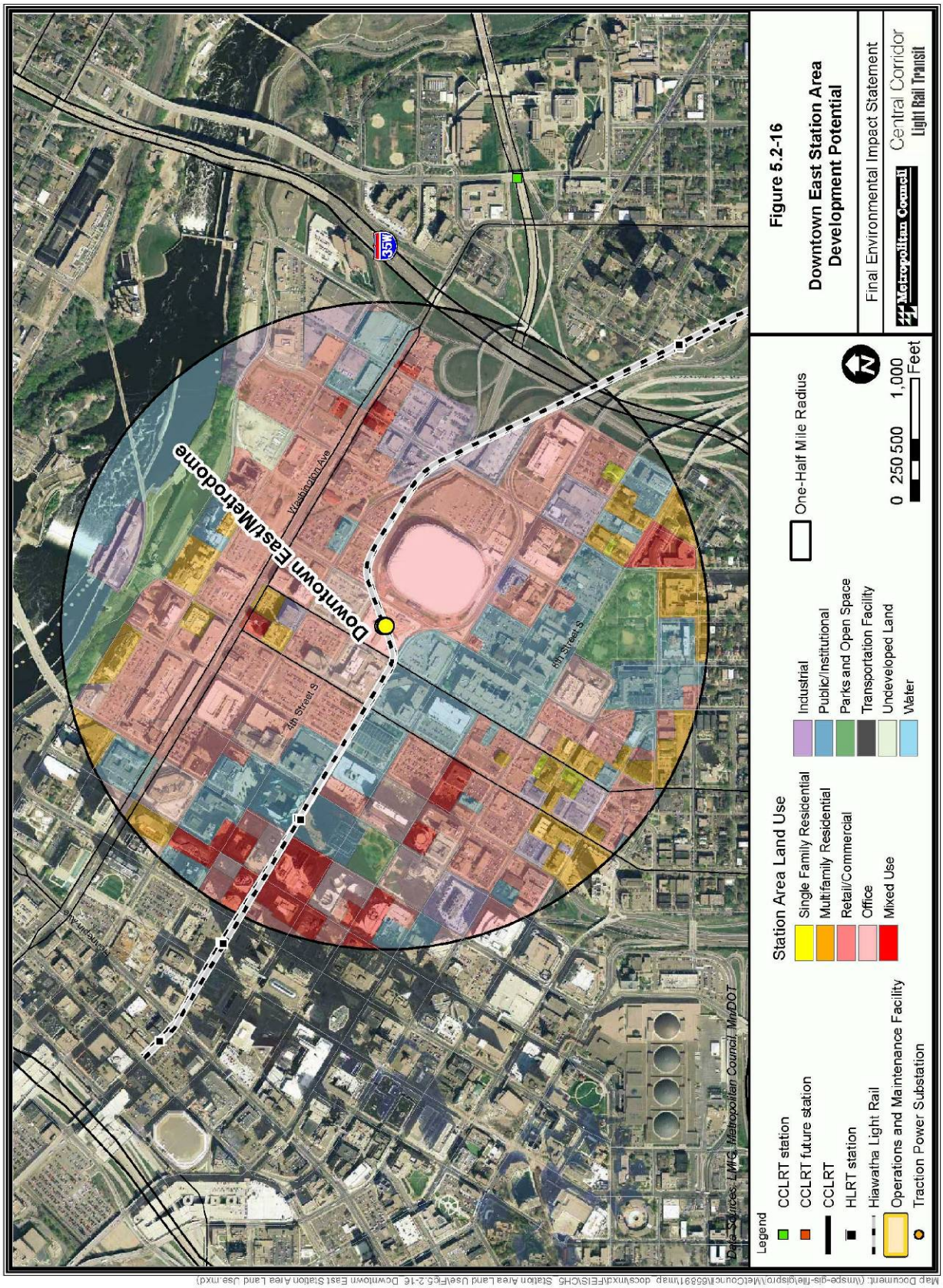


Figure 5.2-16
Downtown East Station Area
Development Potential
Final Environmental Impact Statement
Metropolitan Council
Central Corridor
Light Rail Transit
Downtown East/Metrodome
Washington Ave
4th Street S
6th Street S
35W
Legend
CCLRT station
CCLRT future station
CCLRT
HLRT station
Hiawatha Light Rail
Operations and Maintenance Facility
Traction Power Substation
Station Area Land Use
Single Family Residential
Multifamily Residential
Retail/Commercial
Office
Mixed Use
Industrial
Public/Institutional
Parks and Open Space
Transportation Facility
Undeveloped Land
Water
One-Half Mile Radius
0 250 500 1,000
Feet
Data Sources: LMIC, Metropolitan Council, MnDOT
Map Document: (\\mspe-gis-file\gispro\MetCouncil\66591\map_docs\mxd\FEIS\CH5_Station Area Land Use\Fig5.2-16_Downtown East Station Area Land Use.mxd)

5.2.3 Long-Term Effects

Investments in transportation infrastructure may be correlated with changes to current land uses. Transit, particularly rail transit, has the potential to influence compact, mixed-use development patterns that can help support transit ridership and influence urban form. It is foreseeable that natural market forces resulting from the large public infrastructure investment will result in changes to current land use conditions. As detailed above, the cities of Minneapolis and St. Paul have engaged in concurrent planning processes (e.g. the Central Corridor Development Strategy or the TSAPO Overlay Zoning Districts) in effort to control for and stabilize market forces to protect sensitive populations while encouraging denser development near station areas consistent with local planning efforts.

5.2.4 Short-Term Effects

No short-term effects are anticipated during construction.

5.2.5 Mitigation

Changes in land use and denser development near stations are anticipated and consistent with existing plans and policies. No mitigation is required.

5.3 Development Effects

This section describes the level of development projected in the corridor from the implementation of the Preferred Alternative in comparison with the No-Build Alternative. The data presented are based on real estate assessment of parcels within the corridor that would be located within walking distance of the station areas (defined as one-half mile). Obstacles that would hinder development, such as the presence of recently constructed buildings, residential properties, or small parcel sizes were considered as part of the analysis. These projections are based on positive market conditions within the corridor and predict that much of the development potential allowed in local comprehensive plans would be achieved. For many of the parcels evaluated, it is also projected that full density bonuses due to proximity of transit stations and the inclusion of housing would be allowed. For this analysis, scenario requirements assume a level of development that is projected close to build-out in some sections of the corridor. The local jurisdictions will ultimately determine the level of growth actually allowed in the future.

