SAINT PAUL FOR ALL

2040 COMPREHENSIVE PLAN

APPROVED BY THE SAINT PAUL CITY COUNCIL

June 19, 2019

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INTRODUCTION

What is the Comprehensive Plan?

The Comprehensive Plan is Saint Paul's "blueprint" for guiding development for the next 20 years, 2020-2040. It outlines policies that address city-wide physical development, and contains chapters on Land Use; Transportation; Parks, Recreation and Open Space; Housing; Heritage and Cultural Preservation; and Water Resources. The Plan's core values, goals and policies reflect an understanding that the physical elements of our city – streets, parks, housing and public infrastructure – impact and are impacted by the people in our city. This Plan also addresses several focus areas that are integrated into each chapter, including racial and social equity, aging in community, community/public health, economic development, sustainability/resiliency and urban design. These focus areas are foundational to the City's policies in every chapter of the Comprehensive Plan. The policies contained in the Comprehensive Plan are based on Saint Paul's core values; history; community priorities; and emerging social, economic and environmental trends.

In Saint Paul, several other plans have been adopted over time as addenda to the Comprehensive Plan, including the Central Corridor Development Strategy, station area plans, master plans, area plans, and district plans. These documents are not being updated at this time, but will be reviewed after adoption of the 2040 Comprehensive Plan to ensure compliance.

Legal Framework

The Minnesota Metropolitan Land Planning Act requires that every city and other local government in the seven-county metropolitan region have a Comprehensive Plan with a 20-year time frame, and that it be updated every 10 years consistent with the Metropolitan Council's regional plan (Thrive MSP 2040) and regional policy plans for transportation, parks, housing and water.

The Saint Paul Comprehensive Plan must respond to Thrive MSP 2040, as well as regional growth projections for population, housing units, and employment. Saint Paul is designated as an "Urban Center" in Thrive MSP 2040. According to the Metropolitan Council, Urban Center communities are experiencing redevelopment attracted to their vitality and amenities, often at significant densities, but face many challenges, such as land availability for redevelopment and infrastructure improvements, congestion and pollution remediation costs.

The Metropolitan Council projects that Saint Paul will grow by 30,000 residents,13,000 households and 20,000 jobs between 2020 and 2040.

The Comprehensive Plan must plan for this growth, and chart a course for how local policies will implement regional policies. In its review, the Metropolitan Council also considers Saint Paul's Comprehensive Plan's compatibility with the plans of neighboring municipalities and agencies with jurisdiction within the city limits, such as watershed districts, Ramsey County and the Minnesota Department of Transportation.

Figure I-1: Growth Projections for Saint Paul

	2010	2020	2030	2040
Population	285,068	315,000	329,200	344,100
Households	111,001	124,700	131,400	137,400
Employment	175,933	194,700	204,100	213,500

Source: Metropolitan Council

Major Trends Informing Comprehensive Plan Policy

The 2040 Comprehensive Plan must take into account broader physical, economic, social and environmental trends – both current and projected – that will impact the city's built environment over the next 20 years. These trends include:

Climate change

Cities are being increasingly challenged to find ways to reduce their dependence on fossil fuels, and build in a way that makes them more resilient to environmental threats caused by global climate change. Policies in this document speak to the need to use land and public infrastructure more efficiently by increasing densities on infill parcels, expanding our transit system to lessen dependence on automobiles, and providing for a compact and diverse mix of land uses.

Aging housing stock and infrastructure

Currently, 72% of Saint Paul's housing units are 50 years or older. The median construction year for all housing structures is 1949. In addition, much of the city's infrastructure (e.g. streets and public utilities) is more than 50 years old. While older housing may initially be more affordable, the extraordinary maintenance costs could lead to neglect and loss of the stock over time. This adds to the challenge of maintaining diverse and affordable housing options in Saint Paul. As infrastructure ages and public funding to maintain, replace or expand it becomes scarcer, it could be more difficult for Saint Paul to meet the growth projections laid out for us by the Metropolitan Council.

Constrained financial resources to pay for City services and facilities

The City of Saint Paul is increasingly challenged to pay for City services and facilities, primarily due to reductions in Local Government Aid from the State of Minnesota. Other financial stressors include increasing demands on property taxes and other public sources to pay for public services. In addition, 23% of Saint Paul's property tax base (appraised value) was tax-exempt in 2016. According to a recent Citizens League report, to compensate for exempted properties, the City of Saint Paul requires two to three times more property tax effort from properties that are taxable than the average Metro Area city. The need is ever greater, while the financial resources are spread thinner. The City must continually work to "do more with less."

Changing demographics

Saint Paul, like much of the region, is experiencing significant demographic changes.

Our population is becoming more racially and ethnically diverse (See Figures 5-8). Between 2000 and 2015, the percentage of people of color in Saint Paul increased from 36% to 46%. The trend line suggests that Saint Paul became majority people of color in 2017. Ramsey County has increased from 13% people of color in 2000 to 30% people of color in 2014, and is projected to be at 45% people of color by 2030. Further, over the next three decades, the region will become more diverse: in 2010, 24% of the region's population were people of color; by 2040, that number will be 40%.

Our population is aging. Ramsey County is projected to experience a 48% increase in residents 65 and older between 2015 and 2030, and another 10% increase in this age cohort between 2030 and 2040. The Metropolitan Council projects that those age 65 and older will be the fastest growing segment of our region's population, doubling in absolute numbers by 2030 and becoming one in five of the region's residents by 2040. This new generation of older adults will be more diverse by race/ethnicity, live and work longer, be more independent, and want to age in their current community.

Saint Paul residents are experiencing significant gaps in education, income, employment and homeownership. In 2014, 52% of whites age 25 and older had a bachelor's degree or higher, while only 19% of people of color were in this category. While labor force participation is nearly equal between whites and people of color (72% and 68%, respectively), the per capita income for whites in 2014 was three times that of people of color ($39,344 vs. $13,856). In 2014, there was a 33% gap in homeownership between white residents and people of color (61% vs. 28%, respectively). Into the future, overcoming the effects of historic housing discrimination is a challenge and an opportunity to build community wealth for all Saint Paul residents.

The Metropolitan Council has identified Areas of Concentrated Poverty (ACP50) – Census Tracts where at least half of the residents are people of color and at least 40% of the residents live below 185% of the federal poverty line – and has committed to using its public resources to catalyze investment in these areas. Saint Paul's ACP50 area shows a concentration of the highest percentages by block group of carless households, families living in poverty, non-English-speaking households, severely cost-burdened households, and population 25 years and older with no bachelor's degree (see Appendix A). The ACP50 area also exhibits the lowest high school graduation rates in Saint Paul. The Comprehensive Plan supports the equitable geographic allocation of public funding and investment (especially for land use, housing, transportation, community wealth creation, public utilities and parks) to ensure that residents in these areas have the resources they need to thrive and prosper.

Challenges and Opportunities for the Future

Related to these local and regional trends is a set of challenges and opportunities that the City of Saint Paul must address in its 2040 Comprehensive Plan. Saint Paul is rich in assets that will transform the city in dynamic ways by 2040, especially as a we create a framework for growth and opportunity for all our residents.

- **Equity** – How we grow, develop and invest over the next 20 years must be done in a way that reduces racial disparities in jobs, income, housing cost burden, education and homeownership.

- **Growth and density** – In a land-locked and fully built-up city like Saint Paul, the only way to grow is by increasing densities on infill parcels as they become available for redevelopment, and by serving new development with enhanced transit options. While there are a few large infill sites that will be redeveloped over the next 20 years, much of the city's growth will come from densification on smaller, infill parcels. The challenge is to use growth to our advantage and ensure that new development is sensitive to its urban context.
- **Economic development** – To address our equity, diversity and growth goals, the City and its economic development partners must capture innovations in the marketplace (including service delivery, job training, education and new business sectors) that lead to a growing, adapting, strong local and regional economy. Saint Paul's racial and ethnic diversity is a unique asset that should be tapped to fuel economic growth, especially as it brings innovative economic models to our neighborhoods.
- **Opportunity sites** – For the first time in decades, several large sites are ready for major redevelopment, including Ford, Snelling Midway, West Side Flats and Hillcrest. These projects will have a significant impact on Saint Paul's vitality, tax base and livability.
- **Climate change mitigation, adaptation and resiliency** – Saint Paul signed the Compact of Mayors agreement in 2015, stating its commitment to reduce greenhouse gas emissions and increase resiliency. The challenge to achieve emissions reductions in the building and transportation sectors, the largest contributors to emissions, presents opportunities to reduce energy consumption, improve energy conservation, transition to renewable energy sources, install infrastructure for electric vehicles, and use land use and transportation strategies to reduce the need for driving. These, along with resiliency strategies developed and implemented with an eye toward equity, can also create economic opportunity and enhance the livability of neighborhoods.
- **Designing a city for all ages and abilities** – A vital, healthy city is one where people of all ages and abilities can thrive and live productive lives. Comprehensive Plan policy needs to support mixed-use neighborhoods where housing, shopping, services and volunteer opportunities are within walking distance of one another; a full range of transportation and housing options; and a parks and open space system that meets the needs of youth and older citizens. It also needs to recognize the equity and community health aspects of aging, and ensure that there is ongoing dialogue with seniors. If successful, Saint Paul will be a city where "aging in community" is supported and celebrated.
- **Fostering the next generation** – If a city is going to grow, innovate and prosper, it must provide opportunities for its youth to grow, innovate and prosper. The same physical systems that need to accommodate an aging population need to accommodate a young population. This is especially important in the areas of education and employment and innovation.
- **New technologies and their impact on development patterns** – New technologies, such as autonomous vehicles and district stormwater systems, have the potential to significantly alter our physical development patterns. Autonomous vehicles may allow for narrower streets, require fewer parking spaces, and influence our housing patterns. District stormwater systems may allow for higher densities on larger infill sites. While the Comprehensive Plan cannot anticipate or predict all new technologies, it has to set the stage for a physical development pattern that is flexible and adaptable.

Preparing the 2040 Comprehensive Plan

The Saint Paul Planning Commission began preparing for the 2040 Comprehensive Plan in 2015. The Planning Commission ensures that the Plan responds to the regional mandate for growth, maintains a city-wide perspective, is consistent across chapters and reflects the City's core values. The Comprehensive Planning Committee of the Planning Commission was designated as the Steering Committee to provide oversight of and coordination between the chapters.

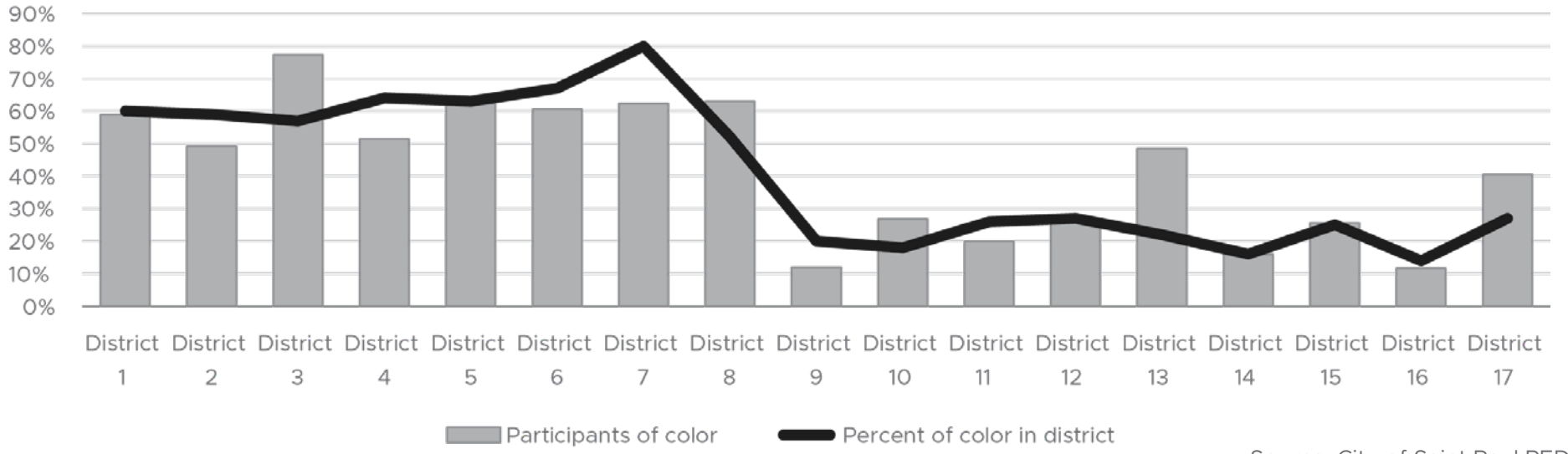
A City staff working group was created for each chapter, comprising inter-departmental staff and, where appropriate, a member of the City Commission with responsibility for Plan implementation (i.e., Parks and Recreation Commission and Heritage Preservation Commission) or staff from a partner agency with implementation responsibility (e.g. Ramsey County Parks). Each working group was led by a City Planner, who was in charge of writing that chapter. As part of the background work for each chapter, the lead Planner reviewed the existing 2030 Saint Paul Comprehensive Plan chapter to determine what had been accomplished, what was still relevant and yet to be done, and what was no longer relevant. While each chapter's process was unique, most used the current chapter as a foundation and added community input, understanding of development trends, research, and a review of comprehensive plans of peer cities to identify issues and best practices.

Extensive community engagement was undertaken to set the community vision and priorities for the Comprehensive Plan, and to identify issues to address within it. Our goal was to reach as many people as possible; be genuine about the role of engagement; and be representative by race, age and geography.

Major engagement kicked off in May 2016 with three broadly advertised open house events, and continued throughout 2016 into 2017 with staff attendance at community festivals, pop-up meetings in public locations, district council meetings, City department meetings, policymaker interviews, radio interviews on WEQY (Voice of the East Side) and KMOJ (The People's Station), Open Saint Paul online input, and discussions with experts and advocacy organizations. A concentrated effort was also made to meet with experts and advocacy groups to identify issues, especially regarding how racial and social equity, aging in community, community/public health, economic development, sustainability/resiliency and urban design intersect with the six chapter subjects.

During the first phase of community engagement, staff spoke with more than 2,200 people at 67 events, generating more than 3,700 comments. At least one event was held and at least 25 people were engaged in each of Saint Paul's 17 planning districts, with an average of three events and 100 people per district. During the big engagement push from

Figure I-2: Racial Composition of Engagement Participants



Source: City of Saint Paul PED

May-September 2016, the 800+ people of color engaged represented approximately 50% of the total participants compared to a city-wide population proportion of 40% (in 2010). The age of participants was also mostly representative of the city-wide population, if somewhat older.

Nine themes and priorities emerged from the community engagement.

- **Livability, equity and sustainability.** When asked about regional themes established by the Metropolitan Council, a majority of responders said livability and equity are the most important for Saint Paul. Further public input established sustainability as also being vitally important.
- **Parks and open space.** Parks and open space, from Como Park to Swede Hollow to the Mississippi River to local playgrounds, were consistently identified throughout the city as cherished places that we should preserve and enhance.

- **Sense of community.** Many people identified social connections, diversity and their neighborhood's character – whether "vibrant" or "quiet" – as key advantages of living in Saint Paul.
- **Public safety.** People want to be safe and feel safe in their communities, and to have positive relationships with police officers. Strategic investment and thoughtful design can improve public safety, as can responsible land use, transportation and housing policies that create a livable, equitable city.
- **Road safety for walking and biking.** Pedestrian safety at crossings and improved facilities were frequently identified as issues, as were bicycle facility improvements and safety.
- **Invest in people.** Whether job training or programming at recreation centers (especially for youth), people identified this as an important issue for Saint Paul. Many commented that these investments pay dividends for livability, prosperity and public safety.
- **Jobs.** People said we need more and better jobs to allow them to provide for their families and lift up the entire community.
- **Quality affordable housing.** People said we need more affordable housing, and that existing housing must be well-maintained.
- **Saint Paul is full of opportunity sites.** The range of "places with potential" identified was astounding, including major projects like Snelling-Midway (soccer stadium area) and the Ford site; large geographies like "the East Side," "the Green Line" or "the riverfront;" commercial corridors like White Bear Avenue or Selby Avenue; and individual sites throughout the city. People said there are gems throughout the city, ready for (re) discovery and investment.

Drafts of the plan chapters were prepared between March and December 2017, and reviewed by the working groups, appropriate City Commissions, and the Comprehensive Planning Committee of the Planning Commission. A draft of the complete plan was submitted to the Metropolitan Council in March 2018 for a preliminary review, at which time it was also sent to adjacent and affected jurisdictions per Metropolitan Council requirements. City staff met with district councils, advocacy groups, and other interested parties between April and June, and held two Open Houses in June. After reviewing comments from adjacent and affected jurisdictions, a public hearing draft was released in November 2018.

The Planning Commission held a public hearing in January 2019 and recommended a final Plan to the City Council in March 2019. The City Council held public hearings in May 2019 and approved the 2040 Comprehensive Plan on June 19, 2019. The approved Plan was sent to the Metropolitan Council on June 28, 2019.

People Infrastructure

The 2040 Comprehensive Plan guides how we will physically build and grow Saint Paul. While the following chapters are focused on objects, such as roads, housing, parks and land uses, at its heart, this is a plan about people. The "things" that make up our city are meaningless without people to use them. The goals and policies in this document guide how we design, build and use these physical resources, and are based on the hopes and desires of the thousands of people we spoke with in preparing the plan.

The 2040 Comprehensive Plan is a framework for where we want to go, but, ultimately, our city will grow by building relationships with people. Through these relationships, we discover our true assets, and our ability to build on these assets will determine our level of success. Based on the community vision and core values stated in this document, we can build the human capacity to fully develop a prosperous future for everyone in Saint Paul.

Vision and Core City Values

Saint Paul is a community that is welcoming to and a place of opportunity for people of all incomes, ages, races, ethnicities and abilities. It accomplishes this by addressing the place-based dimensions of our neighborhoods: embracing growth; offering a wide range of housing choices for its diverse residents; providing a transportation system that meets the needs of pedestrians, bicyclists, transit users, riders and drivers; preserving, celebrating and building on our histories; and supporting infill development that sensitively accommodates a growing, aging and increasingly diverse population. Saint Paul is defined and enhanced by its location on the Mississippi River - an economic, environmental, cultural, historic and recreational amenity that enriches our quality of life and economic prosperity.

This vision is based in the following core values:

- **Equity and Opportunity** – We are a city where opportunities in education, employment, housing, health and safety are equitably distributed and not pre-determined by race, gender identity, sexual orientation or age; we are a city that creates opportunities for all residents to achieve their highest potential.
- **Building on Our Assets** – We are a city that recognizes and builds on the unique human, physical and cultural assets of our diverse residents and neighborhoods, including housing choice, a skilled workforce, multi-modal transportation networks, historic architecture and neighborhoods, our racial and ethnic diversity, a world-class parks and open space system, and a growing small business sector.
- **Resiliency and Sustainability** – We are a city that understands the importance of environmental stewardship of our abundant natural, historic and cultural resources, and ensures that future growth protects those resources.
- **Celebrating Parks** – We are a city that ensures its parks and open space system meets the needs of a growing and more diverse population, and is accessible to all
- **Innovation** – We are a city that builds on a strong core of innovation and creativity to address our challenges, celebrate our strengths and take best advantage of our assets.
- **People-Centered** – We are a city that puts people first, recognizes and celebrates our complex and inter-related histories, and treasures our young and older residents as integral members of our community.
- **Health** – We are a city that recognizes that everything we do impacts the health of our residents; that housing, transportation, land use, parks and economic development opportunities need to be designed to enhance personal health; and that beauty in the built environment is essential to happiness and health.
- **Welcoming and Safe** – We are a city that welcomes all, where everyone feels safe and empowered to participate in decisions that impact them
- **Growth and Prosperity through Density** – We are a city that supports well-designed infill development that responds to its neighborhood context, fosters diversity and prosperity, and brings economic opportunity to all residents.
- **Integration and Coordination** – We are a City where policies, programs and departments are coordinated to provide an integrated set of services for all residents.

- **Respecting Our History and Culture** - We are a City that believes that the preservation of buildings, sites and other objects with historical or cultural value contributes to the uniqueness of Saint Paul, is a public necessity and is required in the interest of the welfare of the people of Saint Paul.

Relationship to Other City Plans

The City of Saint Paul has adopted numerous other plans through the City Council to address specific topics or geographies, many as Comprehensive Plan addenda. Any plans that have not been formally decertified continue to be addendum to the 2040 Comprehensive Plan. In the event of a conflict in policy, the Comprehensive Plan will prevail. As plans are updated, they will be reviewed for consistency with the 2040 Comprehensive Plan and approved through separately.

Citywide Plans

Citywide plans have a geography that includes all or most of the City of Saint Paul:

- **All-Hazard Mitigation Plan** – All-Hazard Mitigation Plan helps ensure the city is prepared to protect people and infrastructure and is required by the Federal Disaster Mitigation Act of 2000.
- **Climate Action & Resilience Action Plan** – The Climate & Resilience Action Plan focuses on achieving carbon neutrality in city operations by 2030, and citywide by 2050.
- **Great River Passage Master Plan** - The Great River Passage Master Plan presents recommendations for orienting the City toward the river and integrating new and enhanced parks and natural areas along all 17 miles of the Mississippi River through Saint Paul.
- **HUD Consolidated Plan** - The City's five-year Consolidated Plan is the document submitted to the U.S. Department of Housing and Urban Development (HUD) that serves as the planning guide for entitlements funded under the Community Planning and Development (CPD) formula to include grant programs.
- **Saint Paul Bicycle Plan** - The Bicycle Plan guides the development of a safe, effective, and well-connected network of bicycle facilities to encourage and facilitate bicycle transportation.
- **Saint Paul Parks and Recreation Parks System Plan** - The System Plan addresses the built components of the park and recreation system, weighing community needs and wants with financial realities, to ensure the system remains economically viable and responsible with tax dollars.
- **Saint Paul Parks and Recreation Parks Vision Plan** - The Vision Plan describes a positive future for parks and recreation in Saint Paul and outlines specific activities that will lead to that future.
- **Saint Paul Pedestrian Plan** - The Saint Paul Pedestrian Plan addresses citywide walking needs such as connecting the sidewalk system, providing safer ways to cross streets and education and enforcement programs to support safe walking.
- **Street and Park Tree Master Plan** – The Street and Park Tree Master Plan outlines the goals, strategies, and criteria that will help guide planning and management decisions using established best management practices and innovative approaches.

Neighborhood Plans

Neighborhood plans cover a generally smaller geography of one district council or a portion of one or several neighborhoods. The following are the categories of neighborhood plans:

- **District Plans** – District Plans are the official plans of the 17 planning districts in the City of Saint Paul.
- **Small Area Plans** – Small Area Plans are focused redevelopment strategies centered on a specific geographic area, such as the station area plans along the Green Line LRT. City staff prepare the plan with the cooperation of district councils, local business associations, neighborhood residents, other City staff and appropriate stakeholders. SAPs are adopted as part of the City's Comprehensive Plan and may be updated or retired over time.
- **Development Strategies** – Development Strategies are adopted by the City Council as part of the Comprehensive Plan, and guide public and private investment within an identified corridor.
- **Other Plans** – Some plans are approved by the City Council, but not adopted as part of the official Comprehensive Plan, giving them less legal significance. Another subset of plans is not officially adopted by the City Council, thus not part of the Comprehensive Plan, but may be used as decision-making tools.

How to Use This Document

Guiding principles for the document are to: 1) use clear and concise language; 2) focus policies on the big picture, not on specific action strategies; 3) keep it to a manageable size; and 4) make it as user-friendly as possible. The 2040 Comprehensive Plan is the City's vision or "blueprint" for guiding future development through 2040, based on the commonly held vision of its citizens for a just, equitable city that is primed for growth, opportunity and vibrancy. It is the foundation for how the City of Saint Paul will respond to trends and guide change in the coming years. It should also be viewed by community groups, development partners, housing and transportation providers, and other governmental agencies as a guide for their work in Saint Paul.

The policies that follow will be used to (among other purposes):

- **Inform zoning decisions**. Zoning actions must be consistent with the Comprehensive Plan. For example, per guidance in the Land Use chapter, is a parcel requested for rezoning from B3 General Business to T3 Traditional Neighborhood located along a transit-corridor or at a Neighborhood Node identified for strategic, higher-density, transit-oriented development?

- **Guide the expenditure of public funds** through such tools as the capital improvement budget, tax increment financing and STAR. For example, per guidance in the Parks chapter, will a proposed park improvement lead to more equitable access to City parks?