5.3.1 No-Build Alternative

Under the No-Build Alternative, no LRT alignment and no stations would be constructed. Consequently, there would be no impact on development either along the corridor or at station locations.

5.3.2 Build Alternative

According to population, employment and housing data discussed in Chapters 1 and 3, the Central Corridor is expected to grow at an appreciable rate, but not as rapidly as the metropolitan area as a whole. A factor contributing to the overall slower growth rate for the Central Corridor is the age of the corridor (both downtowns, the Midway, and the University of Minnesota). Having been developed over the last 100 years or more, the Central Corridor is largely developed, and, by comparison, there are suburban areas of the metropolitan area where development has not yet occurred.

Experience across the country has shown, that implementation of fixed guideway transit can catalyze economic development activities at station locations. At the same time, the Preferred Alternative is not expected to have a substantial impact on development outside the influence area of most stations (line haul segments of the alignment) where market forces alone would continue to be the primary impetus for continued development.

Most redevelopment will be focused in the immediate vicinity of the station area. Station-oriented development activities are not expected to extend outside the one-half mile station areas, especially where distance between stations is such that the two stations are within entirely different land use settings or districts. In cases such as downtown Saint Paul and the University of Minnesota campus, where the distance between stations is comparatively small, the one-half mile station influence areas overlap, and/or the stations can be defined as being within a single district, it will be reasonable for economic development activities that occur at one station to expand development activities outside the station area.

As mentioned, Minneapolis' Hiawatha Corridor experienced rapid growth in housing consistent with implementation of LRT in 2004. In a presentation by Mike Christenson, Director of Minneapolis Community Planning and Economic Development Department, it was stated that, "The TOD housing boom in Minneapolis has exceeded all expectations. A market study completed for the city in 1999 had projected there would be a demand for 7,150 housing units near transit by 2020. The city estimates that the number of units either

proposed, under construction or built already exceed that number—including 5,000 units in the downtown market and another 2,000 from Cedar Riverside to Bloomington. This would suggest that TOD is a valid real estate product niche in the Twin Cities, as elsewhere."