- **Guide private investment**. The Comprehensive Plan also establishes priorities for where the City wants privately funded development to occur, consistent with public investments in housing, transportation, public utilities and parks. For example, the Land Use chapter says that high-density multi-family construction should be concentrated at Neighborhood Nodes.

- **Secure other public funding** (grants, etc.). Regional, state and federal agencies often require projects they fund to be consistent with the applicant's Comprehensive Plan. For example, a Transportation chapter policy supporting the lessening of the impact of interstate freeways on adjacent neighborhoods would be the basis for pursuing federal funding for a "land bridge" over I-94 to reconnect neighborhoods torn apart by the construction of the freeway.

Appendices. Appendices for each chapter support and illustrate policies and are an integral part of this plan. They contain additional information, maps, calculations, analyses and data that may be required by the Metropolitan Council and support the ongoing growth and development of the City of Saint Paul through 2040.

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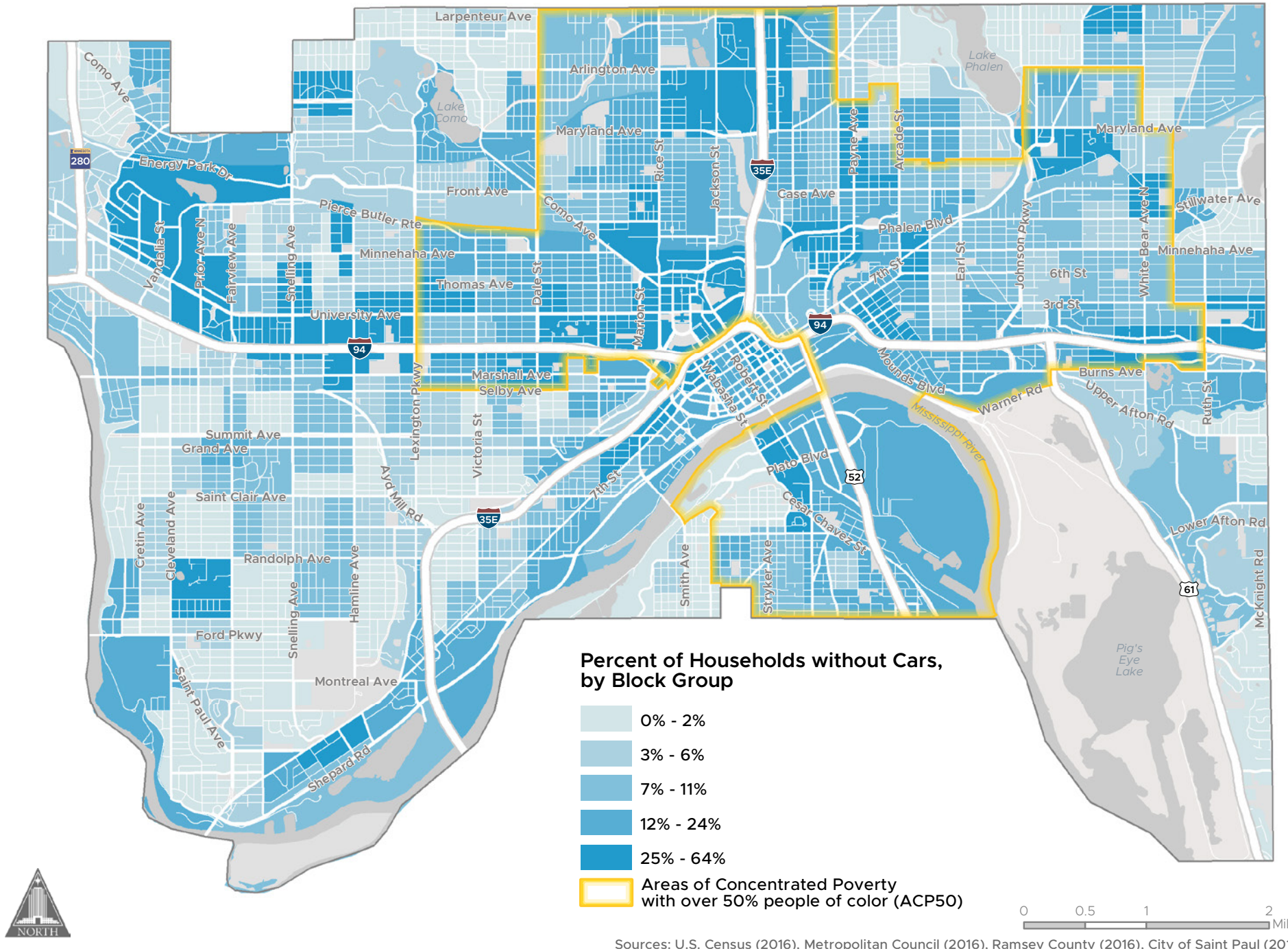
Appendix **A**

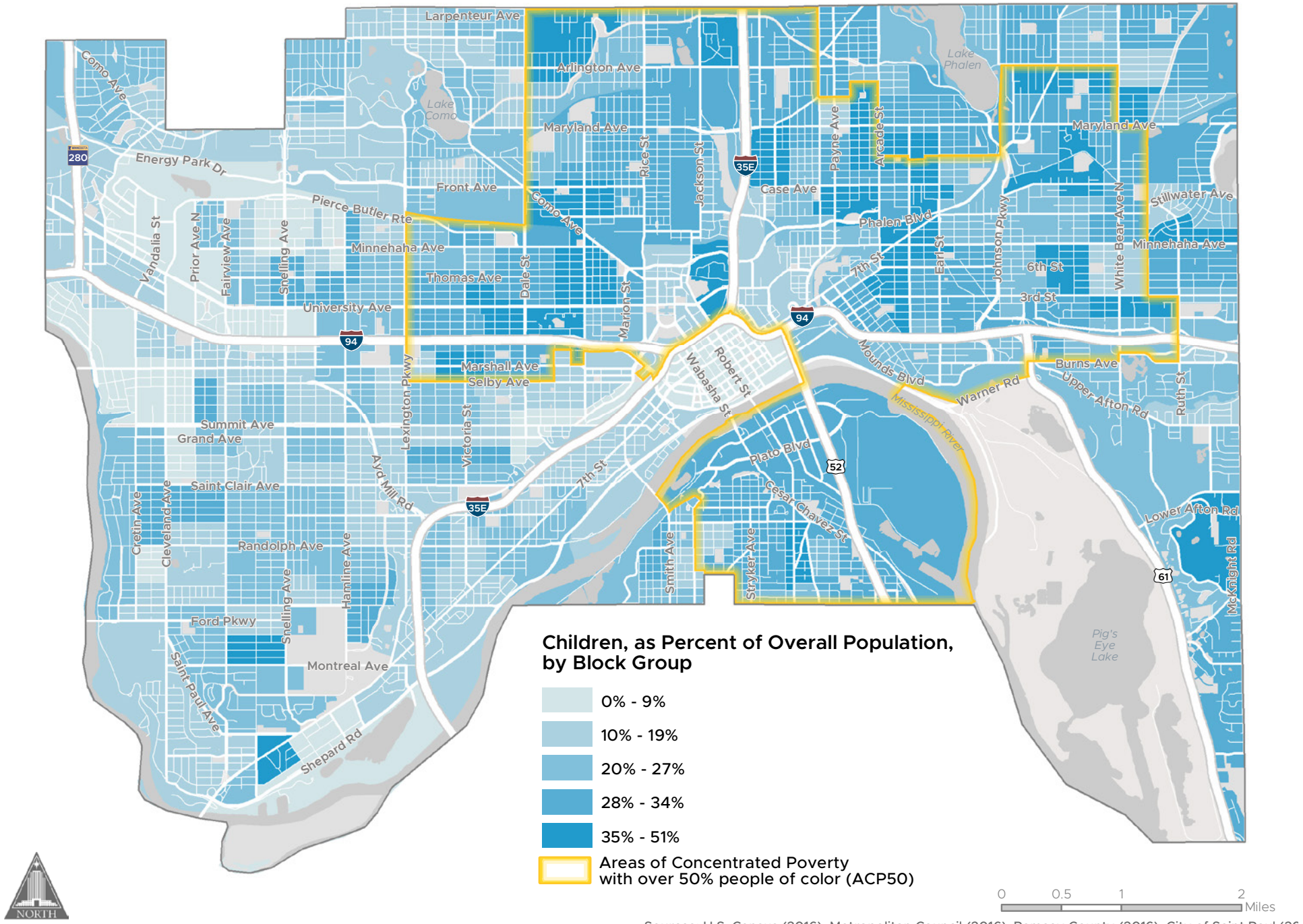
Note: ACP50 data for all from Metropolitan Council via MN Geospatial Commons, from annual release (2/5/2018). Other data as noted.

Map IN-1: Carless Households



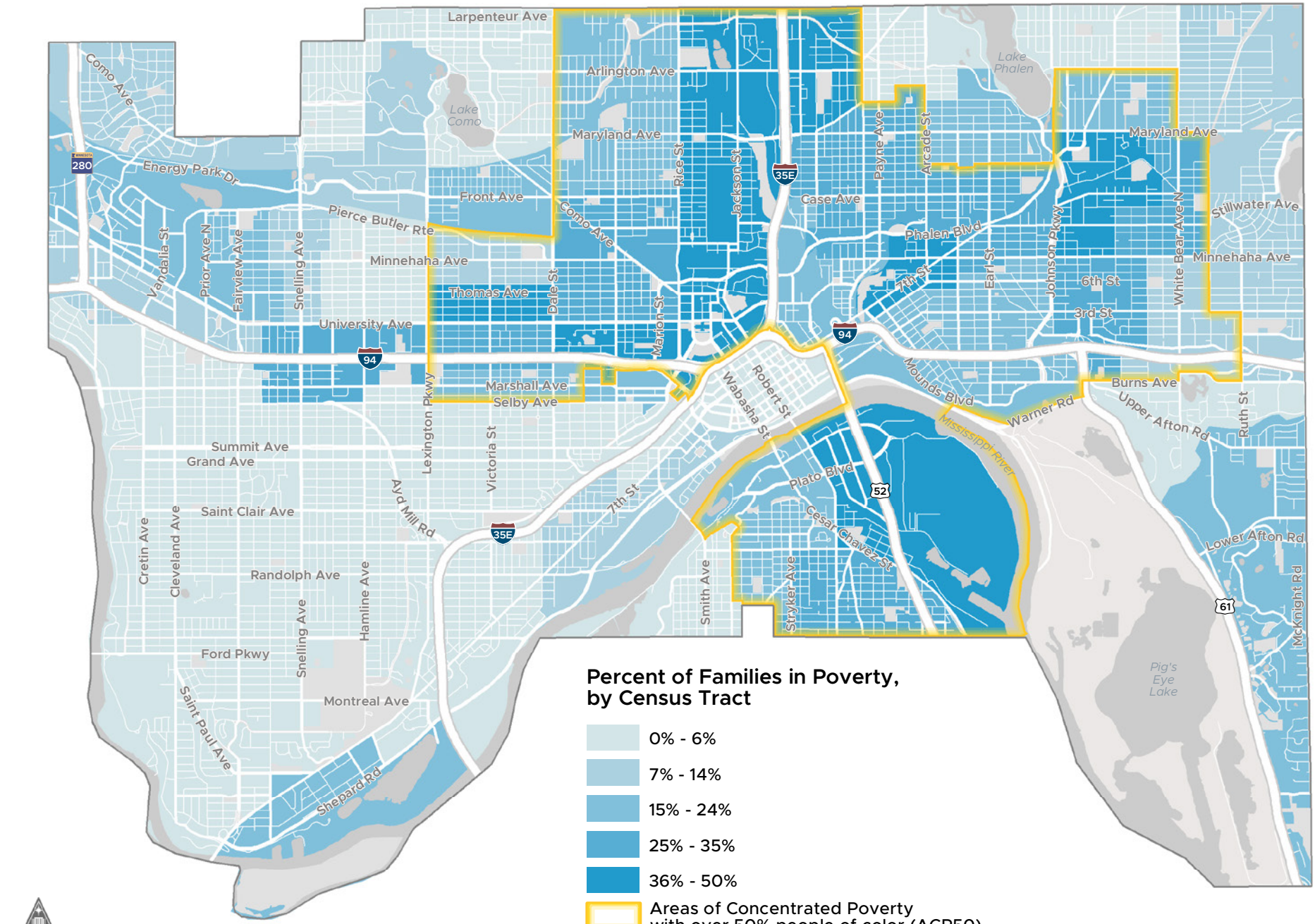
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-2 Children - Percent of Population



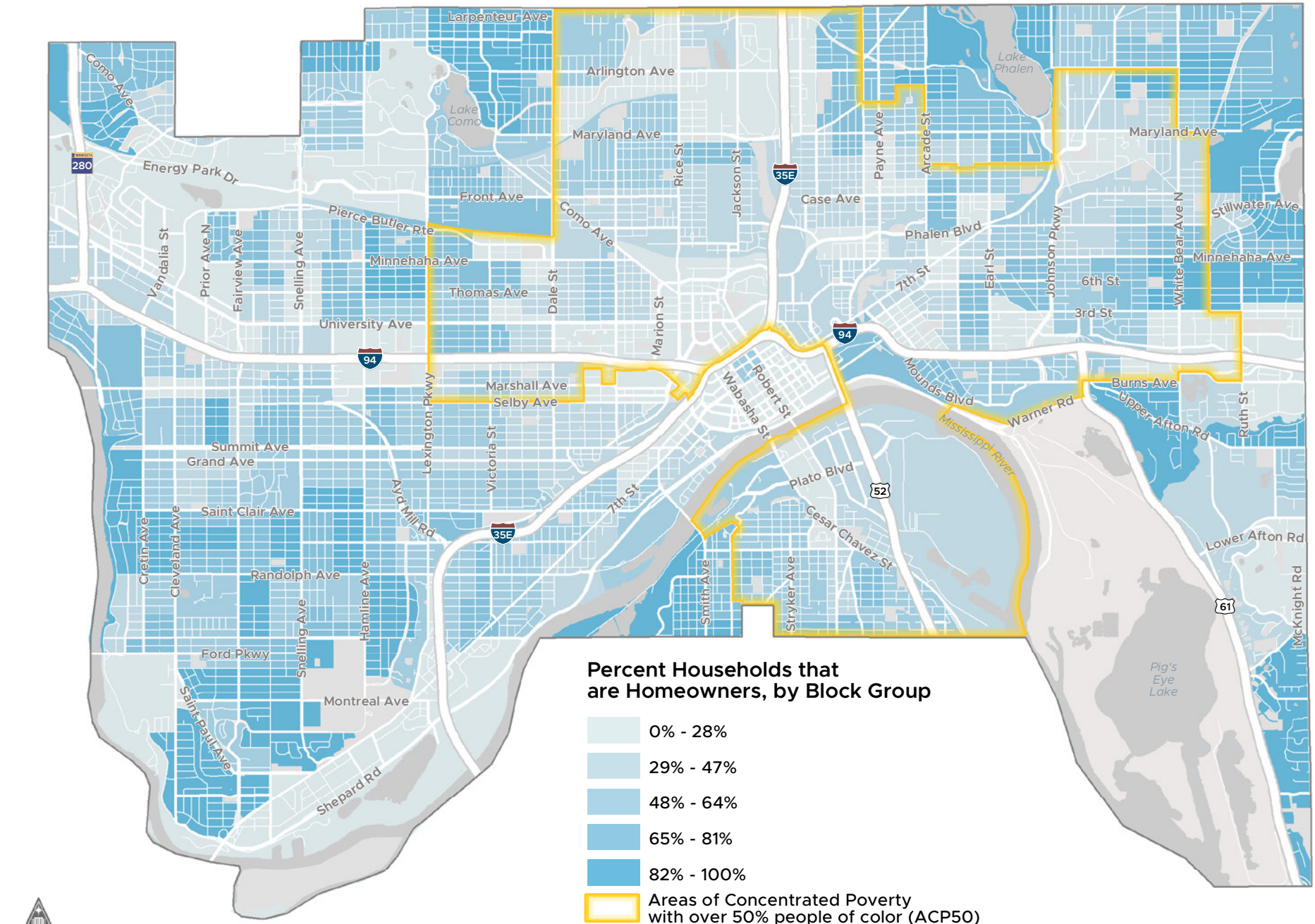
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (20

Map IN-3: Family Poverty Rate



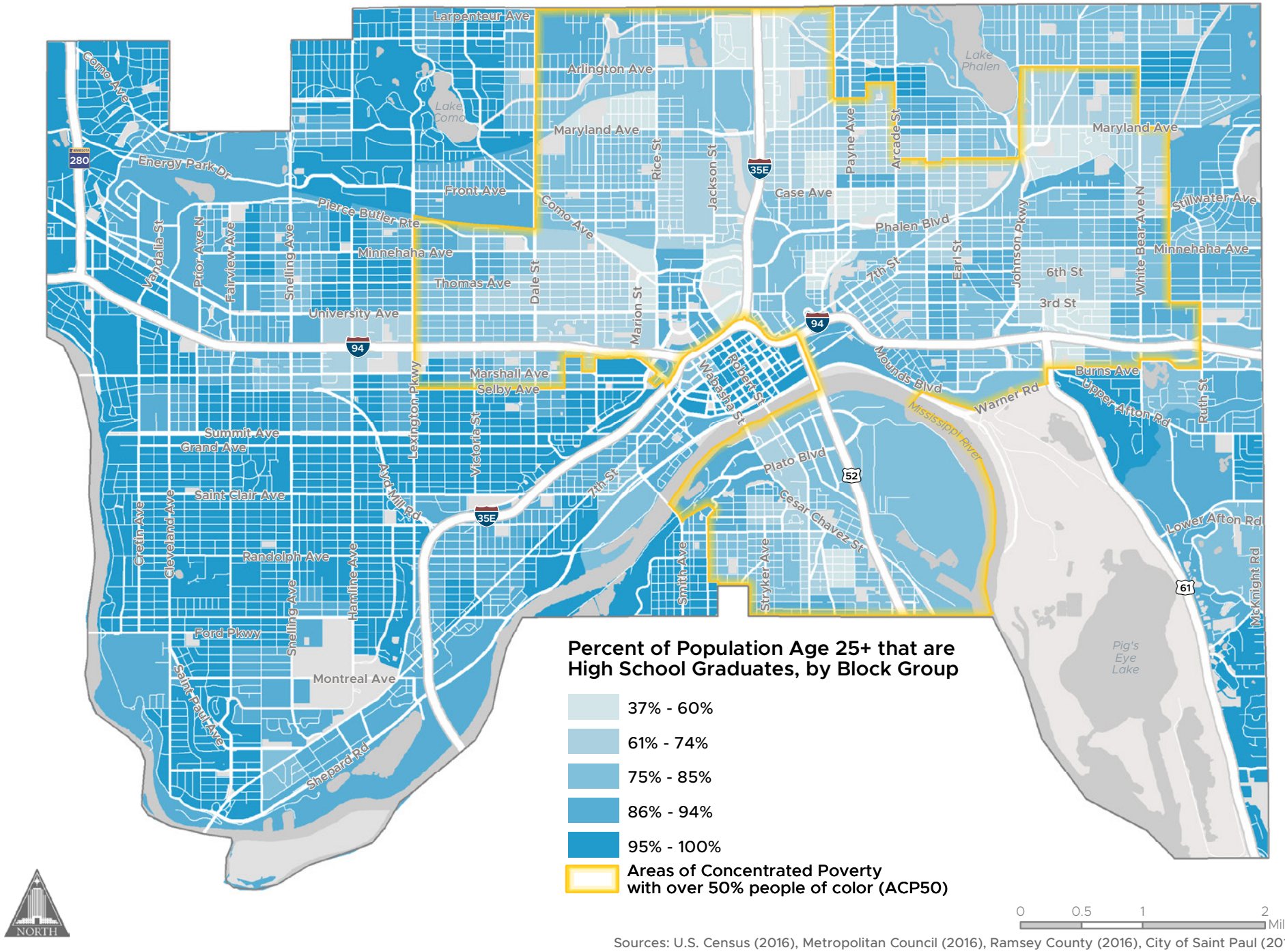
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-4: Homeownership



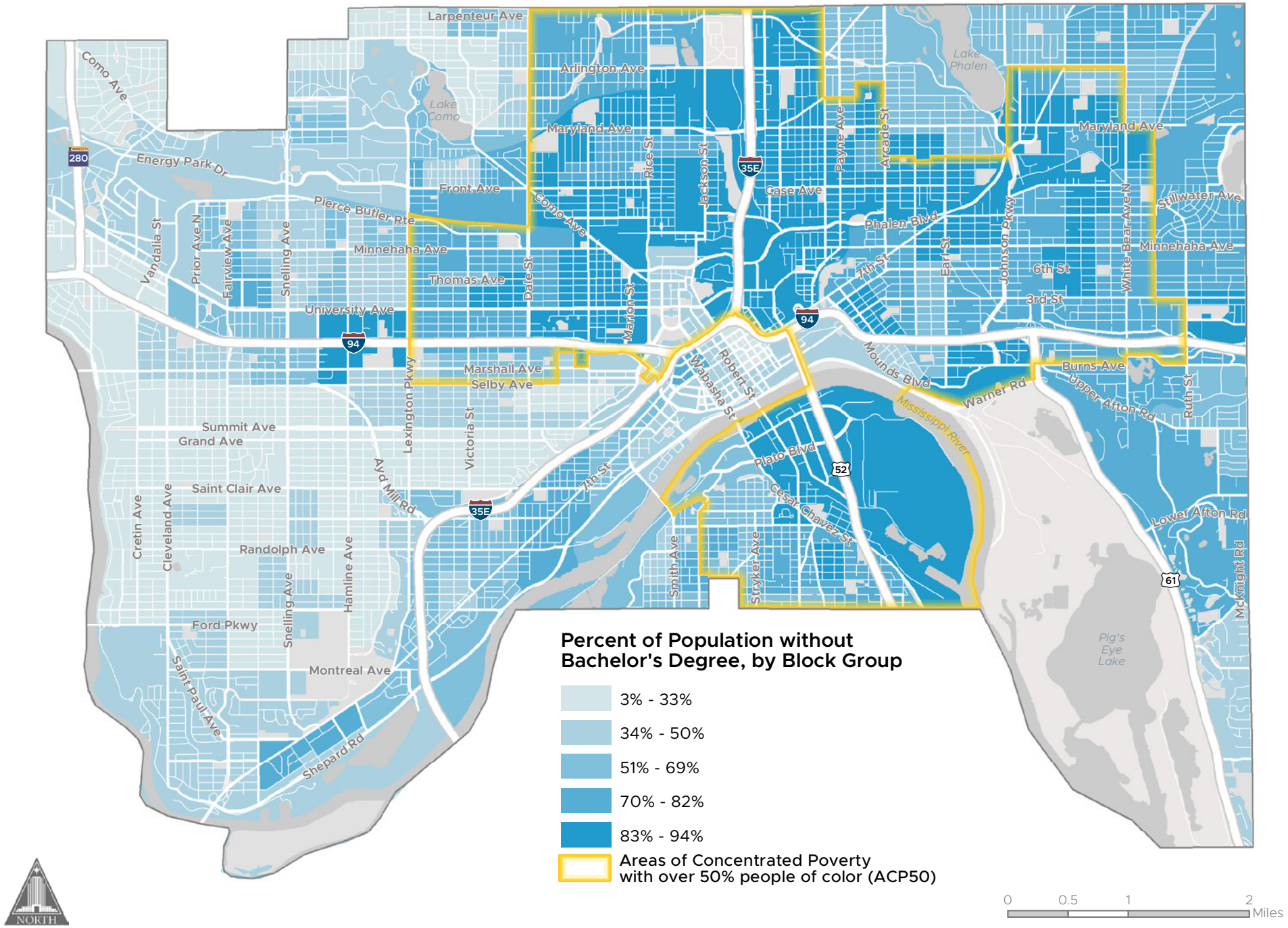
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-5: High School Graduation Rate



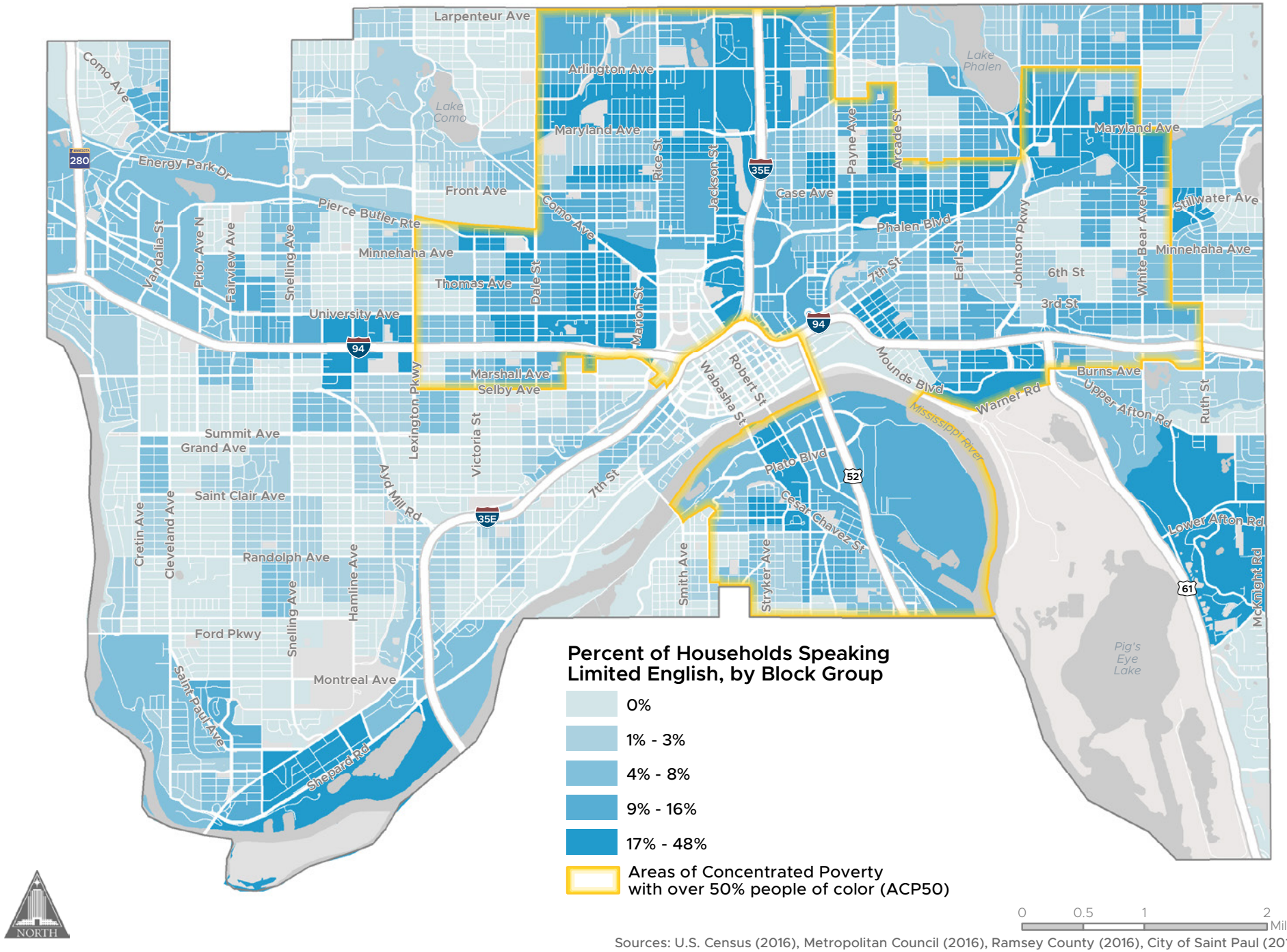
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-6: No Bachelor's Degree



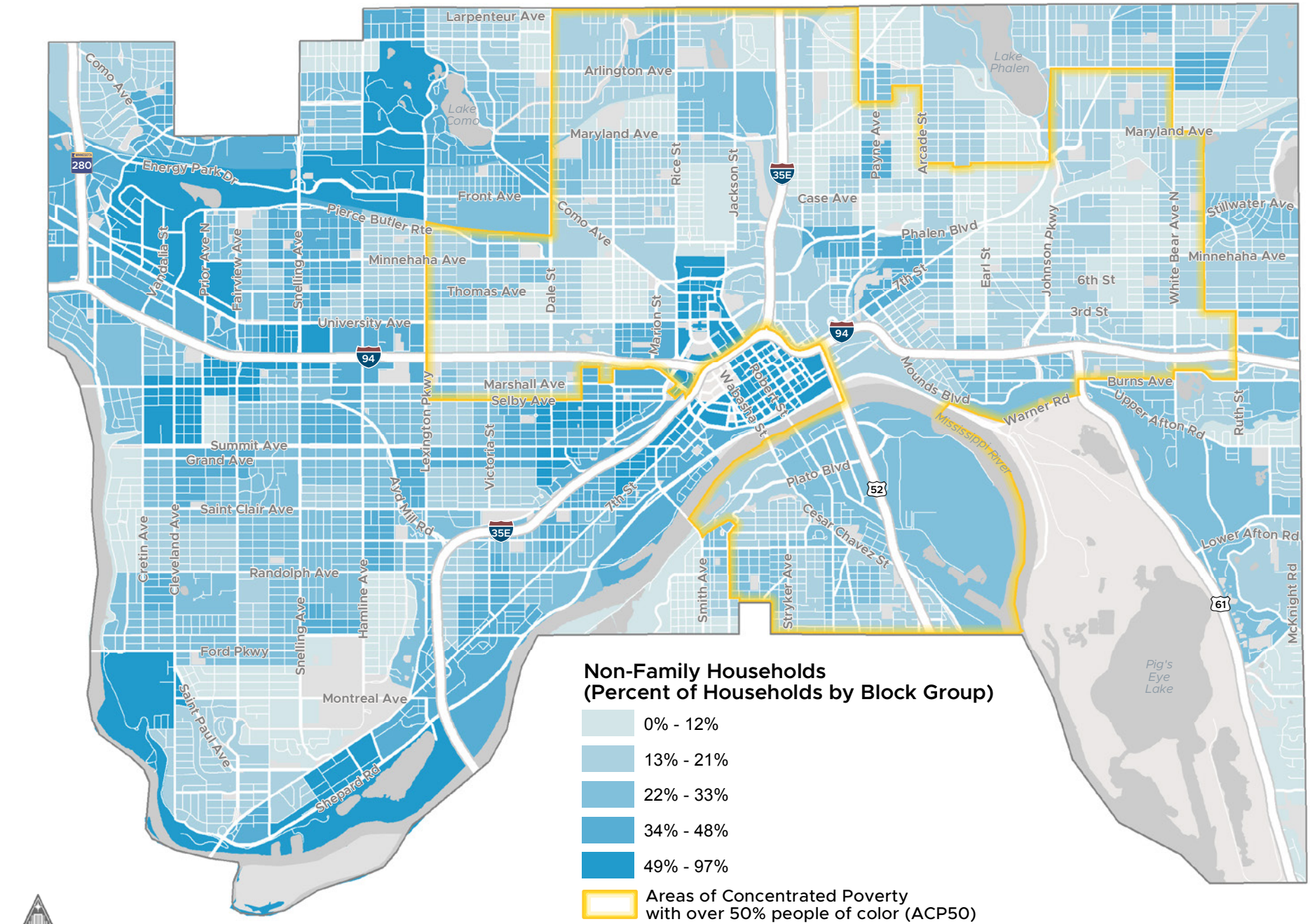
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-7: Non-English Speakers



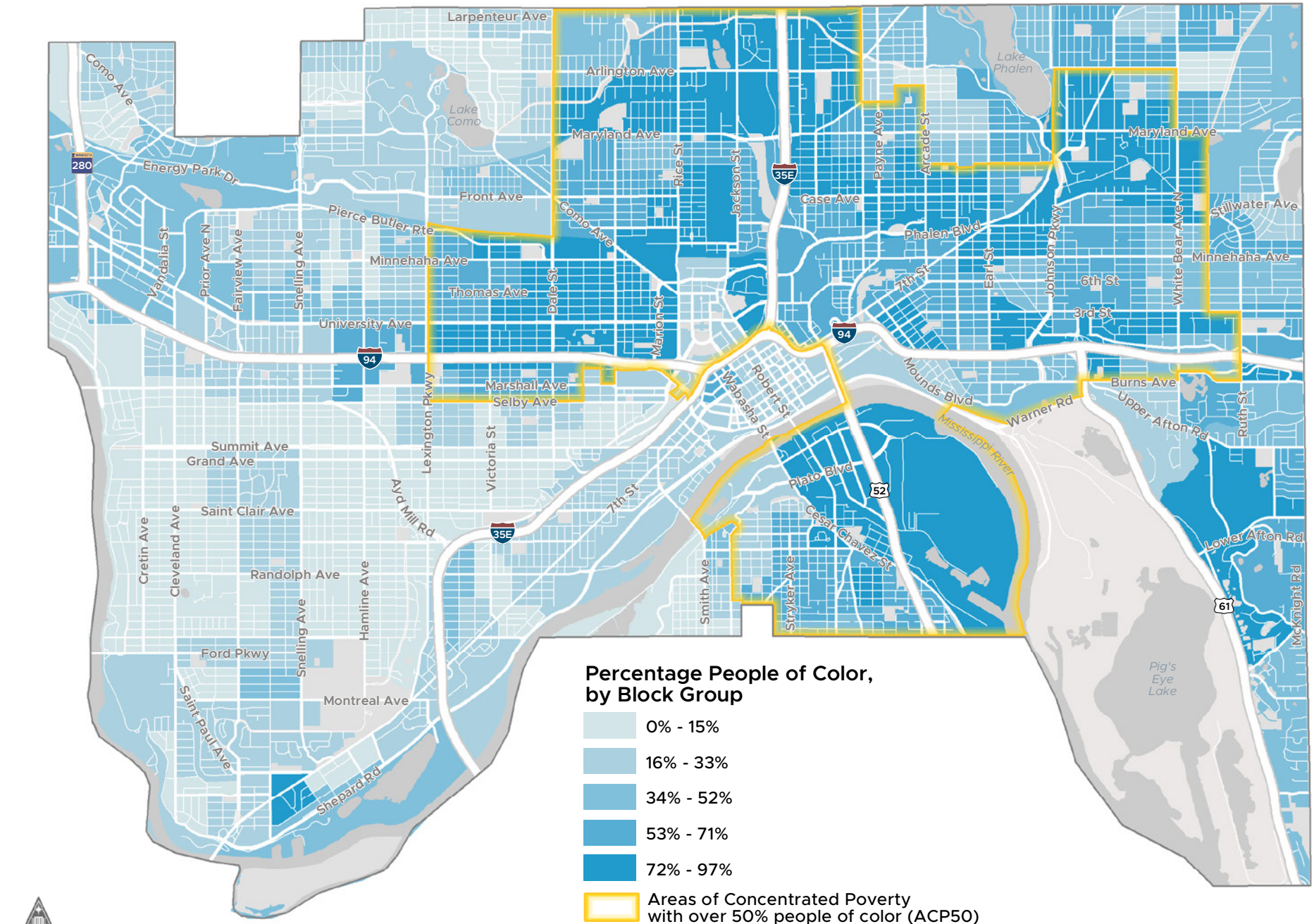
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-8: Non-Family Households



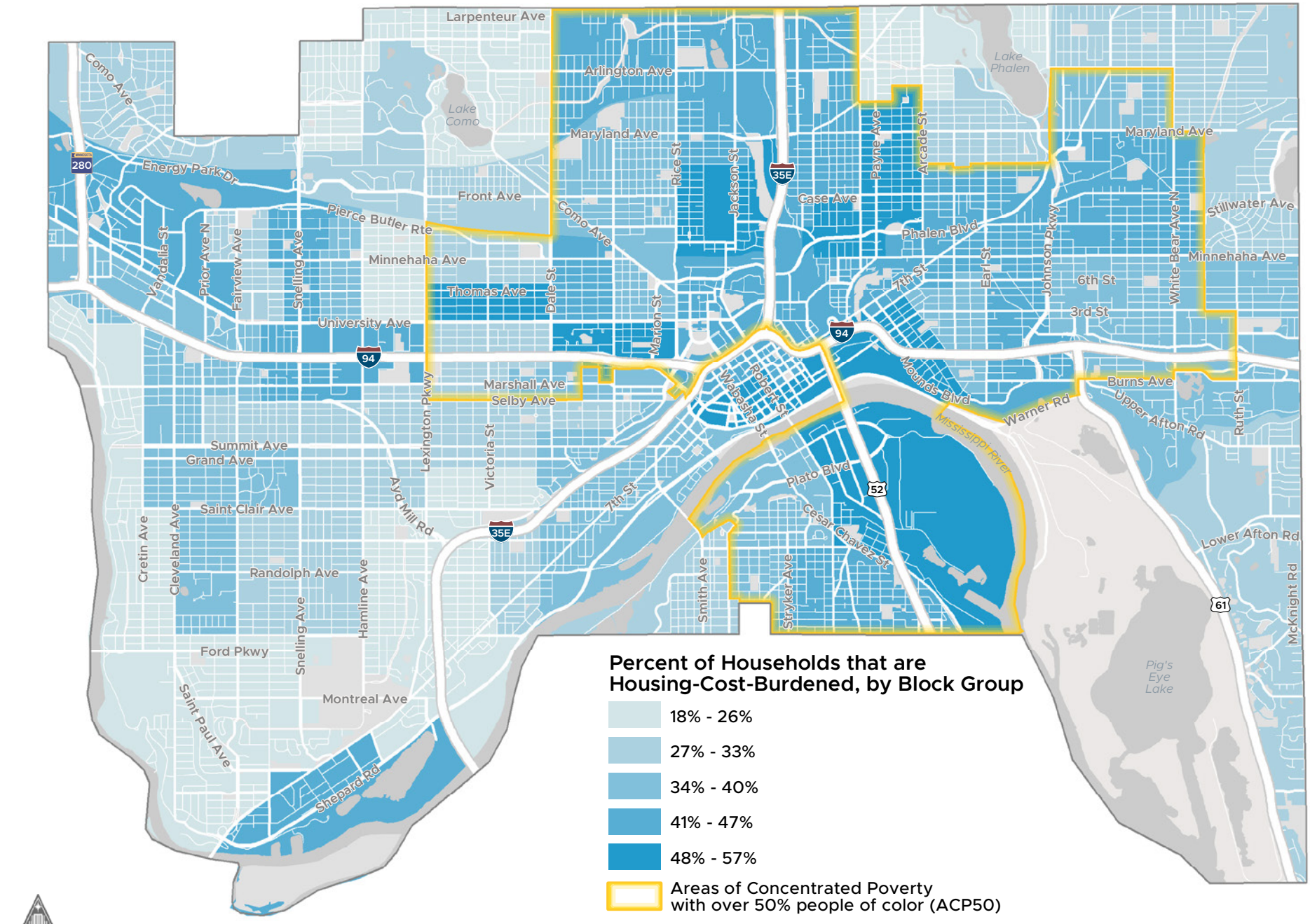
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-9: Non-White



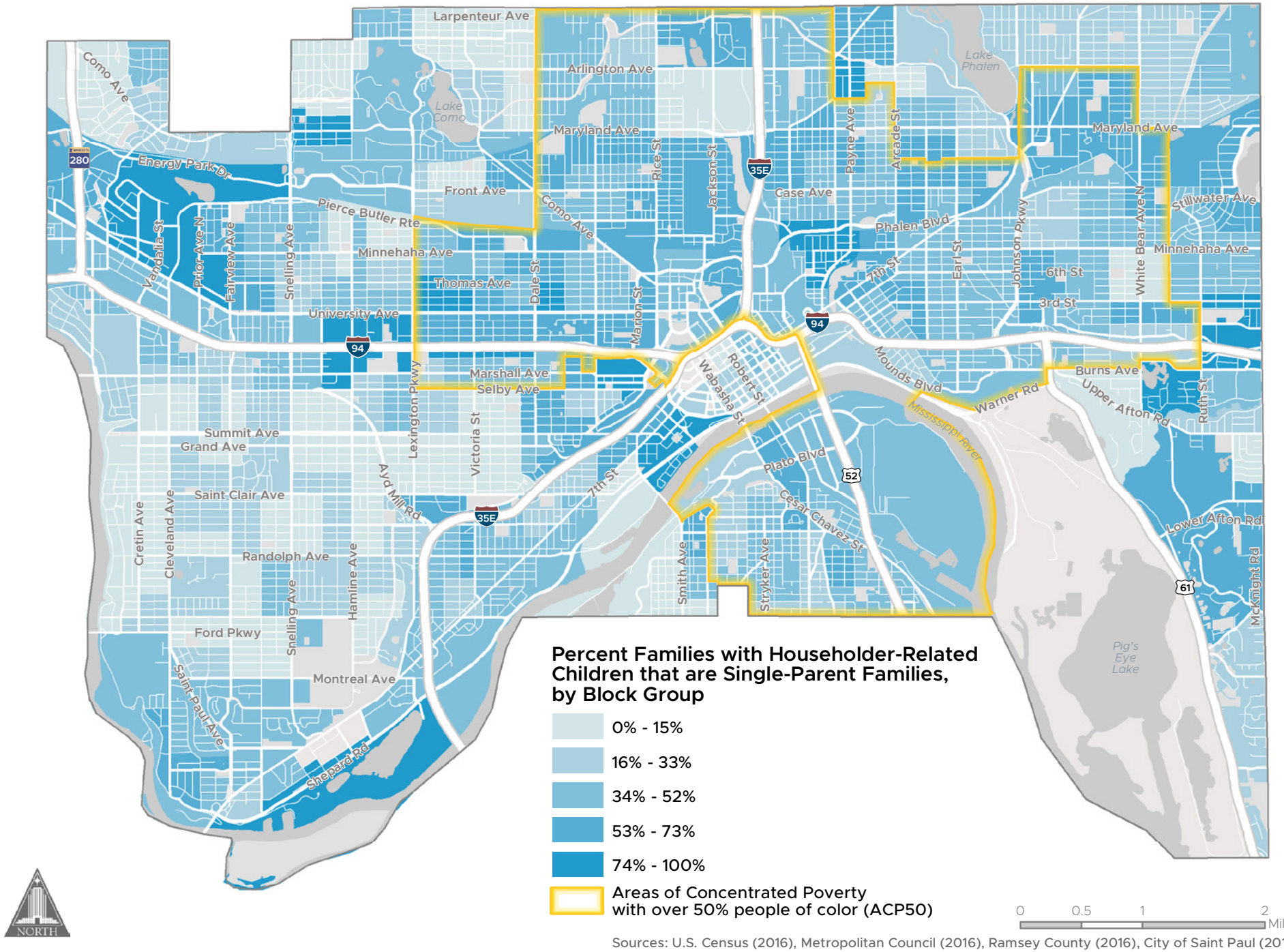
Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-10: Cost-Burdened Households



Sources: U.S. Census (2016), HUD (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Map IN-11: Single-Parent Families



Sources: U.S. Census (2016), Metropolitan Council (2016), Ramsey County (2016), City of Saint Paul (2016)

Figure I-3: Saint Paul Population, 1970 to 2017, and Forecast

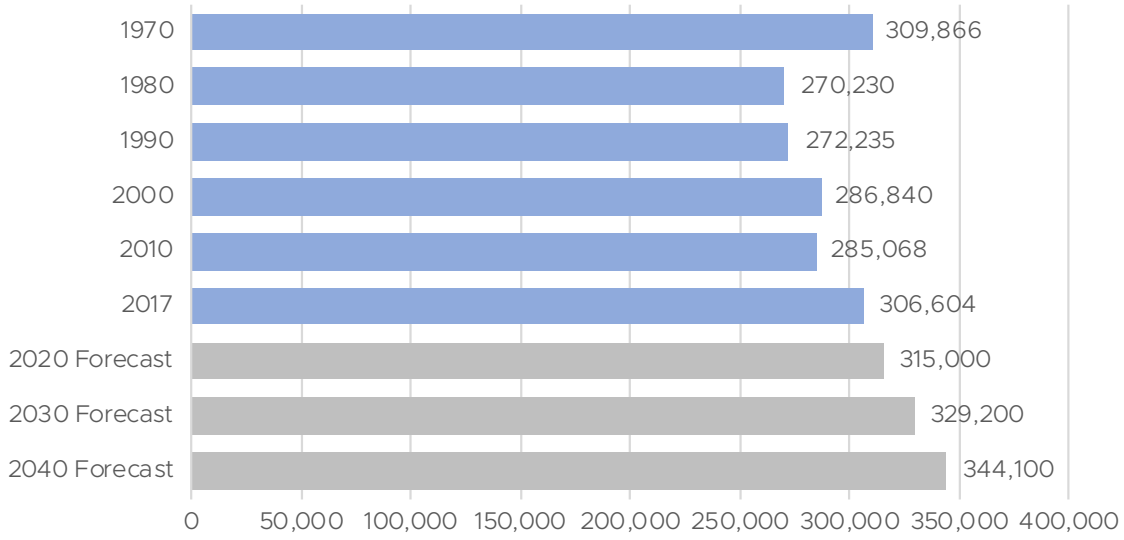


Figure I-4: Saint Paul Households, 1970 to 2017, and Forecast

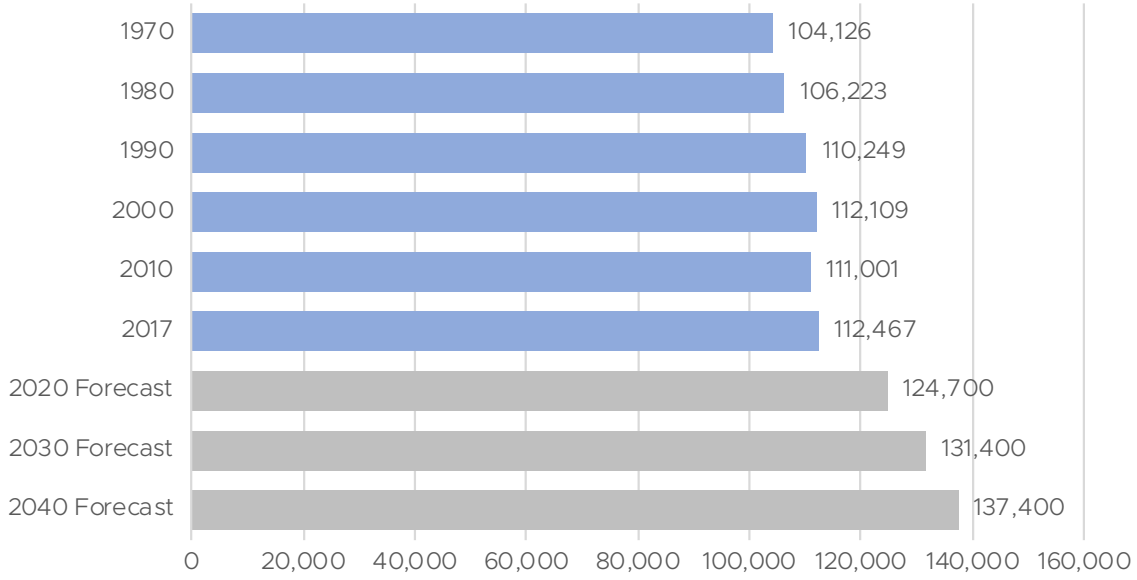


Figure I-5: Disaggregated Population Data - Asian

Sub-Groups Within "Asian Alone" Race			
Group	Population	Margin of Error	% of City Population
Hmong	33,147	+/- 1,609	11.2%
Burmese	7,854	+/- 1,295	2.6%
Vietnamese	2,768	+/- 536	0.9%
Chinese (except Taiwanese)	2,589	+/- 475	0.9%

Source: American Community Survey 5-Year Data, 2012-2016, Table B0218

Figure I-6: Disaggregated Population Data - Single Ancestry

People Reporting Single Ancestry			
Group	Population	Margin of Error	% of City Population
German	16,133	+/- 922	5.7%
Irish	6,529	+/- 703	2.3%
Norwegian	5,018	+/- 546	1.8%
Somali	4,604	+/- 829	1.6%
Ethiopian	4,154	+/- 797	1.5%
Source: American Community Survey 5-Year Data, 2012-2016, Table B04004			

Figure I-7: Disaggregated Population Data - Hispanic or Latino

Hispanic or Latino Origin by Specific Origin			
Group	Population	Margin of Error	% of City Population
Mexican	19,550	+/- 1,205	6.9%
Central American	3,136	+/- 545	1.9%

Source: American Community Survey 5-Year Data, 2012-2016, Table B03001

Figure I-8: Disaggregated Population Data - Native American

American Indian and Alaska Native Alone for Selected Tribal Groupings			
Group	Population	Margin of Error	% of City Population
Chippewa	1,777	+/- 316	0.6%
Source: American Community Survey 5-Year Data, 2012-2016, Table B02014			

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EAGLE STREET GRILLE & PUB
GREAT FOOD, LIQUOR & FRIENDS
EAGLE GRILLE STREET
PUB & RESTAURANT
BACARDI
FAT TIRE
IPA
Budweiser
BUD LIGHT
Corona
Extra

LAND USE

Introduction

The Land Use Chapter guides the overall physical layout and organization of Saint Paul. Policies set forth in this chapter promote development patterns that strengthen neighborhoods; improve walkability; increase access to housing, jobs, schools, parks and services; promote equitable access to neighborhood nodes; help to reduce carbon emissions; and accommodate growth by leveraging transit investments.