According to a report cited by the Native American Community Development Institute, *Quick Facts Supporting the Development of an American Indian Cultural and Economic Corridor*, property values along the Hiawatha LRT Corridor are increasing 22 percent more than property values overall across the City of Minneapolis. The report went on to say that by 2020 more than 19 million square feet of new commercial space and up to 68,000 new jobs would be attracted to the Hiawatha LRT Corridor.

These forecasts are consistent with reports from other cities where LRT has been implemented. Economic studies conducted on the LRT system in Dallas, Texas showed property values to be 25 percent greater than those in a controlled group of neighborhoods not served by LRT. A second study between 1997 and 2001 showed the median value of residential properties increased 32.1 percent near rail stations compared to 19.5 percent in the control group while office building values near fixed guideway stations increased 24.7 percent compared to 11.5 percent in the control group (*An Assessment of the DART LRT on Taxable Property Valuations and Transit Oriented Development*, University of North Texas, September 2002).

A 2001 study of property values in Santa Clara County (San Jose, California and environs) found that the benefits of light rail accessibility were capitalized into commercial land values, but only for properties within a one-half mile walk of a station. Statistical results indicated a four dollar per square foot benefit for LRT station proximity (*Transit's Value-Added: Effects of Light Rail and Commuter Rail Services on Commercial Land Values*, University of California, Berkley, November 2001).

5.3.3 Joint Development Opportunities

Joint development opportunities provide benefits to transit patrons, transit agencies, and local jurisdictions. The transit patron is benefited by additional conveniences tied to the station platform, adjacent land, and improved access to surrounding land uses. The transit agency and/or local jurisdiction would control joint uses on land adjacent to the station. Joint uses potentially benefit the transit agency through increased funds and ridership resulting from the increased convenience for patrons.

With increased values, real estate near public transportation becomes more attractive and can help spur growth and revitalization. Closely related to neighborhood revitalization is the ability of TOD to attract new investments and businesses to station area neighborhoods, thereby creating new and better paying jobs. New employment has a multiplier effect, spinning off other local jobs. Nationally, the following has been observed:

- A sustained investment in transit has the potential to generate an increase of $2 million in business output and $0.8 million in personal income for each $10 million in the short run (during the first year).
- In the long run (during year 20), these benefits increase to $31 million and $18 million respectively for business output and personal income.
- It is also estimated that every $10 million in capital investment in public transportation yields $30 million in increased business sales, and that every $10 million in operating investment in public transportation yields $32 million in increased business sales (*Public Transportation and the Nation's Economy*, Cambridge Systematics, Inc., October 1999).

The Metropolitan Council continues to work with the cities of St. Paul and Minneapolis, along with Ramsey and Hennepin counties to conduct land use planning exercises and provide a conceptual framework for future development around LRT station areas. An outcome of these exercises was the Metropolitan Council's *Guide to Transit-Oriented Development*, published in 2006. Additionally, the Metropolitan Council has established financial resources that have encouraged redevelopment and development of transit-oriented "livable communities" throughout the metropolitan region as part of the Metropolitan Council's Livable Communities Funding Programs, which includes the Livable Communities Demonstration Account discussed above. Potential joint development opportunities exist throughout the study area, including sites such as the St. Paul Union Depot, 4th and Cedar Streets in Downtown St. Paul, or the proposed Minneapolis Multimodal Station (excluding the Downtown Minneapolis Ballpark station currently under construction) and North Loop Village.

5.3.4 Long-Term Effects

Projections of future development effects are based on positive market conditions. The development effects described above are subject to the enacted policies and plans of the cities of Minneapolis and St. Paul. Based in part on the experience of Minneapolis' Hiawatha Corridor, along with national experience in other fixed-guideway projects, it is foreseeable that this large public infrastructure project will result in development effects along Central Corridor. Additionally, joint development opportunities may provide benefits to transit patrons, transit agencies, and local jurisdictions. Intergovernmental partnerships have been established to provide needed funding and guidance to support the development of transit-oriented "livable communities".

5.3.5 Short-Term Effects

No short-term effects are anticipated during construction.

5.3.6 Mitigation

Changes in land use and denser development near stations are anticipated and consistent with existing plans and policies. No mitigation is required.