As Saint Paul has developed, land uses have changed in conjunction with transportation trends, and evolving zoning regulations and market forces. The land uses that have developed over time have a close relationship to natural forms and systems in Saint Paul, including the Mississippi River. The overall composition of these natural and built characteristics influences how people live, move and do business in Saint Paul (Figure LU-1).

This chapter provides guidance by land use type and is illustrated by the Future Land Use Map (Figure LU-2), which determines where the uses are to be located over the next 20 years. The land use types are described throughout the chapter, followed by policies per land use. Household and employment growth over the next two decades is focused in Downtown, Mixed-Use areas and Neighborhood Nodes, creating compact urban development in areas with a high level of services and amenities. Ongoing investment in housing choice in Urban Neighborhoods is also supported. Additional supporting materials for Land Use Chapter policies can be found in the appendices beginning of page 46.

The following goals guide the Land Use Chapter:

1. Economic and population growth focused around transit.
2. Neighborhood Nodes that support daily needs within walking distance.
3. Equitably-distributed community amenities, access to employment and housing choice.
4. Strong connections to the Mississippi River, parks and trails.
5. Infrastructure for all ages and abilities.
6. Efficient, adaptable and sustainable land use and development patterns and processes.
7. Quality full-time jobs and livable wages.
8. People-centered urban design.

City-wide

City-wide land use policies cover a broad range of topics. Generally, the city-wide goals are to increase density and land use diversity at Neighborhood Nodes, focus investment along transit corridors and promote high-quality urban design. Mixed-use clusters anchor neighborhoods, provide convenient access to local services and employment, and promote vibrancy, which supports walking and reduces the amount of driving needed to satisfy daily needs. The following policies apply across the City regardless of land use category:

Policy LU-1. Encourage transit-supportive density and direct the majority of growth to areas with the highest existing or planned transit capacity.

Policy LU-2. Pursue redevelopment of Opportunity Sites (generally sites larger than one acre identified as having potential for redevelopment) as higher-density mixed-use development or employment centers with increased full-time living wage job intensity, and the appropriate location for community services that are completely absent in the surrounding area (Map LU-3).

Policy LU-3. Prioritize equitable public investments relative to areas of concentrated poverty as defined by the Metropolitan Council.

Policy LU-4. Invest in measures that minimize displacement in neighborhoods where the proximity to high-frequency transit has increased redevelopment pressure and/or housing costs.

Policy LU-5. Encourage flexible building design to ensure ongoing functionality and viability, and to respond to new market opportunities.

Benefits of Transit-Oriented Development

Transit-Oriented Development (TOD) does not simply mean more condos and coffeeshops. Focusing growth along quality transit means job access, security and an affordable cost of living. When transit connects to schools and job centers, more training and employment opportunities open for all residents along the route. High-frequency transit increases reliability for both employees and employers, which increases job choice and longevity. Transit-oriented development also allows people to get more from their paycheck. The overall cost of housing plus transportation is less because households can get by with fewer or no cars, and are freed from the cost of buying, maintaining and insuring vehicles.

Benefits of TOD are described in the series *Promoting Opportunity through Equitable Transit-Oriented Development*, by Enterprise Community Partners, Inc., including:

- Access to employment: Not only are most jobs in the United States located close to transit, but proximity to transit decreased the time lower-paid job-seekers looked for work.
- Decreased cost of living: Those living in TOD areas save thousands of dollars annually, freeing up income for other necessities, such as food, healthcare and education.
- Health and well-being: Living in a TOD area promotes a more active lifestyle, with people walking to transit and other neighborhood amenities. These habits can lead to reduced risk of obesity, heart disease, diabetes and other diseases.
- Efficient transportation networks: Denser TOD areas have been shown to reduce the overall distances of car trips while increasing transit trips.
- Economic development: TOD supports a healthy, diverse economy by supplying employers with a reliable pool of employees. TOD is associated with “a 10-fold increase in tax revenue, one-third reduction in infrastructure cost and 10 percent reduction in service-delivery costs” over typical suburban development, all of which contribute to good municipal financial health.
- Environmental protection: By reducing dependence on private automobiles and concentrating daily destinations, TOD reduces greenhouse emissions from vehicles and reduces regional sprawl.

The Urban Forest

Most people know that trees provide the oxygen we need to breathe, but did you know that trees also:

- Capture fine particles on leaf surfaces, reducing the circulation of airborne particulate matter
- Provide shade, reducing the impacts of daytime heat and production of ozone
- Reduce the urban heat island effect (the tendency for built-up urban areas to retain more heat)
- Increase stormwater absorption and groundwater recharge
- Reduce rates of crime and stress
- Increase property values
- Promote outdoor exercise
- Provide natural habitat
- Enhance the landscape
- Offer an effective strategy for climate adaptation

A comprehensive list of recommendations on how Saint Paul can maximize its tree canopy are contained in the *Emerald Ash Borer Health Impact Assessment Report*. Key recommendations include:

1. City of Saint Paul should identify neighborhoods with lower canopy cover and higher rates of vulnerable populations, and target these neighborhoods for new tree planting and increased assistance.
2. The City of Saint Paul Mayor's Office should declare the stability of the urban forest a City priority.
3. Saint Paul Forestry should develop and implement a five-year community forestry master plan with measurable goals.
4. Saint Paul Forestry and Saint Paul Chamber of Commerce should work together to provide incentives to businesses and property management companies to reduce heating and cooling costs.
5. Saint Paul Planning and Economic Development should incorporate urban forestry approaches into plans for climate resilience and/or disaster preparedness as a temperature buffering and flood management strategy.

Policy LU-6. Foster equitable and sustainable economic growth by:

1. facilitating business creation, attraction, retention and expansion;
2. supporting family-sustaining jobs and enhancing workers' skills to excel at those jobs;
3. growing Saint Paul's tax base in order to maintain and expand City services, amenities and infrastructure;
4. proactively directing new development to high-priority geographies, such as Neighborhood Nodes, ACP50 Areas and Opportunity Sites;
5. encouraging cultural and arts-based businesses and business districts, such as Little Mekong, Little Africa, Rondo and the Creative Enterprise Zone;
6. supporting business, real estate and financial models that keep more money locally, such as locally-owned businesses, local-prioritized employment, employee-owned businesses and commercial land trusts;
7. building and expanding neighborhood economic and cultural assets through the development of the local micro-economies of our Neighborhood Nodes;
8. enhancing vibrant downtown neighborhoods and connecting them to the Mississippi River;
9. developing programs and funding sources for site acquisition and parcel assembly; and
10. integrating Saint Paul's historic resources into neighborhood-based economic development strategies.

Policy LU-7. Use land use and zoning flexibility to respond to social, economic, technological, market and environmental changes, conditions and opportunities.

Applying Metropolitan Council's Areas of Racially Concentrated Poverty to Saint Paul

The Metropolitan Council defines Areas of Concentrated Poverty (ACPs) as census tracts where 40% or more of the residents have family or individual incomes that are less than 185% of the federal poverty threshold. To identify areas where people of color experience the most exposure to concentrated poverty, the Met Council further differentiates Areas of Concentrated Poverty where 50% or more of the residents are people of color (ACP50s). The City of Saint Paul is using ACP50 geography as a lens to guide our approach to equitable development within the city. This approach may require investing within ACP50 areas in some cases, while investing outside them in other instances. In any case, equitable investment will require ongoing monitoring and evaluation to ensure success.

The Metropolitan Council's Thrive 2040 includes a "Statement on Equity" that lays out the Council's goals and action steps to achieve those goals. The Metropolitan Council will promote equity by:

- Using our influence and investments to build a more equitable region.
- Creating real choices in where we live, how we travel, and where we recreate for all residents, across race, ethnicity, economic means, and ability.
- Investing in a mix of housing affordability along the region's transit corridors.
- Engaging a full cross-section of the community in decision-making.

Examples of actions the Metropolitan Council will take that relate to the City's Land Use Chapter include:

- Work to mitigate Areas of Concentrated Poverty and Racially Concentrated Areas of Poverty by better connecting their residents to opportunity and catalyzing neighborhood revitalization.
- Work with communities to create more income-diverse neighborhoods, including strategically targeted subsidies to develop market-rate housing in areas that lack market-rate options.
- Use Livable Communities Act resources to catalyze private investment in Areas of Concentrated Poverty and Racially Concentrated Areas of Poverty.
- Conduct a regional inventory of industrial land that considers the location of industrial land relative to the potential workforce eager to access nearby higher wage job opportunities.
- Encourage preserving existing housing where rehabilitation is a cost-effective strategy to maintaining housing affordability.
- Invest in and encourage new affordable housing in higher-income areas of the region, particularly in areas that are well-connected to jobs, opportunity, and transit.
- Prioritize transportation investments that connect lower-income areas to job opportunities.
- Engage neighborhood residents in transit planning to understand how to most effectively use transit service and investments to promote access to opportunity.
- Promote transit-oriented development that ensures a mix of housing affordability in transit station areas.
- Collaborate and consult with members of the community, especially historically underrepresented populations.Work toward making decisions with people, not for people.

Policy LU-8. Ensure that zoning and infrastructure support environmentally and economically efficient, resilient land use development.

Policy LU-9. Promote high-quality urban design that supports pedestrian friendliness and a healthy environment, and enhances the public realm.

Policy LU-10. Activate streetscapes with active first-floor uses, street trees, public art, outdoor commercial uses and other uses that contribute to a vibrant street life.

Policy LU-11. Preserve significant publicly-accessible views through the regulation of structure placement, height, bulk and scale while accounting for other priorities (Figure LU-4).

Policy LU-12. Support airport safety by prioritizing compatible land uses and using FAA 7640 review to ensure that building heights do not unreasonably interfere with airspace operations close to Saint Paul Downtown Airport and Minneapolis-Saint Paul International Airport. Airport Safety Zones (Figure T-17) are subject to Airport Safety Zones are subject to land use regulations defined in Minnesota Rules Chapter 8800.2400, per state law. See also Policy T-18.

Policy LU-13. Support strategies, as context and technology allow, to improve off-street parking efficiency, such as shared parking agreements, district ramps, car sharing, electric vehicle charging and reduced parking overall.

Policy LU-14. Reduce the amount of land devoted to off-street parking in order to use land more efficiently, accommodate increases in density on valuable urban land, and promote the use of transit and other non-car mobility modes.

Policy LU-15. Ensure that stand-alone parking uses are limited, and that structured parking is mixed-use and/or convertible to other uses.

Policy LU-16. Encourage the equitable spatial distribution of community food assets, including urban farms, community gardens, food markets, healthy retail food options and food hubs.

Policy LU-17. Promote access to sunlight for solar energy systems while accounting for the development rights of adjacent properties (Map LU-6).

Policy LU-18. Support facilities outside public rights-of-way to support pedestrian and bicycling activity, such as sidewalk access to building entrances, adequate lighting, trails and bicycle parking/storage.

Policy LU-19. Prioritize measures to achieve a long-term increase in canopy coverage citywide, with general goals of 40% tree canopy coverage in all neighborhoods outside of downtown and 15% downtown.

Policy LU-20. Encourage private landowners to provide public access to privately-owned open spaces, and facilitate joint use of athletic fields and school playgrounds.

Policy LU-21. Identify, preserve, protect and, where possible, restore natural resources and habitat throughout the city with the following ordinances:

- Chapter 67. - Zoning Code—Overlay Districts
  - ARTICLE II. - 67.200. TP Tree Preservation Overlay District
  - ARTICLE V. - 67.500. HV Hillcrest Village Overlay District
- Chapter 68. - Zoning Code—River Corridor Overlay Districts
  - ARTICLE II. - 68.200. River Corridor Overlay Districts
- Chapter 69. - Zoning Code—Subdivision Regulations
  - ARTICLE IV. - Application for Subdivision
    - Sec. 69.406. - Review of divisions of land.
  - ARTICLE V. - General Requirements and Design Standards
    - Sec. 69.509. - Preservation of natural features and amenities.

Downtown

Downtown is the mixed-use core of Saint Paul, encompassing all the B4 and B5 Zoning Districts and most of Planning District 17. It is the oldest developed part of the city, and currently and historically has had the greatest employment and housing density in Saint Paul. Downtown is intended to continue growing and diversifying while building on its great neighborhood, commercial and cultural assets, especially its location on the Mississippi River. Improved infrastructure will enliven vitality, and safely connect people within downtown and to adjacent neighborhoods. For more detailed guidance on the future of downtown, see the Downtown Development Strategy. The following policies apply to the Downtown land use category:

Policy LU-22. Continue to invest in Downtown and promote a broad mix of uses that attract greater numbers of people and employers to ensure Downtown's vitality as the civic, cultural and employment center of the East Metro.

Policy LU-23. Strengthen neighborhood connections to and within Downtown Saint Paul through development and improvements that support and complement Downtown businesses and urban villages.

Policy LU-24. Prioritize public and private investments in infrastructure that:

1. improve technology access to enhance conditions for a growing economy;
2. maintain and improve the public realm to encourage street-level pedestrian activity; and
3. support parks, green space and recreation.

Policy LU-25. Continue to strengthen Downtown as a residential neighborhood that provides services and amenities for people of all ages.

Policy LU-26. Support office and commercial development that takes advantage of Downtown's position as the office Center of the East Metro, that maximizes jobs, business and tax base growth; and meets the needs of a dynamic region.

Mixed-Use

Mixed-Use areas are primarily along thoroughfares well-served by transit. The main distinguishing characteristic is a balance of jobs and housing within walking distance of one another. Historically, these areas developed in easily-accessible locations, and they will continue to be the most dynamic areas of Saint Paul. These areas are vital for the ongoing growth and economic development of the city by providing the highest densities outside of downtown. The following policies apply to the Mixed-Use land use category:

Policy LU-27. Provide for land use change and rezoning of land adjacent to Mixed-Use areas to allow for commercial redevelopment and/or expansion fronting arterial and collector streets.

Policy LU-28. Support pedestrian-friendly streetscapes and visual interest through commercial building design.

Policy LU-29. Ensure that building massing, height, scale and design transition to those permitted in adjoining districts.

Neighborhood Nodes Policy Approach

The most frequent comments received from the community for the Land Use Chapter expressed a desire to have amenities within walking distance of home, such as neighborhood businesses and grocery stores, parks, playgrounds and open space, and libraries. This goal is related to equity in that amenities and basic public infrastructure are not evenly distributed throughout the city. Increasing the number of Neighborhood Nodes from those designated in the previous 2030 Comprehensive Plan is a direct policy response to this. Over time, public and private investment in new development that increases the mix of uses and pedestrian amenities in these Neighborhood Nodes will increase amenities city-wide.

Having amenities within walking distance of home throughout the city is consistent with the way Saint Paul was planned and developed generations ago. The city was organized into "Communities" (precursors to the current District Council system) and "Neighborhoods" in the mid-20th century. Guiding design principles for Communities were "to have a set of facilities which are designed, primarily, for service to children aged 12-17 and, secondly, for service to adults." The primary design principle for Neighborhoods (sub-sections of Communities) was that "young children aged 5-12, generally will be safe from traffic and other hazards." (*Plan for Public Education, Recreational and Cultural Facilities, City of Saint Paul, 1960*)

There is also an increasingly rich amount of research quantifying the positive benefits of this type of development pattern. Benefits include:

- improved health;
- increased walking;
- reduced vehicle miles traveled; and
- positive equity outcomes.

(*More Great Research Quantifying Smart Growth Benefits*, Todd Litman)

These benefits show the close relationship between land use and transportation, and illustrate how we can grow in a way that achieves the improvements people want to see in their communities. Neighborhood Nodes are linked to the streets that host them. Jan Gehl points out in his book Cities for People:

> *"there is more life in urban neighborhoods when people move slowly. The goal of creating cities where more people are invited to walk and bike will bring more life to the streets and a greater wealth of experience because fast traffic will be converted into slower traffic" (p.71).*

Creating a land use mix and high-quality urban design that invites pedestrians to linger at Neighborhood Nodes will make the city more walkable.

Neighborhood Node Locations

The Neighborhood Node designation is based on locations planned for higher-density, mixed-use development in adopted small area, neighborhood and master plans; community feedback on locations with market potential and neighborhood support; review of current zoning designations; analysis of current and future land use; and locations of existing or planned transit. Analysis included reviewing historic land use maps for persistent commercial nodes and mixed-uses; comparing amenities proximate to potential nodes; and identifying public anchors such as schools, parks and libraries. A final analysis ensured that, generally, there would be a Neighborhood Node within 20-minute (or less) walk of any residence in Saint Paul. This is based on the urban design concept of "20-minute cities," where many daily services and amenities are within a 20-minute walk from the vast majority of residences. Neighborhood Nodes are designated in the following general locations, as identified in the 2040 Future Land Use Map:

- Arlington Hills/Maryland-Payne
- Baker-Smith
- Case-Arcade
- Como-Front-Dale
- Como-Snelling
- Dale Station Area
- District del Sol
- E. 7th Street-Arcade
- E. 7th Street-Payne
- Earl Station Area
- Etna Station Area
- Fairview Station Area
- Fitzgerald Park Urban Village
- Grand-Fairview
- Grand-Victoria
- Grand-W. 7th/Seven Corners
- Hamline Station Area
- Highland Village/Ford Site
- Hillcrest Golf Course
- Idaho-White Bear
- Larpenteur-Lexington
- Larpenteur-Vento Trail
- Lawson-Payne-Wells
- Lawson-Rice-Front
- Lexington Station Area
- Lexington-Front
- Lower Afton-McKnight
- Lowertown Urban Village
- Marshall-Cleveland
- Maryland-Arcade
- Maryland-Dale
- Minnehaha-Snelling
- Minnehaha-White Bear
- Montreal-W. 7th-Lexington
- Mounds Station Area
- Mount Airy-Jackson
- Payne-Phalen
- Payne-Tedesco
- Phalen Village
- Phalen-Arcade
- Phalen-Cayuga
- Phalen-Cook
- Phalen-Olive
- Randolph-Snelling
- Randolph-W. 7th/Schmidt
- Raymond Station Area
- Rice Park Urban Village
- Rice Station Area
- Selby-Dale
- Selby-Milton
- Selby-Snelling
- Selby-Western
- Shepard-Davern/Sibley Manor
- Snelling Station Area
- St. Anthony Park Village
- St. Clair-Cleveland
- St. Clair-Snelling
- St. Clair-W. 7th
- Stillwater-Iroquois
- Stryker-George
- Suburban-White Bear
- Sun Ray Station Area
- Victoria Park
- Victoria Station Area
- Wacouta Commons Urban Village
- West Side Flats
- Western Station Area
- Westgate Station Area
- Wheelock-Arcade
- Wheelock-Rice-Larpenteur
- White Bear Station Area
- White Bear-Maryland

Neighborhood Nodes

Neighborhood Nodes are compact, mixed-use areas that provide shops, services, neighborhood-scale civic and institutional uses, recreational facilities and employment close to residences. They may be neighborhood centers, transit station areas or urban villages, and have often developed adjacent to major intersections or at former street car stops. Neighborhood Nodes serve a neighborhood's daily needs, including access to food; reduce public infrastructure disparities; improve livability; and accommodate growth. Neighborhood Nodes are denser concentrations of development relative to the adjacent future land use categories. Neighborhood Nodes foster an equitable system of compact, mixed-use and commercial centers across the city to increase access to community services (such as health care) and businesses, and support pedestrian-oriented neighborhoods. Investment in Neighborhood Nodes will tap the economic, cultural and human assets of Saint Paul's diverse neighborhoods, and can foster micro-economies that celebrate those assets. The following policies apply to a range of land uses within the Neighborhood Nodes land use category:

Policy LU-30. Focus growth at Neighborhood Nodes using the following principles:

1. Increase density toward the center of the node and transition in scale to surrounding land uses.
2. Prioritize pedestrian-friendly urban design and infrastructure that emphasizes pedestrian safety.
3. Cluster neighborhood amenities to create a vibrant critical mass.
4. Improve access to jobs by prioritizing development with high job density.

Policy LU-31. Invest in Neighborhood Nodes to achieve development that enables people to meet their daily needs within walking distance and improves equitable access to amenities, retail and services.

Policy LU-32. Establish or enhance open space close to Neighborhood Nodes, such as public parks, publicly-accessible private open spaces, and school playgrounds.

Policy LU-33. Promote amenities that support those who live and work in Neighborhood Nodes, including frequent transit service, vibrant business districts, a range of housing choices, and neighborhood-scale civic and institutional uses such as schools, libraries and recreation facilities.

Urban Neighborhoods

Urban Neighborhoods are primarily residential areas with a range of housing types. Single-family homes and duplexes are most common, although multi-family housing predominates along arterial and collector streets, particularly those with transit. Multi-family housing, schools, neighborhood parks, religious institutions and cemeteries may also be scattered throughout Urban Neighborhoods. Limited neighborhood-serving commercial may also be present, typically at intersections of arterial and/or collector streets. Urban Neighborhood is the largest land use area in Saint Paul. The following policies apply to the Urban Neighborhoods land use category:

Policy LU-34. Provide for medium-density housing that diversifies housing options, such as townhouses, courtyard apartments and smaller multi-family developments, compatible with the general scale of Urban Neighborhoods.

Policy LU-35. Provide for multi-family housing along arterial and collector streets, and in employment centers to facilitate walking and leverage the use of public transportation.

Policy LU-36. Promote neighborhood-serving commercial businesses within Urban Neighborhoods that are compatible with the character and scale of the existing residential development.

Policy LU-37. Facilitate partnerships between public and private institutions for joint use of recreational fields, playgrounds and other community facilities and hubs to economically provide equitable access to services and leverage other public investment.

Policy LU-38. Direct the location of new secondary schools and post-secondary educational institutions along transit routes and bicycle and pedestrian networks to provide options for students and staff, and decrease traffic congestion in adjacent neighborhoods.

Policy LU-39. Direct the location of new elementary schools to locations with safe pedestrian and bicycling networks.

Semi-Rural

Semi-Rural land is primarily large-lot, low-density residential, with more limited public infrastructure than elsewhere in the city. Development is limited by the river bluffs; preservation of green space, including the tree canopy, is emphasized. The Semi-Rural land use category is limited by geography, and is expected to remain static or even shrink over the next 20 years as properties are connected to public utilities and infrastructure. The following policies apply to the Semi-Rural land use category:

Policy LU-40. Maintain large-lot residential development with private utilities that preserves the natural ecosystem along the river bluffs.

Policy LU-41. Promote cluster development with public utilities to add density in a way that preserves the natural ecosystem along the river bluffs.

Policy LU-42. Promote context-sensitive infill development along arterial and collector streets, at densities similar to Urban Neighborhoods, while preserving the natural features of the area.

Policy LU-43. Expand the availability of public utilities, where feasible, to provide for voluntary connections to abutting properties.

Industrial

Industrial land uses are a major source for employment in Saint Paul and are are a significant net positive payer of property taxes, relative to the City services consumed. They have traditionally been defined as manufacturing, processing, warehousing, transportation of goods and utilities. More contemporary uses, driven by technological advances, include medical tech and limited production and processing. The intent is for this land use type to remain adaptable, relevant and supportive of well-paying jobs with low barriers to entry and a growing tax base. The following policies apply to the Industrial land use category:

Policy LU-44. Identify and assemble industrial sites within close proximity to logistics networks, including interstate freeways, river terminals, rail and other cargo/commodity shipping facilities.

Policy LU-45. Support and encourage development that maximizes tax base, job creation and/or job retention.

Policy LU-46. Retain and protect current industrial land from conversions to residential or institutional uses unless guided otherwise in a City of Saint Paul adopted plan.

Policy LU-47. Preserve the long-term tax base by evaluating the impact of tax-generating industrial land, as well as compatibility with adjacent land uses and infrastructure.

Policy LU-48. Minimize the amount of surface parking in industrial districts through a more efficient use of existing parking and development of shared parking.

Policy LU-49. Pursue partnerships to improve public open space access along the Mississippi River.

Policy LU-50. Support efforts to convert former industrial buildings to complementary production uses.

Policy LU-51. Support efforts to combine small parcels in industrial zones in order to allow for uses requiring larger building footprints.

Policy LU-52. Encourage investment in new employment uses, such as medical technology, maker space, and small-scale or custom production.

Major Parks and Open Spaces

Major Parks and Open Space land use includes regional parks, City parks larger than 200 acres, City parks adjacent to the river and parkways. This land use designation helps to connect the city's neighborhoods and acts as its "lungs," contributing to environmental quality, and providing space for recreation and respite. The Parks, Recreation and Open Space Chapter guides the City's park system.

Civic and Institutional

Civic and Institutional land use includes buildings and open space for major institutional campuses. As the host of the State Capitol and many high-quality educational institutions, Saint Paul has rich resources in this land use category. It is important to cultivate conditions that allow these uses to thrive, connect to neighborhoods and feed into the local economy. The following policies apply to the Civic and Institutional land use category:

Policy LU-53. Pursue partnerships with area colleges and universities that strengthen connections to the community and adjacent neighborhoods; and support workforce development, business creation and innovation, and retention of youth and young professionals.

Policy LU-54. Ensure institutional campuses are compatible with their surrounding neighborhoods by managing parking demand and supply, maintaining institution-owned housing stock, minimizing traffic congestion, and providing for safe pedestrian and bicycle access.

Policy LU-55. Encourage the redevelopment of surface parking lots within the Capitol Area into projects that contribute to the tax base and public realm.

Transportation

Saint Paul is a city with a rich infrastructure of multi-modal transportation systems, such as streets, walking and biking pathways, transit networks and the Mississippi River. The Transportation land use category, however, includes only highways, railroads and the Saint Paul Downtown Airport. These uses are essential for interstate commerce and contribute to the local and regional and global economies. As such, it is important to provide for these uses while ensuring minimum negative external impacts to adjacent land uses. The following policies apply to the Transportation land use category:

Policy LU-56. Provide for transportation uses while ensuring minimum negative external impacts to adjacent land uses.

Policy LU-57. Protect intermodal operations and freight railways from encroachment of other land uses that conflict with their safe operation.

Policy LU-58. Ensure that industrial development needing access to freight infrastructure is appropriately located to serve its freight and other intermodal needs.

Policy LU-59. Protect and expand river shipping terminals to strengthen the role of Saint Paul as a logistics hub of the Upper Mississippi.

Policy LU-60. Use the least amount of land practicable for transportation and utilities uses in order to maximize land for urban development and environmental protection.

Policy LU-61. Lessen the negative impacts of interstate highways by supporting design interventions, such as “land bridges” and landscaping and liner buildings on new bridges, that improve connectivity, hide the road and/or reduce pollution.

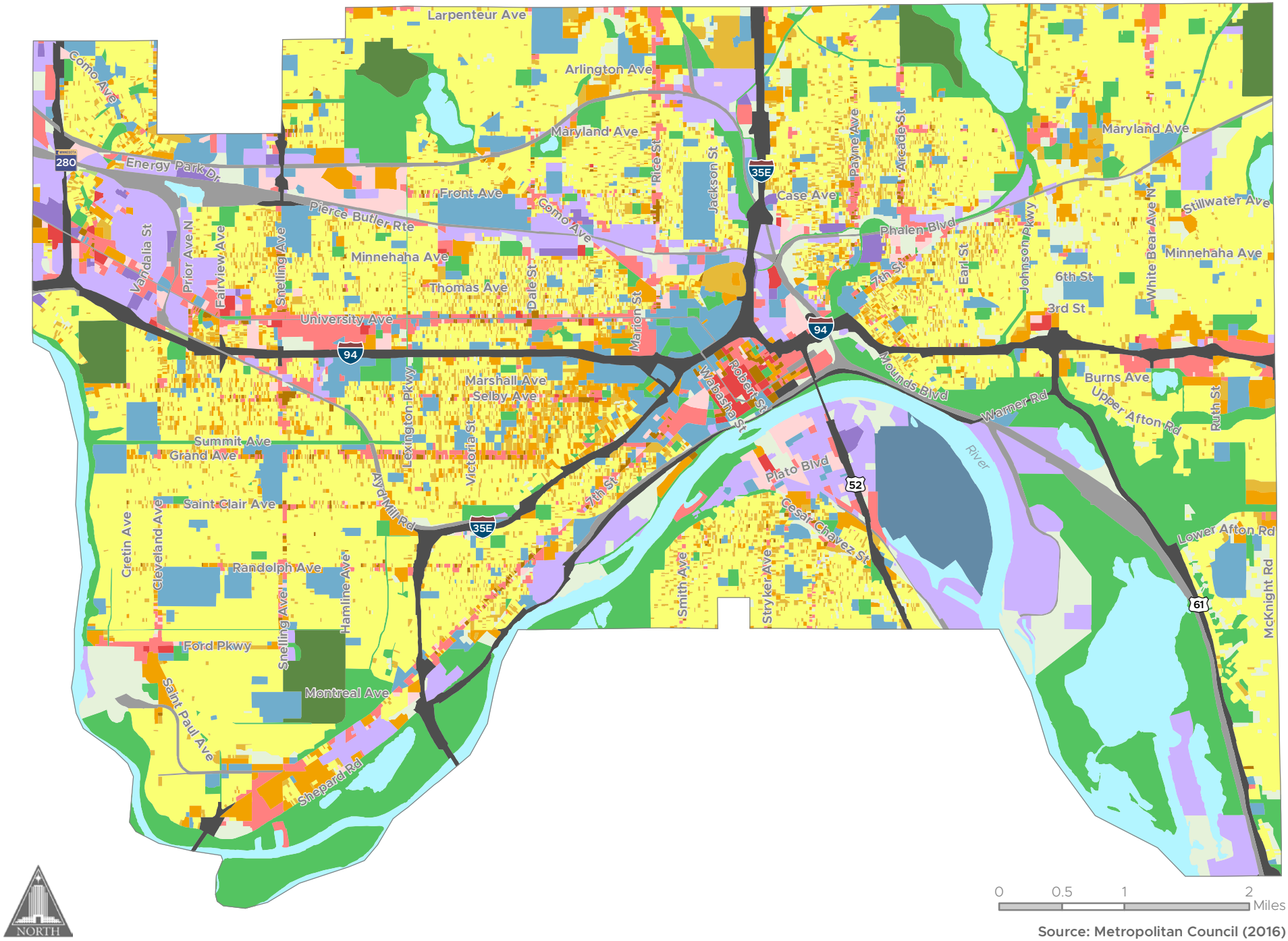
Appendix **A**

Appendix **B**

Appendix **C**

Note: These appendices provide supporting content for land use-related policies and satisfy associated Metropolitan Council requirements..

Map LU-1: Current Land Use



Source: Metropolitan Council (2016)

Abbreviated Land Use Descriptions from Chapter

General densities and land use mixes associated with each future land use can be found in Figure LU-3 and Figure LU-4.

Neighborhood Nodes

Neighborhood Nodes are compact, mixed-use areas that provide shops, services, neighborhood-scale civic and institutional uses, recreational facilities and employment close to residences. They may be neighborhood centers, transit station areas or urban villages, and have often developed adjacent to major intersections or at former street car stops. Neighborhood Nodes serve a neighborhood's daily needs, including access to food; reduce public infrastructure disparities; improve livability; and accommodate growth.

Downtown

Downtown is the highest-density mixed-use area of Saint Paul and a regional transportation hub, encompassing all the B4 and B5 Zoning Districts and most of Planning District 17.

Mixed-Use

Mixed-Use areas are primarily along thoroughfares well-served by transit. The main distinguishing characteristic is a balance of jobs and housing within walking distance of one another.

Urban Neighborhoods

Urban Neighborhoods are primarily residential areas with a range of housing types. Single-family homes and duplexes are most common, although multi-family housing predominates along arterial and collector streets, particularly those with transit. Multi-family housing, schools, neighborhood parks, religious institutions and cemeteries may also be scattered throughout Urban Neighborhoods. Limited neighborhood-serving commercial may also be present, typically at intersections of arterial and/or collector streets.

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Major Parks and Open Spaces

Major Parks and Open Space land use includes regional parks, City parks larger than 200 acres, City parks adjacent to the river and parkways.

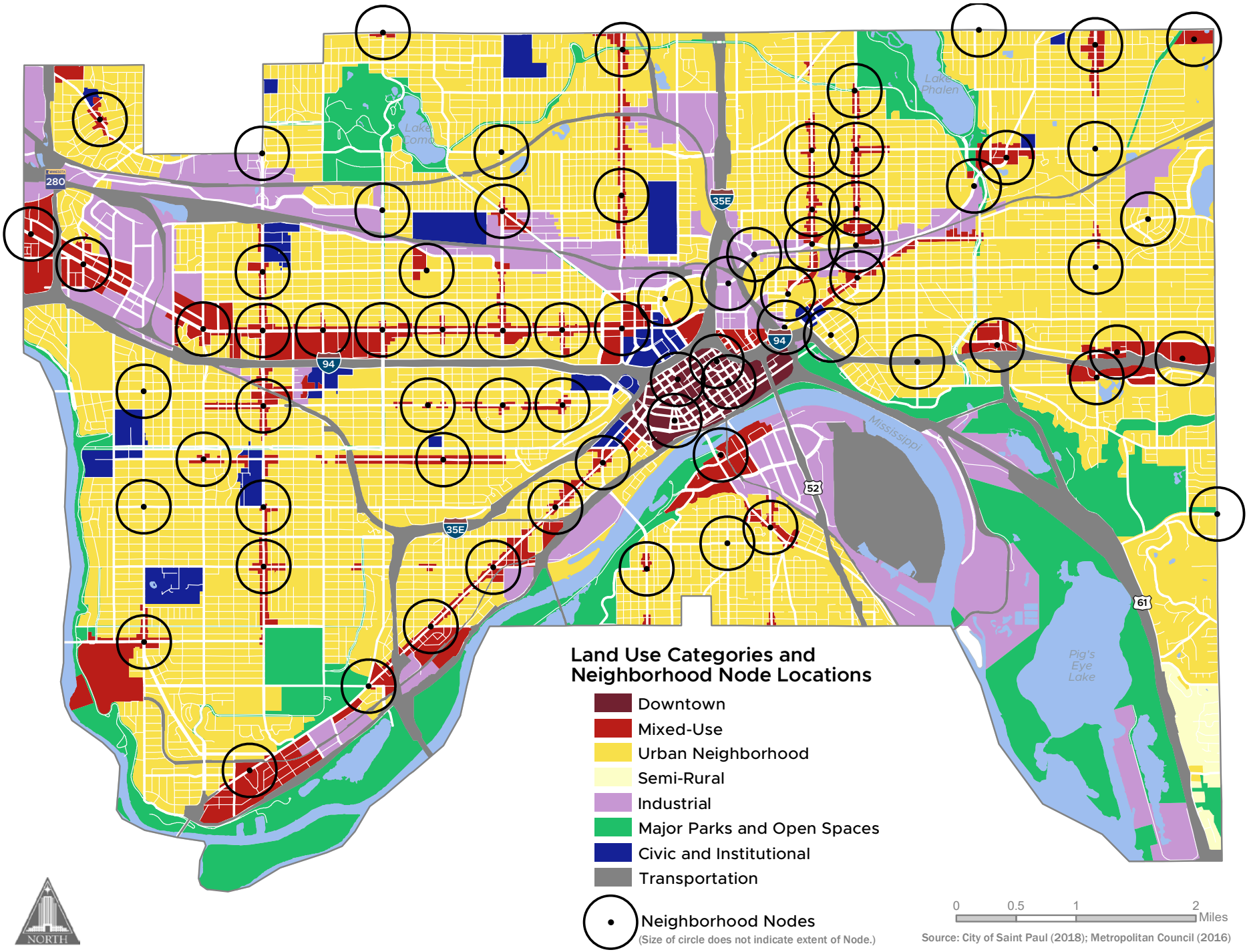
Civic and Institutional

Civic and Institutional land use includes buildings and open space for major institutional campuses.

Transportation

Saint Paul is a city with a rich infrastructure of multi-modal transportation systems. The Transportation land use category includes streets, walking and biking pathways, light rail and bus rapid transit routes, highways, railroads, the Mississippi River and the Saint Paul Downtown Airport.

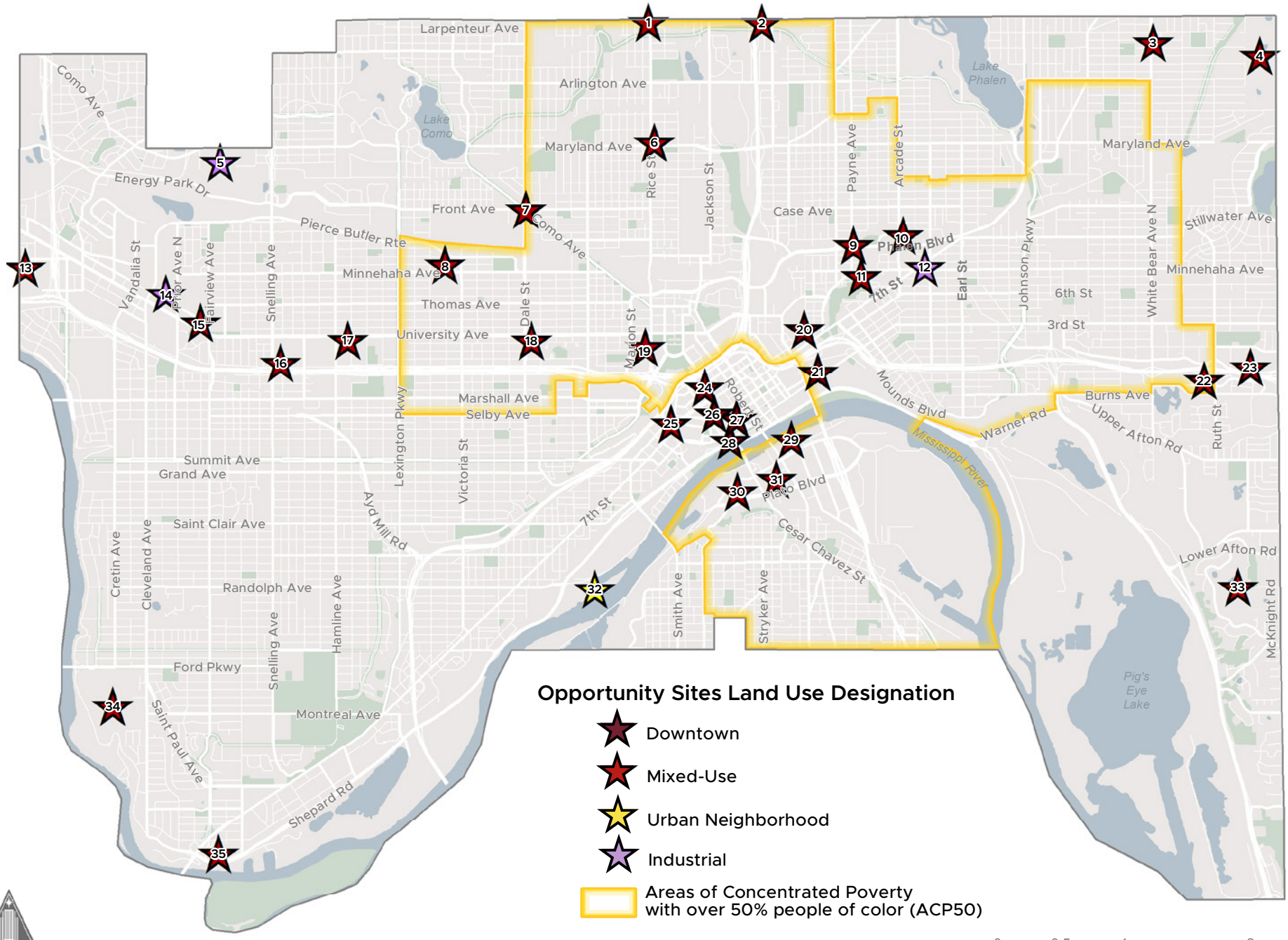
Map LU-2: 2040 Land Use



Source: City of Saint Paul (2018); Metropolitan Council (2016)

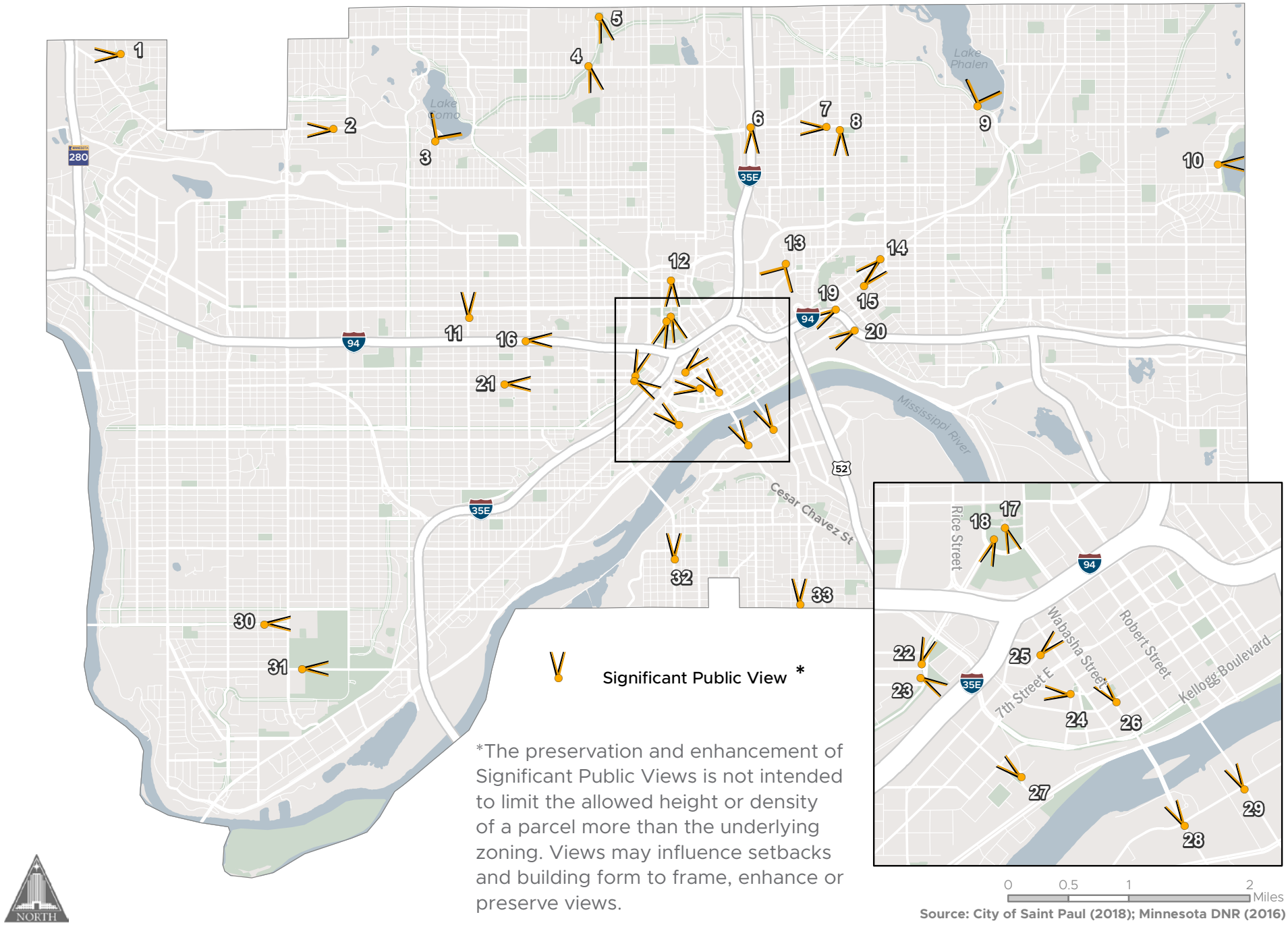

1, Rice-Larpenteur Site
2, 35E-Wheelock
3, Hillcrest Center - White Bear-Hoyt
4, Hillcrest Golf Course
5, State Fair Parking
6, Rice-Maryland
7, Como-Front-Dale
8 - Minnehaha Mall
9 - Payne-Phalen
10 - Payne-Arcade Strip Mall
11 - Hamms Brewery
12 - Beacon Bluff Site 7th-Minnehaha
13 - Wayerhaueser Site
14 - Amtrak Site
15 - Goodwill Parking University-Fairview
16 - Snelling-University Redevelopment
17 - Target Outlot
18 - Unidale Mall
19 - Sears Site
20 - 7th Street East
21 - Prince Street
22 - Suburban
23 - Sunray Center
24 - McNally Smith School Site
25 - Gateway Site
26 - Wabasha Court
27 - Central Station
28 - Ramsey-West Site
29 - West Side Flats 1
30 - West Side Flats 2
31 - West Side Flats 3
32 - Island Station
33 - Boys Totem Town
34 - Ford Site
35 - Johnson Brothers - Riverbend

Map LU-3: Opportunity Sites



Source: City of Saint Paul (2018); Minnesota DNR (2016)

Map LU-4: Significant Public Views



Source: City of Saint Paul (2018); Minnesota DNR (2016)

View 1: Hendon Avenue West

From Hendon Avenue, one of the highest points in St. Anthony Park, are views of the downtown Minneapolis skyline.

View 2: Como Avenue West

Looking west on Como Avenue west of Como Park provides a view of the downtown Minneapolis skyline.

View 3: Nagasaki Road at Lake Como

From Nagasaki Road there are several vistas of Lake Como and its far shore.

View 4: Wheelock Parkway Ridge

This section of Wheelock is on a ridge providing views of the city to the south. However, the wooded area is overgrown blocking views. It could use some selective trimming and removal of invasive species to open the landscape to people using the Grand Round.

View 5: Horseshoe Bend

Horseshoe Bend along Wheelock Parkway is a remnant of a landform marking the southern terminus of glaciers from the last ice age. This high point provides outstanding views to the east and south from Wheelock and the park at the top of the hill.

View 6: 35E South to Downtown

Coming into downtown from the north on 35E there is a prolonged view of the downtown skyline.

View 7: Maryland Avenue West

There is a wonderful long westward view of the Minneapolis skyline rising over the neighborhood west of the intersection of Payne Avenue and Maryland Avenue.

View 8: Payne Avenue South to River Valley

South of the intersection of Payne Avenue and Maryland Avenue there is a broad southward sweeping view of the Mississippi River Valley and the bluffs of the West Side. This view is very dramatic, particularly at certain times of the day and year. This change in topography and the view that comes with it really enhances the very special sense of place along a several-block stretch of Payne Avenue. This is a dramatic view for a city where so many places are characterized by their flatness in topography.

View 9: Wheelock Parkway at Lake Phalen

On Johnson Parkway, facing north between Phalen Boulevard and Wheelock Parkway East/East Lakeshore Drive there is a very wide and wonderful view of Lake Phalen. This view along this stretch of parkway is one of the more dramatic ones in the city.

View 10: Beaver Lake Park

This location from Edgewater Boulevard provides views overlooking Beaver Lake Park and the lake behind it.

View 11: Victoria Street Station

The Saint Paul Fellowship Church is a handsome local landmark, immediately visible from the proposed station location. It was identified in the Victoria Station Area Plan as a key vista from the LRT station. New development at the NW corner of Victoria and University should be set back to protect and enhance views of the church steeple.

View 12: North Capitol Street

A rarer Minnesota Capitol view from the north can be seen from North Capitol Street. Views from this street have been diminished over time from right of way vacations. This view is with the Capitol Area Architectural and Planning Board area.

View 13: Rivoli Street

The southern end of Rivoli Street provides one of the absolute best, yet least known, picture postcard views of the Saint Paul skyline. Ongoing work to define an overlook and/or green space here could ensure that this remarkably breathtaking view is preserved and available to the public for generations into the future.

View 14: East 7th Street

Longer views southeast to the downtown Saint Paul skyline are seen from the top of the hill on East 7th Street west of Margaret Street.

View 15: East 6th Street

Looking east on East 6th Street there is a great view of the façade of Sacred Heart Church where the street bends.

View 16: I-94 West to Downtown

Coming into downtown from the west on I-94 there is a view of the downtown skyline.

View 17: South from Capitol

This view was planned in 1903 by Cass Gilbert to be one of the main axial views from the Capitol (along with John Ireland Boulevard and Cedar Street). It is part of the longer view from Smith Avenue (across the High Bridge) to the Capitol, and was initially planned to terminate at Cleveland Circle. Unfortunately, in the 1950s, the Veterans Service Building was built north of what is now I-94, essentially obliterating the view beyond it.

View 18: John Ireland Boulevard to Cathedral

This view was planned in 1903 by Cass Gilbert to be one of the main axial views from the Capitol (along with the corridor noted in View 17 and Cedar Street). This view is intact today and unobstructed, now framed by the Transportation Building.

View 19: I-94 West to Downtown

Coming westward on I-94 around the bend between Dayton's Bluff and Mounds Park there is a view of Lafayette Bridge, the ballpark in Lowertown and the downtown skyline. This is the first view of a major skyline in Minnesota for those travelling west along that interstate.

View 20: Mounds Boulevard to Downtown

Mounds Boulevard provides beautiful day and night views of the downtown skyline as it sits in the Mississippi River Valley year-round. The Mounds Station Area Plan calls for wider pedestrian and bike facilities to allow people to properly enjoy this unparalleled view of the city.

View 21: Selby Avenue to Downtown

Eastward views from Selby Avenue east of Chatsworth Street frame the tops of some downtown buildings, particularly the First Bank Building and its iconic illuminated, flashing "1." For this reason, night views can be more impressive than the daytime as well as those during the winter months when the trees are bare.

View 22: John Ireland to Capitol

This view was planned in 1903 by Cass Gilbert to be one of the main axial views from the Capitol (along with the corridor noted in View 17 and Cedar Street). This view is intact today and unobstructed, now framed by the Transportation Building and Minnesota Historical Society.

View 23: Cathedral to Downtown

From the Cathedral steps, the skyline is visible over open space on top of the historic Selby streetcar tunnel. Retaining this area as open space is critical to maintaining the view, and understanding the relationship between downtown and the Selby terrace.

View 24: West 6th to Cathedal

This view up 6th Street is also identified in the Seven Corners Gateway Development Evaluation Tool as an important view to be preserved when the Cleveland Circle (Seven Corners Gateway) site is developed. The Seven Corners Gateway Development Evaluation Tool view corridor starts on the other side of the skyway, closer to W. 7th Street, but the impact of any development would essentially be the same. The skyway that originally connected the two St. Paul Companies office buildings was designed specifically to allow for views through it to the Cathedral. Because of the stature and lighting of the Cathedral, preservation of this view at night is also important.

View 25: West Exchange Street

This view looking east from Wabasha to Cedar along Exchange Street terminates at Central Presbyterian Church, listed on the National Register of Historic Places and designated as a local heritage preservation site. Also contributing to the importance of the view are the scale of Exchange Street, the framing of the view by buildings in the block between Wabasha and Cedar streets, and the character of the street as defined by the lush tree canopy on both sides of Exchange Street.

View 26: Cedar Avenue to Capitol

This view is the primary axial view established by Cass Gilbert in the 1880s in his plans for the State Capitol and Capitol Mall. Skyways should not be allowed to obstruct this view, and any new development along Cedar Street should be designed to frame the view. Land use, and building type, height and setback between Exchange Street and the Capitol are regulated by the Capitol Area Architectural and Planning Board. Because of the stature and lighting of the Capitol, preservation of this view at night is also important.

View 27: Chestnut Avenue to Cathedral

Chestnut Avenue is a major gateway into downtown and W. 7th Street neighborhood from Shepard Road and the Mississippi River. Future development on the United/ Children's Hospital campus at the base of the bluff at Smith Avenue should be designed to frame and/or enhance this view. Because of the stature and lighting of the Cathedral, preservation of this view at night is also important.

View 28: Wabasha Avenue

The view as one comes over the Wabasha Street bridge is of the downtown skyline and Mississippi River. The west side of Wabasha Street north of Fillmore Street is very likely to be developed in the next 20 years, so framing this view with the proper scale and height of buildings will be critical to maintaining and framing the view.

View 29: Robert Street

The view as one comes over the Robert Street bridge is of the downtown skyline and Mississippi River. The east side of Robert Street north of Fillmore Street is very likely to be developed in the next 20 years, so framing this view with the proper scale and height of buildings will be critical to maintain and framing the view.

View 30: Ford Parkway to Water Tower

As one climbs the hill moving westward on Ford Parkway the Water Tower comes into view. This is an important community landmark in one of the high points of the city. A historic building, it was designed by Cap Wigington, the first African-American municipal architect in the country.

View 31: Montreal Avenue to River Valley

Eastward views from Montreal Avenue provide glimpses of the river valley below in the long view.

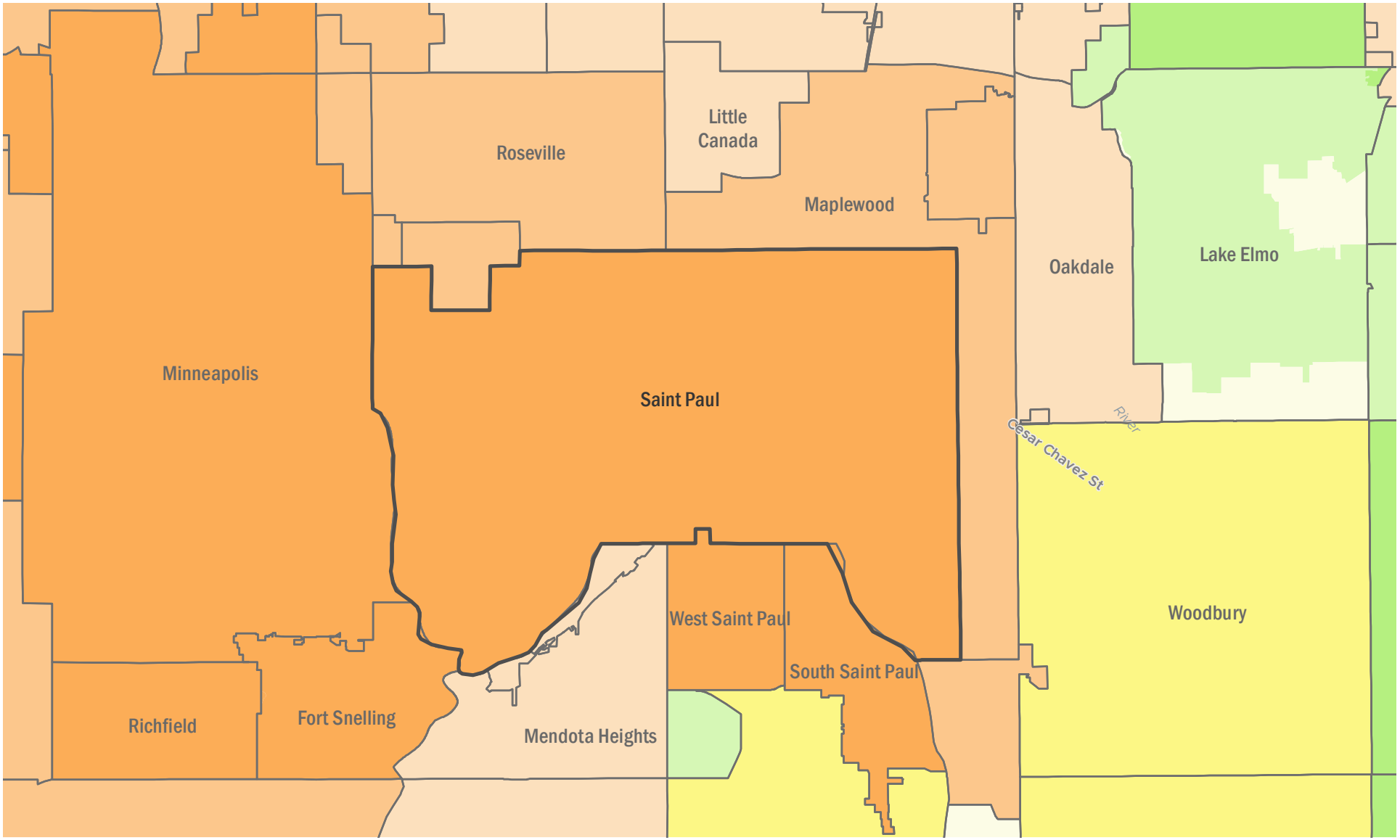
View 32: Smith Avenue to Capitol

This is the long view identified by Cass Gilbert in his 1880s plans for the Capitol building. It is also noted for preservation in the Seven Corners Gateway Development Evaluation Tool. With so much distance between the view point and the Capitol, it is unlikely that anything built along the corridor would obstruct this critical Capitol view. Because of the stature and lighting of the Capitol, preservation of this view at night is also important.

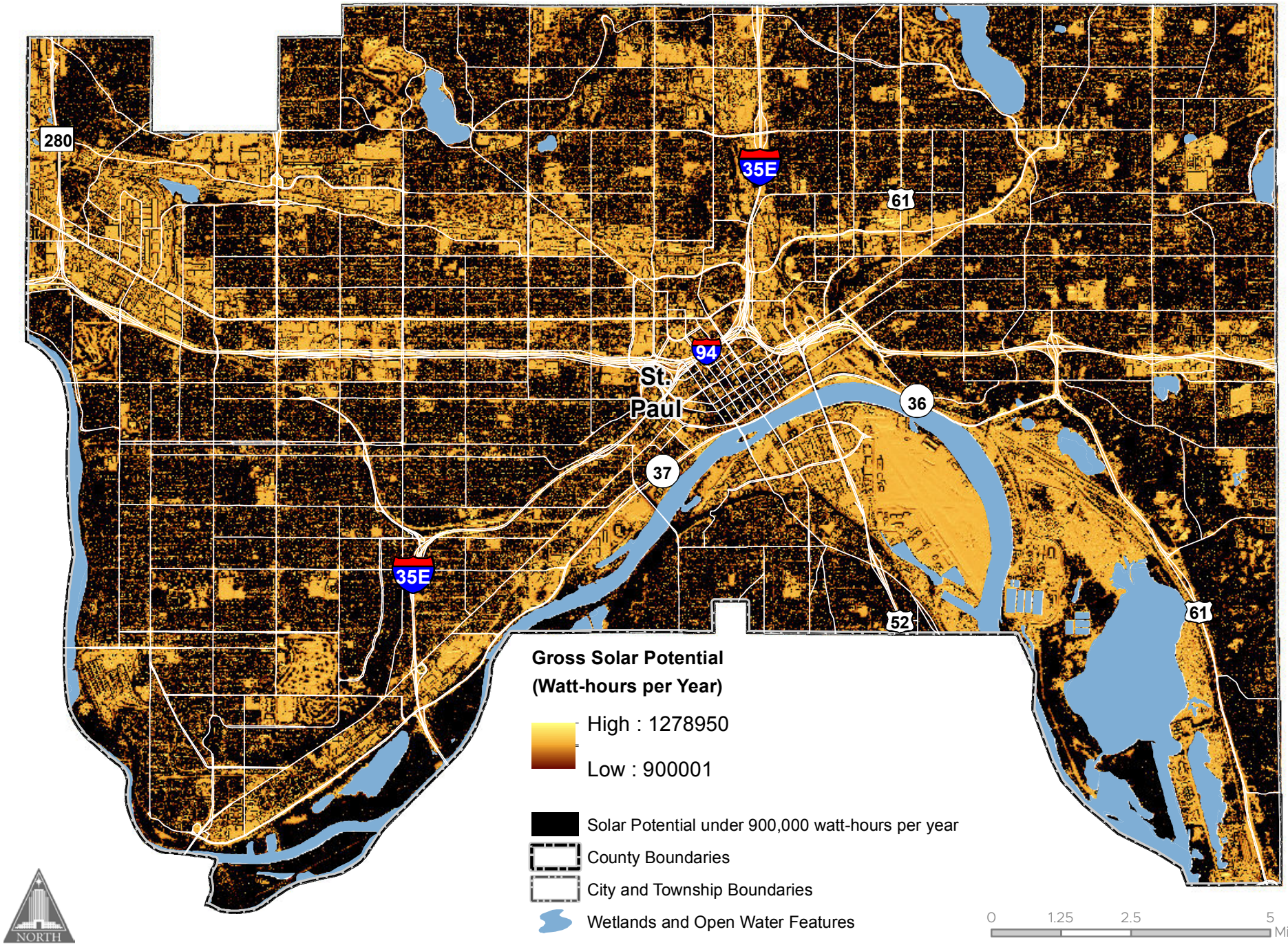
View 33: Robert Street to River Valley

Northward views from north of Annapolis Street along Robert Street glimpses of the river valley below in the long view.

Map LU-5: Thrive MSP 2040 Community Designation



Map LU-6: Gross Solar Collection Potential



Gross and Rooftop Solar Resource Calculations

Gross Potential (Mwh/yr)	Rooftop Potential (Mwh/yr)	Gross Generation Potential (Mwh/yr)**	Rooftop Generation Potential (Mwh/yr)**
66,151,161	10,968,464	6,615,116	1,096,846

*The gross solar potential and gross solar rooftop potential are expressed in megawatt hours per year (Mwh/yr), and these estimates are based on the solar map for your community. These values represent gross totals; in other words, they are not intended to demonstrate the amount of solar likely to develop within your community. Instead, the calculations estimate the total potential resource before removing areas unsuitable for solar development or factors related to solar energy efficiency.

The gross solar generation potential and the gross solar rooftop generation potential for your community are estimates of how much electricity could be generated using existing technology and assumptions on the efficiency of conversion. The conversion efficiency of 10% is based on benchmarking analyses for converting the Solar Suitability Map data to actual production, and solar industry standards used for site-level solar assessment.

**In general, a conservative assumption for panel generation is to use 10% efficiency for conversion of total insolation into electric generation. These solar resource calculations provide an approximation of each community's solar resource. This baseline information can provide the opportunity for a more extensive, community-specific analysis of solar development potential for both solar gardens and rooftop or accessory use installations. For most communities, the rooftop generation potential is equivalent to between 30% and 60% of the community's total electric energy consumption. The rooftop generation potential does not consider ownership, financial barriers, or building-specific structural limitations.

Source: Metropolitan Council Local Planning Handbook - Solar Resource Calculation

Appendix B: Tables Required by Metropolitan Council

Figure LU-1: Current Land Use Table (2016)

Land Use	Acres	Percent of Total
Agricultural	14	0.0%
Airport	531	1.5%
Golf Course	654	1.8%
Industrial and Utility	2,397	6.7%
Institutional	2,646	7.4%
Major Highway	1,322	3.7%
Major Railway	892	2.5%
Mixed Use Commercial	165	0.5%
Mixed Use Industrial	178	0.5%
Mixed Use Residential	222	0.6%
Multifamily	1,611	4.5%
Office	478	1.3%
Open Water	2,384	6.6%
Park, Recreational, or Preserve	4,588	12.8%
Retail and Other Commercial	1,383	3.9%
Single Family Attached	1,795	5.0%
Single Family Detached	13,067	36.4%
Undeveloped	1,555	4.3%
Total	35,882	

Figure LU-2: 2040 Land Use Table

Land Use	Acres	Percent of Total
Civic and Institutional	850	2.4%
Downtown	412	1.1%
Industrial	3,359	9.3%
Major Parks and Open Spaces	4,161	11.6%
Mixed-Use	2,746	7.6%
Semi-Rural	222	0.6%
Transportation	2,838	7.9%
Urban Neighborhood	18,773	52.2%
Water	2,577	7.2%
Total	35,962	

Figure LU-3: 2040 Employment Density and General Land Use Mix*

Land Use Type	Employment Densisty (FAR)**	Commercial/Office/ Residential
Downtown	3.0-8.0	20%/50%/30%
Mixed-Use	0.3-6.0	30%/30%/40%
Urban Neighborhood	0.3-2.0	5%/5%/90%
Industrial	0.0-6.0	80%/15%/5%

* Land use mix represents a generalized average for new development within the future land use type citywide. It is not a mandate or requirement for any individual development project.
**FAR applies to only employment generating land uses. Minimum FAR includes existing employment uses, such as commercial parking and outdoor storage.

Figure LU-4: 2040 Residential Land Use Density Ranges*

Land Use Type	Base Range	At Neighborhood Node
Downtown	50-300 units/acre	
Mixed-Use	20-75 units/acre	50-200 units/acre
Urban Neighborhood	7-30 units/acre	20-60 units/acre
Semi-Rural	2-15 units/acre	n/a
Citywide**	20 units/acre	

*Density ranges represent a target for new development averaged across the generalized future land use type. Individual projects may be less than or exceed targeted goals.
**Metropolitan Council's requirement for communities with the urban core designation. All of Saint Paul falls within this category.
Note: Saint Paul does not regulate maximum density by dwelling units per acre in most zoning districts today and intends to continue that practice. Density is most often regulated with floor-area-ratios.

Figure LU-5: Metropolitan Council's Regional Transit Density Targets*

Distance from transit	Transit type	Min (units/acre)**	Target (units/acre)***
1/2 Mile	Fixed rail transitway	50	75-150
	Bus rapid transitway	25	40-75
1/4 Mile	Arterial bus rapid transit	15	20-60
	High-frequency transit	10	15-60

*Average for new development in areas identified in a station area plan as appropriate for redevelopment.
**Minimum represents an average goal for new development.
***Individual projects may be less than or exceed targets.

Figure LU-6: General Housing Unit Development Estimates and Timeline Based on Opportunity Sites*

2040 Land Use	Density Range	Percent Housing**	2019-2020		2021-2030		2031-2040		TOTAL	
			Acres	Development Estimates	Acres	Development Estimates	Acres	Development Estimates	Acres	Development Estimates
Downtown	50-300 units/acre	30%	1.9	29-171	6.1	92-549	0.0	0	8.0	120-720
Mixed-Use	50-200 units/acre	40%	37.4	749-2,992	193.6	3,872-15,488	194.5	3,890-15,560	425.5	8,510-34,040
Urban Neighborhood	20-60 units/acre	90%	0.7	13-38	75.1	1,352-4,055	134.2	2,416-7,247	209.9	3,780-11,340
TOTAL			40.1	789-3,201	274.8	5,315-20,092	328.7	6,306-22,807	643.5	12,410-46,100

*** The purpose of this table is to satisfy Metropolitan Council's requirements to illustrate development capacity for population growth estimates. The figures in this table are estimated based on many broad assumptions. Timing of redevelopment is a best guess based on current market dynamics and planning activities. Redevelopment sites included in the analysis were generally larger than one acre. Given the location and size of Opportunity Sites, density ranges are assumed to be in the "At Neighborhood Node" range identified in Figure LU-4. This information is likely to be less accurate over time as market conditions and redevelopment sites change. Some sites may have an approved master plan which guides development and will provides a more accurate development estimate. Industrial land use is not included in the table because it is not a location for substantial housing production.**
****From Figure LU-3**

Appendix C

Figure LU-7: Summary of Policies Organized by Goal

Goal	Policies
1. Economic and population growth focused around transit.	LU-1; LU-22; LU-35; LU-55
2. Neighborhood Nodes that support daily needs within walking distance.	LU-23; LU-30; LU-31; LU-32; LU-33
3. Equitably-distributed community amenities, access to employment and housing choice.	LU-3; LU-16; LU-19; LU-20; LU-34; LU-36; LU-37; LU-42
4. Strong connections to the Mississippi River, parks and trails.	LU-21; LU-40; LU-41; LU-49
5. Infrastructure for all ages and abilities.	LU-38; LU-39; LU-54
6. Equitable, adaptable and sustainable land use and development patterns and processes.	LU-5; LU-7; LU-8; LU-12; LU-13; LU-14; LU-15; LU-17; LU-27; LU-29; LU-43; LU-47; LU-48; LU-50; LU-51; LU-52; LU-56; LU-60; LU-61
7. Quality full-time jobs and livable wages.	LU-2; LU-6; LU-24; LU-26; LU-44; LU-45; LU-46; LU-53; LU-57; LU-58; LU-59
8. People-centered urban design.	LU-4; LU-9; LU-10; LU-11; LU-18; LU-25; LU-28

TRANSPORTATION

Introduction

The Transportation Chapter guides the creation of a safe, equitable and well-maintained multi-modal transportation system in Saint Paul that supports the needs of all users, enhances vitality, and sets the stage for infill development to accommodate the city's projected growth. The transportation system relies primarily on streets, which connect people to jobs, homes, shopping, education and recreation, but also includes water (the Mississippi River), trail and rail. It is important to have a consistent long-term vision that will gradually, strategically and consistently remake the city's transportation system so that it works better for all users.

Since opportunities to remake streets are infrequent due to limited funds and a high volume of needs (the life expectancy of Saint Paul streets is approximately 40 years, and many go 90 years or more before being reconstructed), the chapter establishes clear priorities for project selection. Projects will prioritize the safety of people walking and biking, equity, and improved access to economic opportunity. Maintenance is also established as a "first cut" for project selection, because regular maintenance is much more cost-effective in the long run and allows for a greater number of projects to be accomplished over time. Further, the ability to obtain outside funding will be considered.

Priorities are also established for the design of our rights-of-way, with the needs of pedestrians and bicyclists placed at the top. This includes aggressively evaluating and pursuing "road diets" that improve pedestrian safety while having a minimal impact on traffic flow. Considering pedestrians first will ensure a safe transportation system that works well for everyone. Additional supporting materials for Transportation Chapter policies can be found in the appendices beginning of page 79.

The following goals guide the Transportation chapter:

1. Investment that reflects the City's priorities.
2. Safety and accessibility for all users.
3. A transportation system that supports access to employment and economic opportunity.
4. True transportation choice throughout the city, with a shift from single-occupant vehicles toward other modes.
5. Sustainable and equitable maintenance models.
6. Environmentally-sustainable design.
7. Functional and attractive Parkways.
8. A system that responds to technology and shapes its implementation.

Goal 1: Investment that reflects the City's priorities.

Policy T-1. Prioritize safety and racial and social equity benefits in project selection, followed by support of quality full-time, living wage jobs – both through business support and connection of residents to job centers. Priorities will also be informed by specific modal plans, such as the Bicycle Plan or the forthcoming Pedestrian Plan (See Sidebar and Maps T-1, T-3, T-5, and T-6).

Policy T-2. Use surface condition and mulitmodal usage rates to prioritize transportation projects and ensure well-maintained infrasctructure that benefits the most people (See Maps T-10 and T-12).

Policy T-3. Design rights-of-way per the following modal hierarchy:

1. Pedestrians, with a focus on safety
2. Bicyclists, with a focus on safety
3. Transit
4. Other vehicles

Policy T-4. Significantly reduce carbon emissions from motor vehicles by developing infrastucture that supports vehicle electrification.

Goal 2: Safety and accessibility for all users.

Policy T-5. Adopt and implement a "Vision Zero" program with the long-term goal of achieving zero traffic fatalities and severe injuries. Components of the program should include street design improvements and behavioral safety improvements, such as reducing driver impairment, inattentiveness and speed through education and enforcement.

Policy T-6. Implement "road diets" for undivided four-lane roads to convert them to two or three lanes, where feasible, in order to prioritize pedestrian safety (See Map T-2).

Policy T-7. Implement intersection safety improvements such as traffic signal confirmation lights, pedestrian countdown timers, and leading pedestrian signal intervals. Reduce pedestrian roadway exposure via median refuge islands, curb extensions, narrowed travel lanes and other elements designed to lower motor vehicle speeds.

Policy T-8. Reduce speed limits where it will improve safety, and work with State and Ramsey County governments to overcome obstacles to implementing this policy.

Policy T-9. Design the rights-of-way for all users, including older people, children and those with mobility constraints, as guided by the Street Design Manual and Safe Routes to School Plans, and by thoughtfully addressing streetscape issues such as curb cut design, level sidewalks, lighting, accessibility to/from bus stops, and the presence of benches and buffers between sidewalks and streets.

Policy T-10. Design sidewalks, trails and transit stops for personal safety (real and perceived), including by providing lighting and boulevards.

Policy T-11. Support driver, bicyclist and pedestrian education to improve mutual awareness and safety.

Policy T-12. Minimize and consolidate driveway curb cuts as redevelopment opportunities arise for redevelopment sites that have sufficient existing access or can reasonably be accessed via side streets, alleys or shared driveways, especially in areas with anticipated high pedestrian activity or with adjacent planned bikeways.

Policy T-13. When street design changes involve the potential loss of on-street parking spaces, prioritize safety for all transportation modes. Explore mitigation of lost spaces where feasible and practical.

Economic and Social Impacts of Motor Vehicle Crashes

Transportation safety is worth the investment. According to a National Highway Traffic Safety Administration (NHTSA) study, in 2010 there were 32,999 people killed, 3.9 million people injured, and 24 million vehicles damaged in motor vehicle crashes in the United States. The economic costs of these crashes totaled $242 billion, which represents the equivalent of nearly $784 for each person living in the United States, and 1.6 percent of the $14.96 trillion real U.S. Gross Domestic Product for 2010. These costs represent the tangible losses that result from motor vehicle crashes. However, in cases of serious injury or death, such costs fail to capture the rather intangible value of lost quality-of-life that results from these injuries. When quality of life valuations are considered, the total value of societal harm from motor vehicle crashes in 2010 was $836 billion. In 2015, the number of traffic fatalities was 35,091, a 6% increase over 2010. In Saint Paul in 2018, there were 265 vehicular crashes involving pedestrians and bicyclists alone, including 4 fatalities and 208 injuries (140 requiring hospital attention).

Roadway Safety Plan

In January 2016, MnDOT released its Roadway Safety Plan for Saint Paul, a consultant-produced document with City of Saint Paul staff participation that identified the greatest opportunities to reduce the number of severe crashes based on the City's crash data, street contexts and strategies with demonstrated effectiveness in mitigating the types of severe crashes experienced here. The study recommended focusing on certain arterial streets, employing the following types of safety projects:

- improving pedestrian safety (primarily at intersections);
- reducing the frequency of red light violations at traffic signals; and
- improving the safety characteristics of undivided streets.
- The specific safety improvement strategies could include:
  - road diet (convert to three lanes);
  - access management;
  - traffic signal confirmation lights;
  - pedestrian/bicycle countdown timers;
  - pedestrian/bicycle leading pedestrian intervals
  - pedestrian/bicycle curb extensions; and
  - pedestrian/bicycle median refuge islands.

Goal 3: A transportation system that supports access to employment and to economic opportunity.

Policy T-14. Work with agency partners and the Saint Paul Port Authority to implement and support freight transportation improvements in and near industrial areas of regional economic importance, particularly West Midway, the Great Northern corridor, river industrial areas, and the portion of West Side Flats east of Robert Street, to improve safety and connections to the regional transportation network (See Map T-15).

Policy T-15. Explore freight delivery solutions that resolve loading/unloading conflicts in congested areas to support businesses and provide safety to pedestrians, bicyclists and other road users. Solutions could include delivery coordination and timing, and use of smaller freight delivery vehicles.

Policy T-16. Support financing for above-standard streetscapes in business areas.

Policy T-17. Use pricing to manage parking demand and improve parking efficiency in areas with high demand and short supply.

Policy T-18. Work with agency partners, including the Minnesota Department of Transportation and the Metropolitan Airports Commission to maintain a regional aviation system that balances commercial demand and capacity while being compatible with the community, particularly in terms of safety and noise. See also Policy LU-12. (Figure T-17).

Policy T-19. Work with the Saint Paul Port Authority to maintain the Mississippi River as a working river through land use policy and support for jobs in river-related industries.

Policy T-20. Prioritize investments in infrastructure that improve river commerce and conditions necessary to maintain and grow regional logistics and commodities hubs connecting, river, rail, truck modes.

Goal 4: True transportation choice throughout the city.

Policy T-21. Reduce vehicle miles traveled (VMT) by 40% by 2040 by improving transportation options beyond single-occupant vehicles.

Policy T-22. Shift mode share towards walking, biking, public transit, carpooling, ridesharing and carsharing in order to reduce the need for car ownership.

Policy T-23. Formulate responses to traffic issues identified through traffic studies based on desired, rather than current, mode share.

Policy T-24. Implement the Bicycle Plan to make bicycling safe and comfortable throughout the city, and to increase bicycling mode share.

Policy T-25. Implement the Pedestrian Plan to make walking safe and comfortable throughout the city, increase pedestrian mode sharefor short trips, and increase physical activity in people's daily routines. Until the Pedestrian Plan is adopted, focus pedestrian infrastructure improvements in areas with acute pedestrian safety hazards, with existing or anticipated high pedestrian activity, and/or in racially concentrated areas of poverty.

Policy T-26. Provide sidewalks throughout the city, generally on both sides of the street, except potentially in portions of Highwood as directed via other officially-adopted City plans (See Map T-1).

Policy T-27. Improve public transit mode share and support quality public transit in all parts of the city through strategic establishment of transit-supportive land use intensity and design, increased traffic signal optimization for transit, working with transit providers to improve their service offerings and supporting transit facilities (See Maps T-5, T-6 and T-8).

Policy T-28. Facilitate intermodal trips at mobility hubs (where walking, biking, public transit, ridesharing and carsharing are intentionally designed to connect) by providing enhanced security, lighting, information, shelter, placemaking, comfort and convenience.

Policy T-29. Expand commuter options with Travel Demand Management (TDM) and support of carpooling facilities.

1. Require a TDM Plan for all large developments and large employers.
2. Create incentives, employer programs and parking policies, especially in downtown but throughout the city, that encourage and accelerate use of walking, biking, transit and carshare.
3. Support the work of other agencies, organizations and the private sector to market and support transit, carshare, rideshare, carpooling, biking, walking, flexible work hours and telecommuting.
4. Consider options to enforce and improve implementation of TDM Plans.

Policy T-30. Design holistically for all modes, especially pedestrians and bicycles, in any bridge reconstruction or maintenance project such as for bridges (or lids) over interstate highways or the Mississippi River. Ensure that the project scope incorporates adjacent intersections as necessary.

Policy T-31. Establish (or re-establish) the right-of-way grid with block lengths of 300 to 600 feet as redevelopment occurs on large sites in order to increase neighborhood connectivity and accommodate pedestrian-oriented, higher-density development.

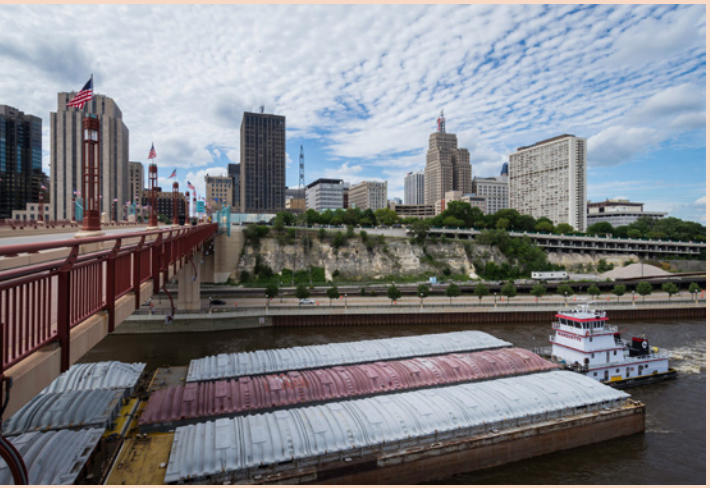
Policy T-32. Accommodate access to community events and around construction projects by all mode users, including by working with Metro Transit to provide additional transit service, providing sufficient bicycle parking, generally avoiding the closure of bicycle lanes and sidewalks and providing detours for all modes.

Policy T-33. Improve pedestrian and recreational connections to the Mississippi River.

Policy T-34. Promote safe walking and bicycling to school by supporting Safe Routes to School efforts and investing in sidewalk connectivity and crossing enhancements near schools.

Working River

Barges move millions of tons of raw materials on the Mississippi River every year in one of the most efficient and environmentally responsible ways possible. Saint Paul's four river terminals are important economic generators, hosting 34 companies that employ over 1,000 people. (St. Paul Port Authority 2017)



Goal 5: Sustainable and equitable maintenance models.

Policy T-35. Pursue fiscally- and environmentally-sustainable models for equitably maintaining transportation infrastructure in Saint Paul, including for right-of-way maintenance, bridges, sidewalks, trails and alley snowplowing.

Policy T-36. Consider the full long-term infrastructure costs when allocating maintenance funding compared to reconstruction funding.

Policy T-37. Maintain roadway pavements in pursuit of achieving a Pavment Condition Index (PCI) of 70 on all City-owned streets. (See Map T-10).

Policy T-38. Reduce the number of heavy vehicle trips on local streets through measures such as consolidation, coordination and route designation/planning, in order to reduce maintenance costs.

Goal 6: Environmentally-sustainable design.

Policy T-39. Seek opportunities to improve the environmental sustainability of rights-of-way in the city, such as through shared, stacked-function green infrastructure (SSGI) planting trees to reduce the urban heat island effect and reducing the amount of land devoted to parking.

Policy T-40. Lessen the negative impacts of interstate highways by supporting design interventions, such as "land bridges" and landscaping and liner buildings on new bridges, that improve connectivity, hide the road and/or reduce pollution.

Goal 7: Functional and attractive Parkways.

Policy T-41. Maximize space for recreation and landscaping uses within Parkway rights-of-way, and prioritize recreation and landscaping in Parkway design in order to maintain a park-like feel, particularly on the Grand Round.

Goal 8: A system that responds to technology and shapes its implementation.

Policy T-42. Ensure that new technologies, such as automated vehicles, further the City's transportation and land use priorities.

Policy T-43. Ensure that right-of-way design and management accounts for changing vehicle technologies and forms of use, such as automated vehicles, car-sharing, curbside pickup and delivery, ride-hailing and ride-sharing.

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Appendix **A**

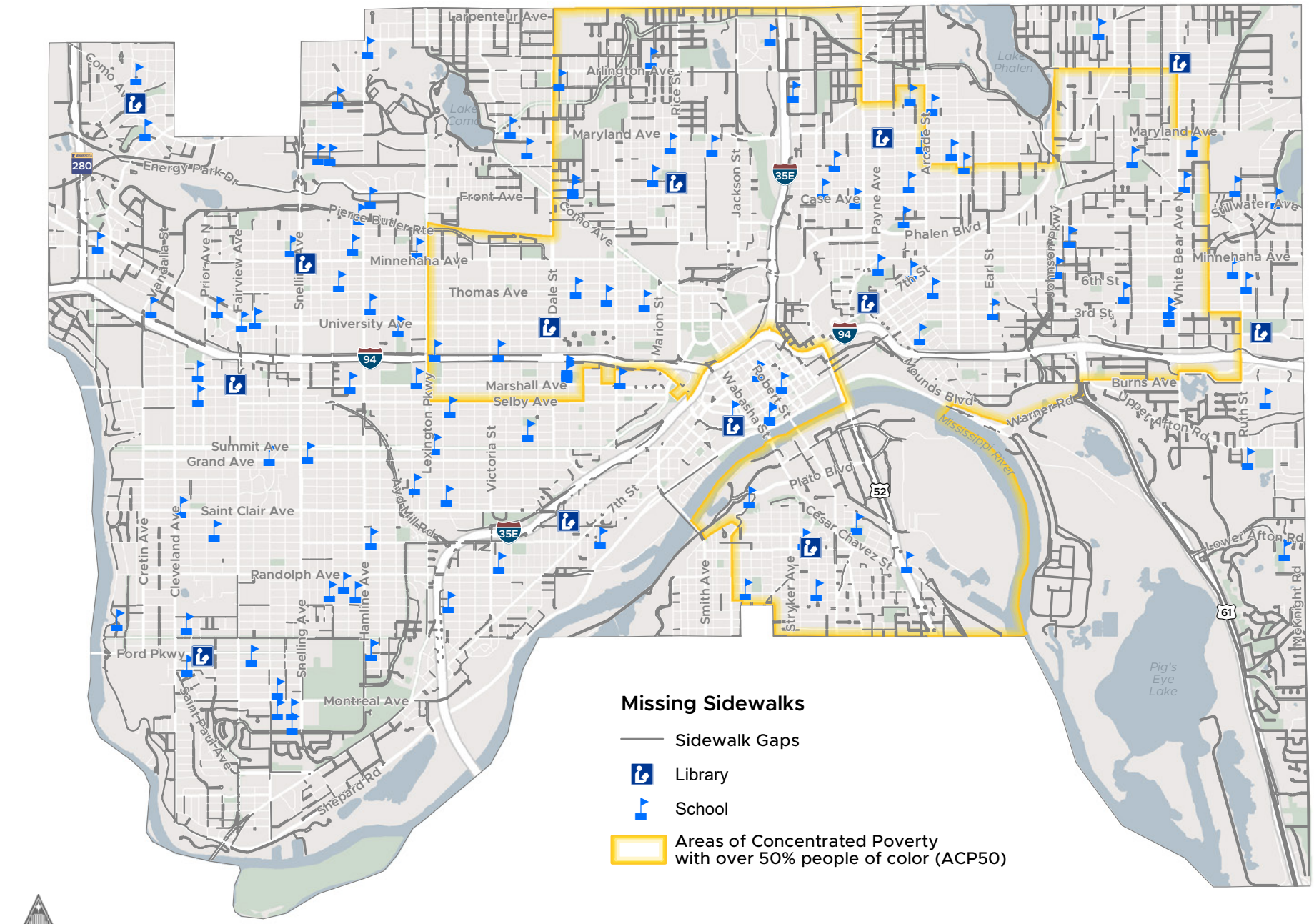
Notes: These appendices provide supporting content for transportation-related policies and satisfy associated Metropolitan Council requirements..
ACP50 data for all from Metropolitan Council via MN Geospatial Commons, from annual release (2/5/2018). Other data as noted.

Appendix B

Appendix C

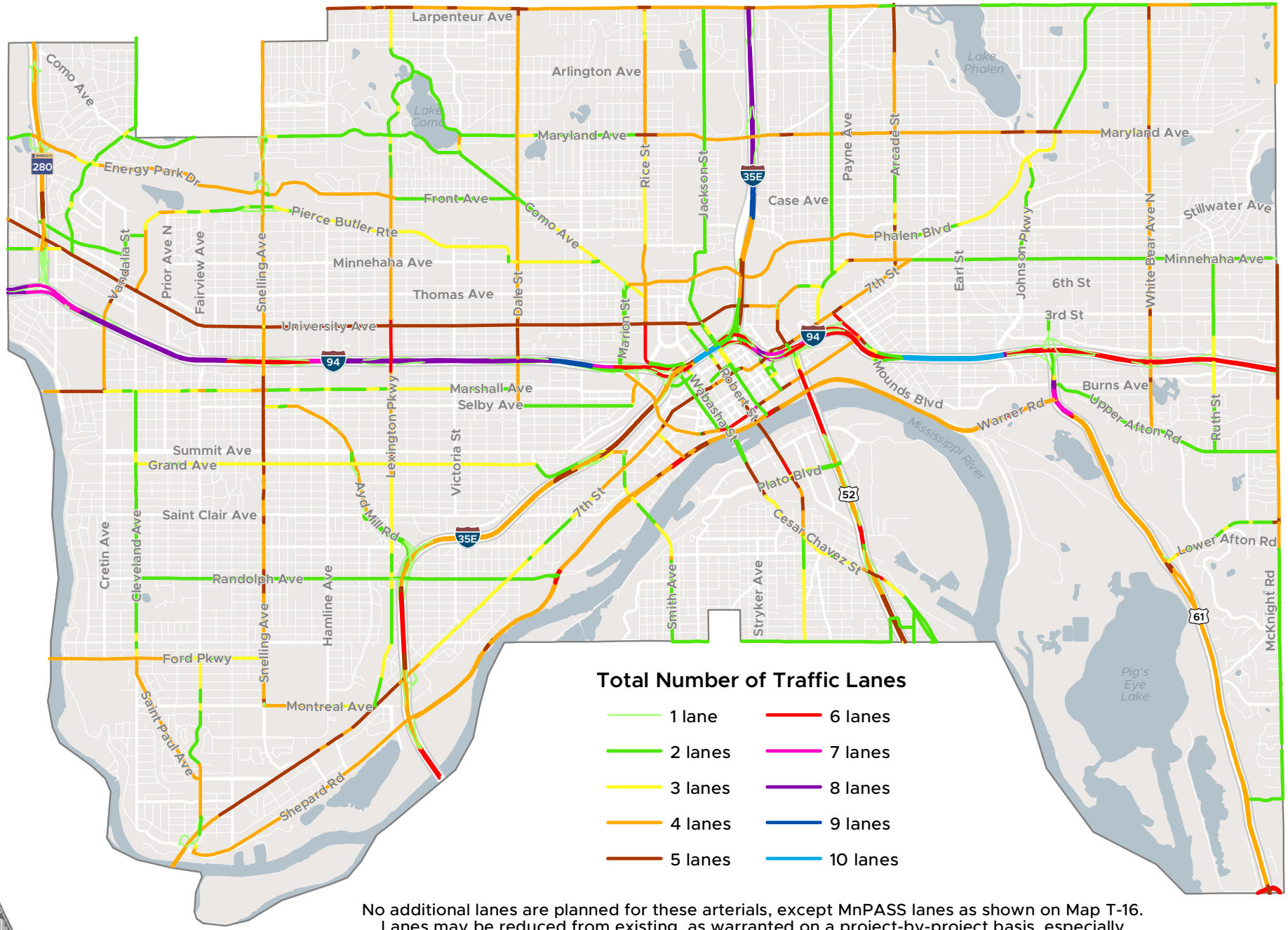
Appendix D

Map T-1: Missing Sidewalks



Sources: City of Saint Paul (2017); Minnesota Department of Education (2017); Metropolitan Council (2018)

Map T-2: Number of Traffic Lanes on Arterials



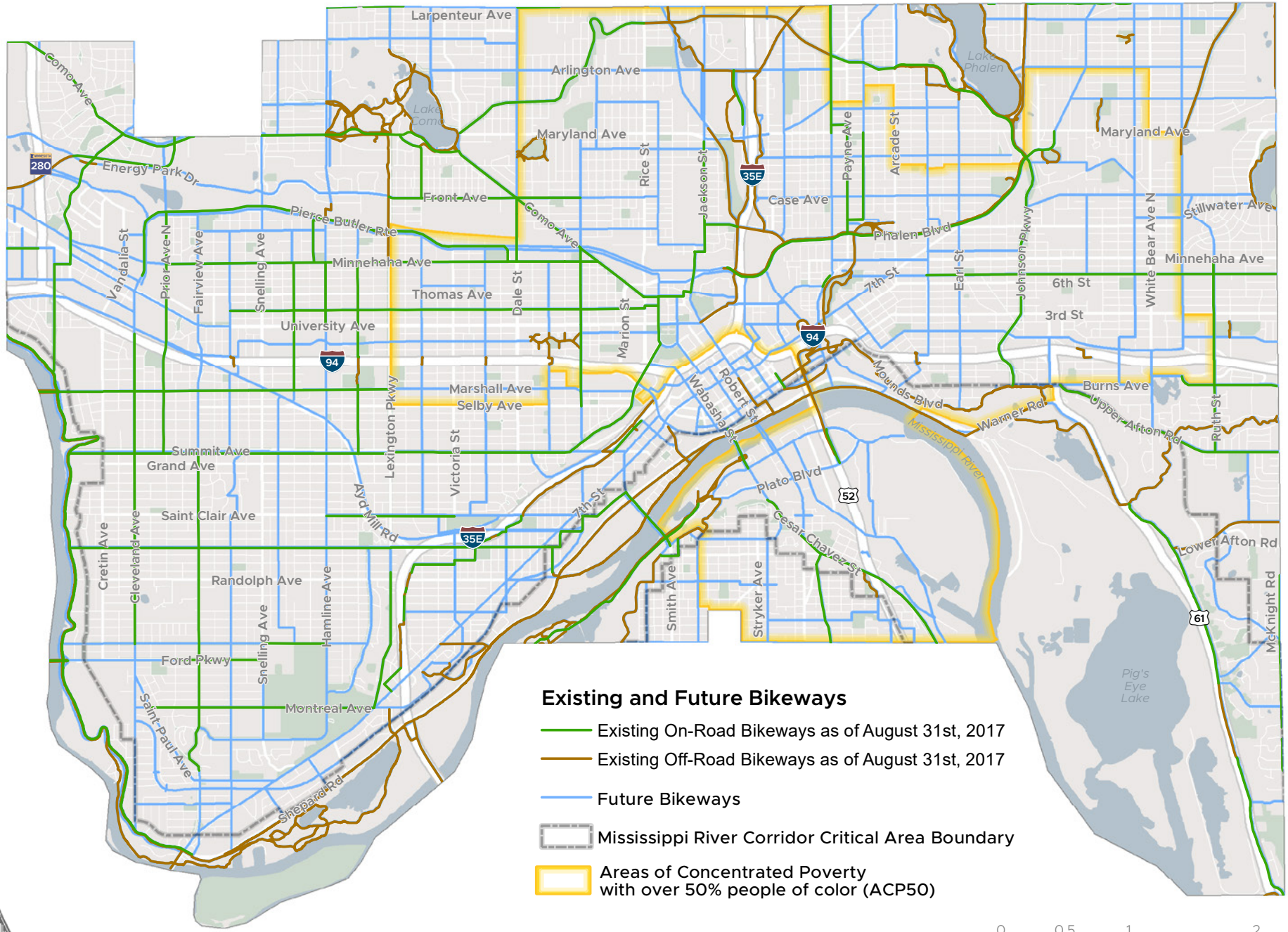
No additional lanes are planned for these arterials, except MnPASS lanes as shown on Map T-16. Lanes may be reduced from existing, as warranted on a project-by-project basis, especially on undivided roads with 4 or more lanes.

NORTH

0 0.5 1 2 Miles

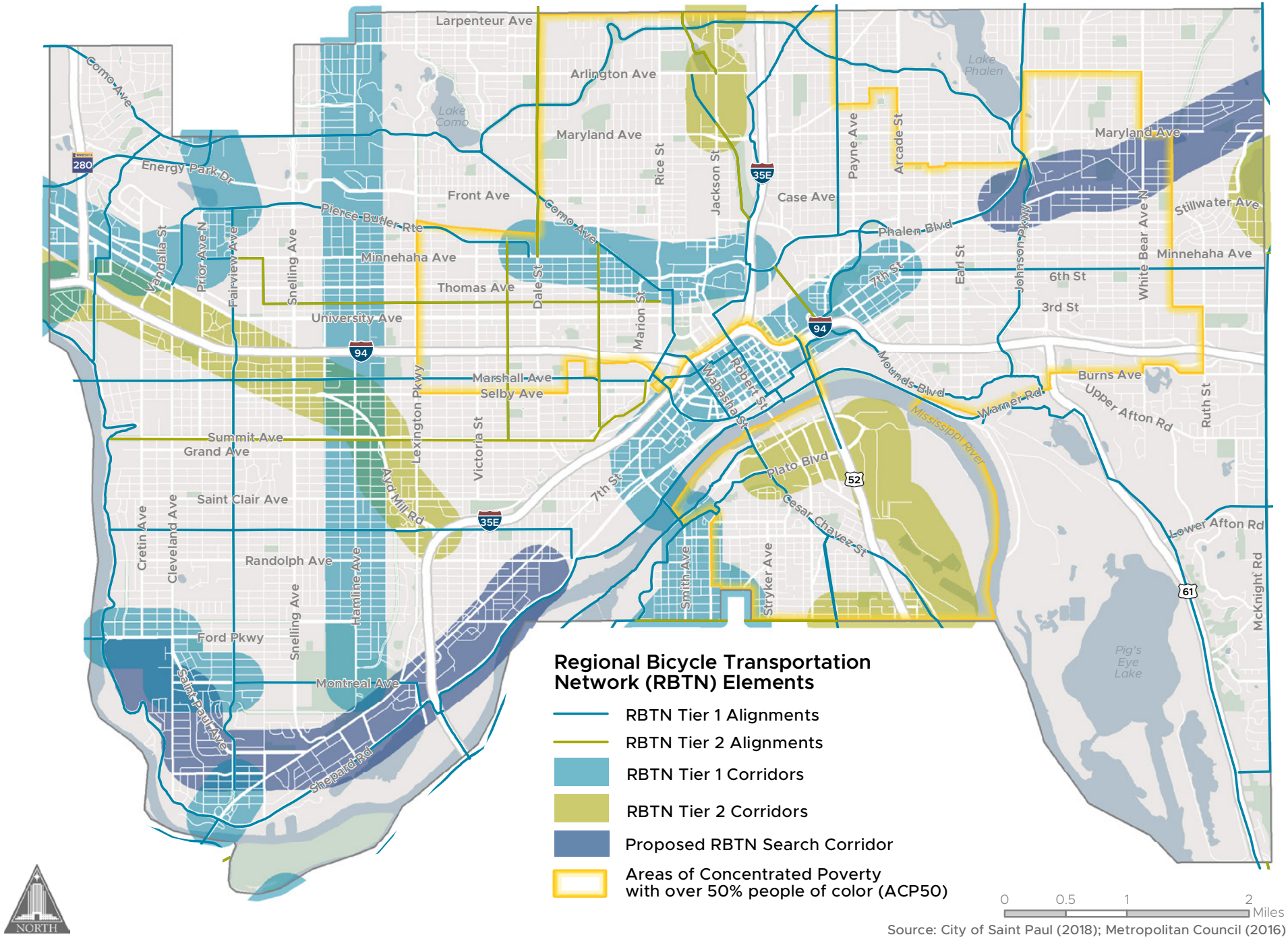
Sources: City of Saint Paul (2018); Metropolitan Council (2018)

Map T-3: Bikeways



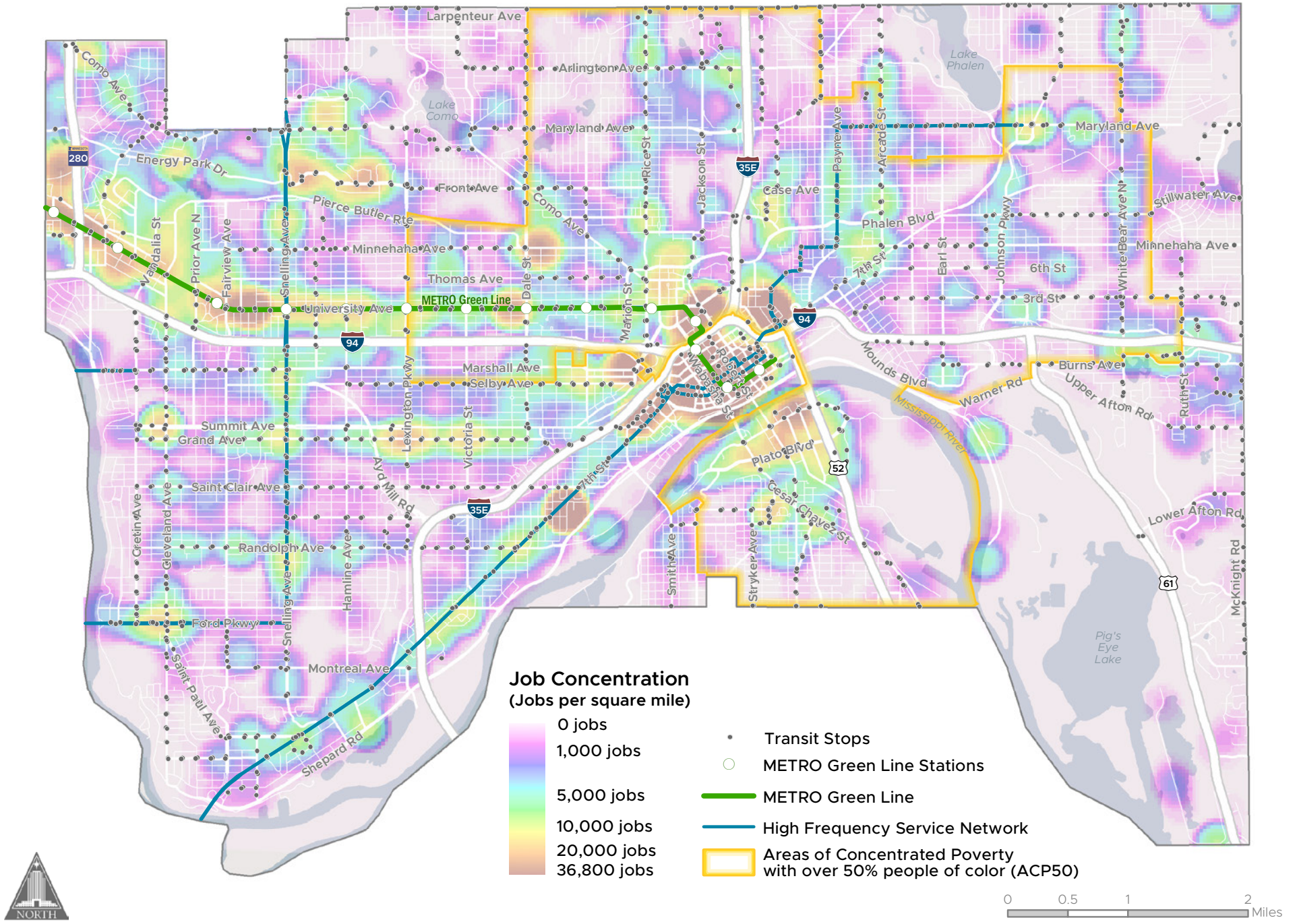
Sources: City of Saint Paul (2018); Metrpolitan Council (2018)

Map T-4: Regional Bicycle Transportation Network



Source: City of Saint Paul (2018); Metropolitan Council (2016)

Map T-5: Job Concentrations and Transit



Job Concentration
(Jobs per square mile)

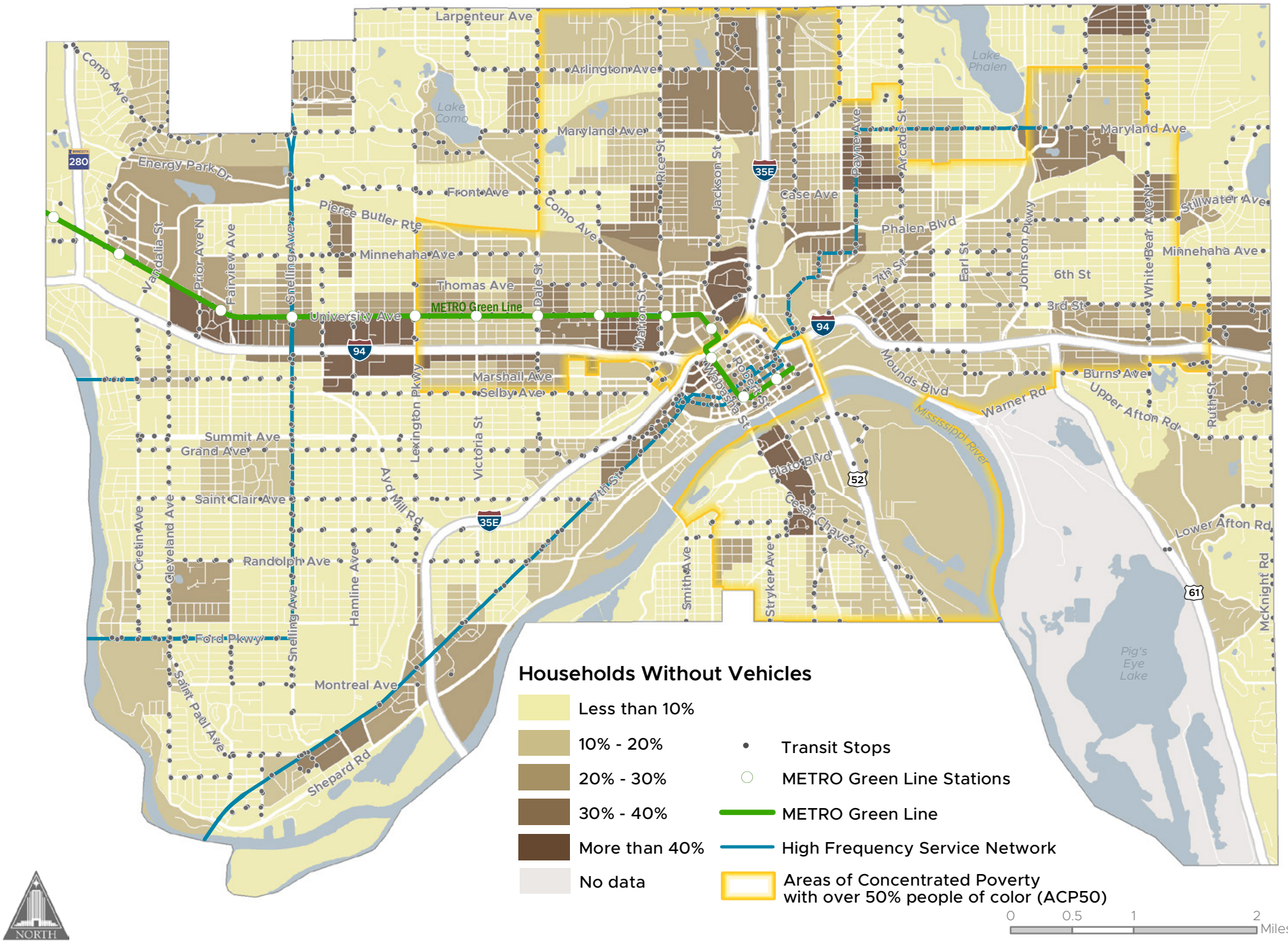
- 0 jobs
- 1,000 jobs
- 5,000 jobs
- 10,000 jobs
- 20,000 jobs
- 36,800 jobs

- Transit Stops
- METRO Green Line Stations
- METRO Green Line
- High Frequency Service Network
- Areas of Concentrated Poverty with over 50% people of color (ACP50)

0 0.5 1 2 Miles

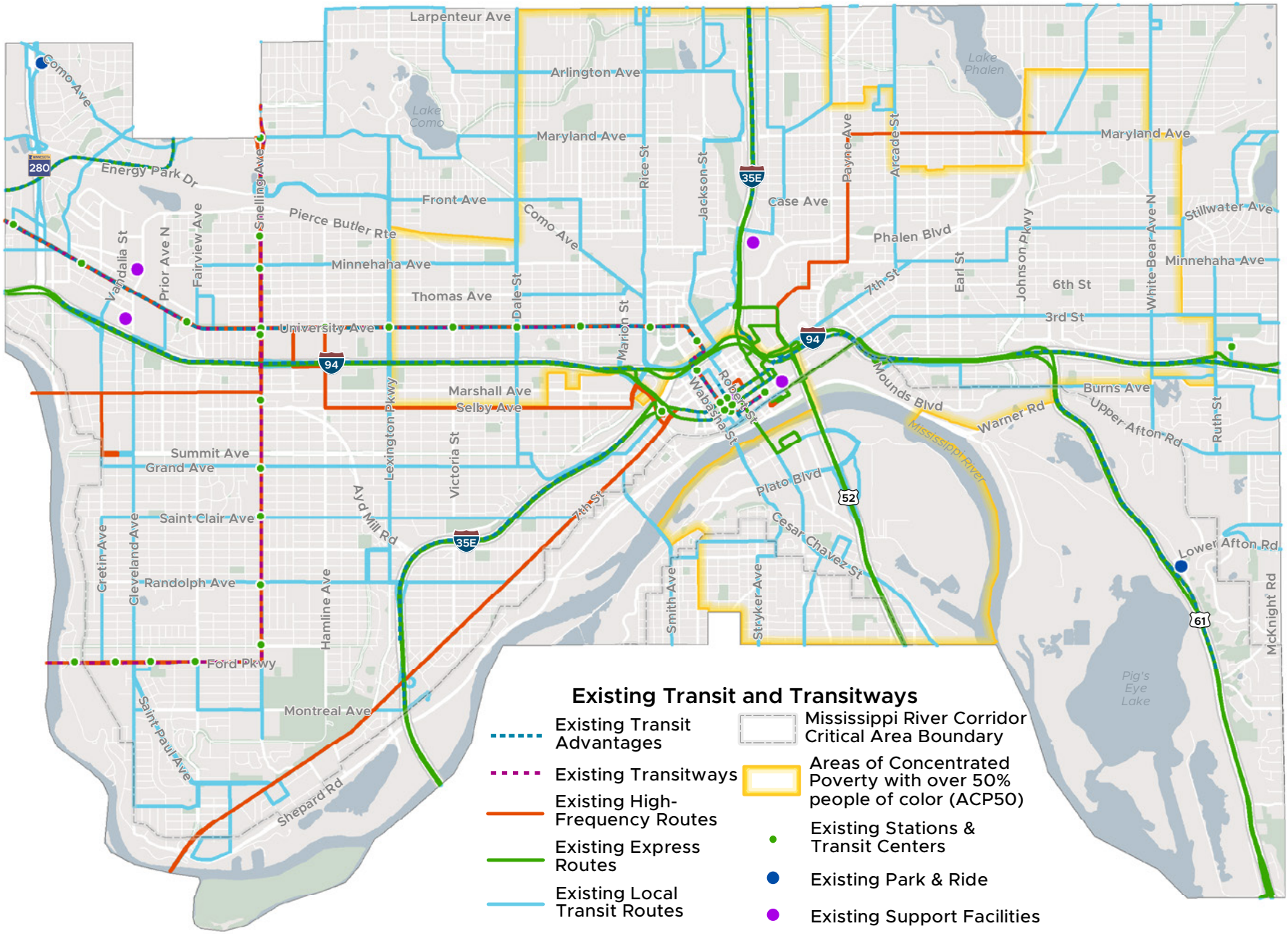
Sources: State of Minnesota (2015), Metropolitan Council (2018)

Map T-6: Households without Vehicles and Transit Network



Sources: U.S. Census Bureau (ACS 2012-2016), Metropolitan Council (2017-2018)

Map T-7: Existing Transit and Transitways



Existing Transit and Transitways

- Existing Transit Advantages
- Existing Transitways
- Existing High-Frequency Routes
- Existing Express Routes
- Existing Local Transit Routes
- Mississippi River Corridor Critical Area Boundary
- Areas of Concentrated Poverty with over 50% people of color (ACP50)
- Existing Stations & Transit Centers
- Existing Park & Ride
- Existing Support Facilities

0 0.5 1 2 Miles

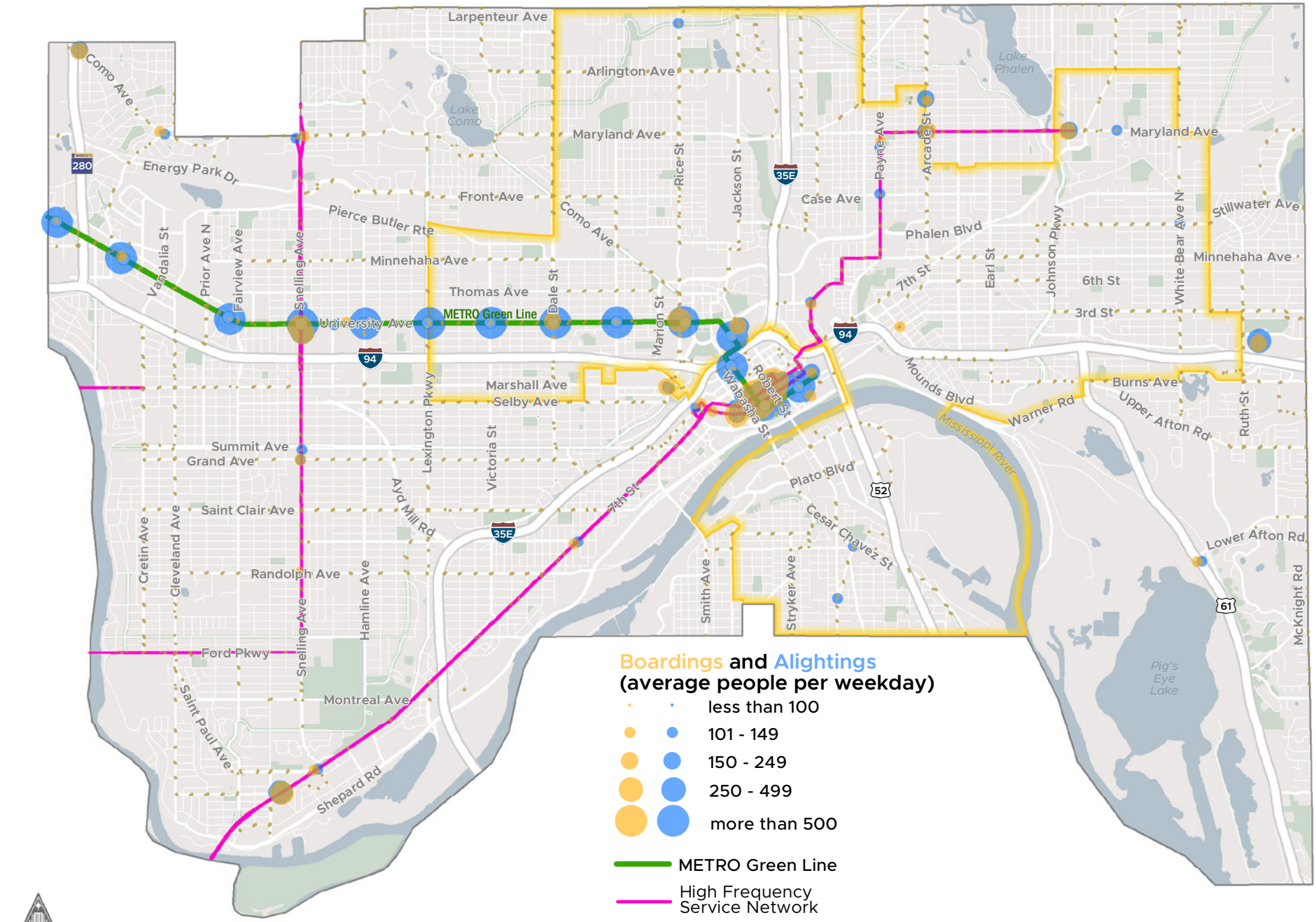
Source: City of Saint Paul (2016); Metropolitan Council (2017-2018)

Map T-8: Planned/Potential Transitways and High-Frequency Transit

* Lake St - Marshall Ave Corridor is a Potential Current Revenue Project

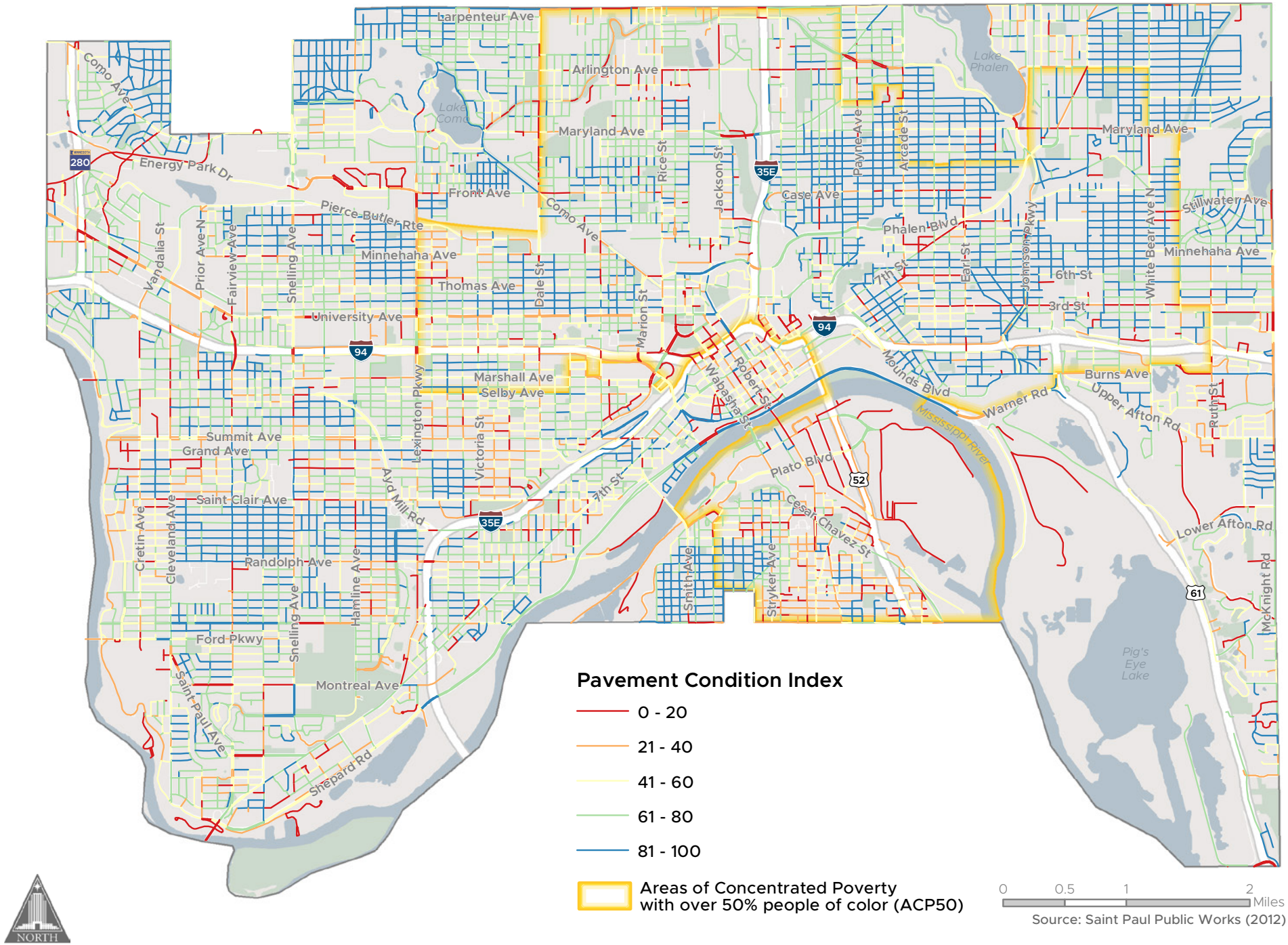
Source: City of Saint Paul (2018); Metropolitan Council (2017-2018)

Map T-9: Boardings and Alightings on Transit System

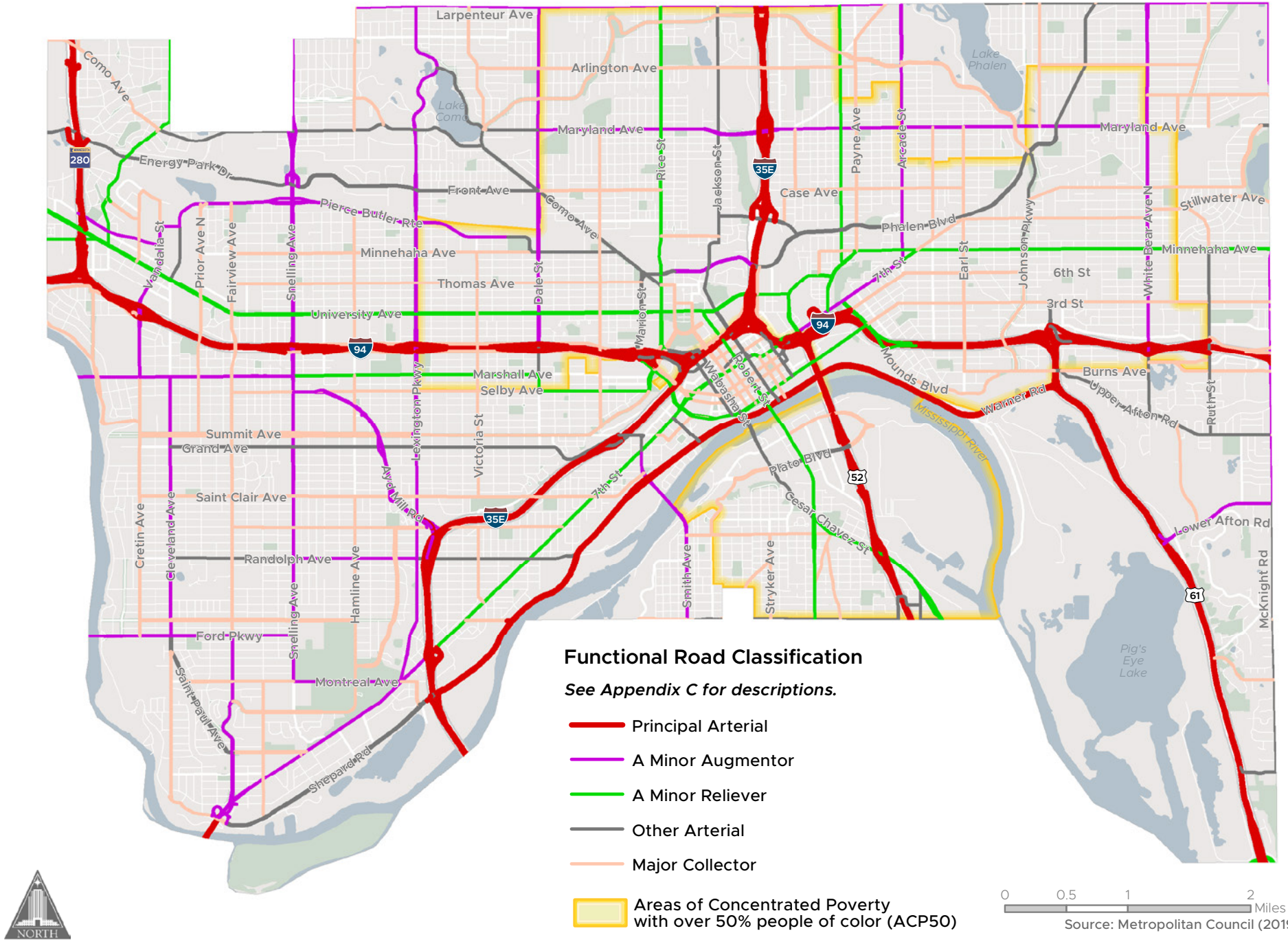


Source: City of Saint Paul (2016); Metropolitan Council (2017-2018)

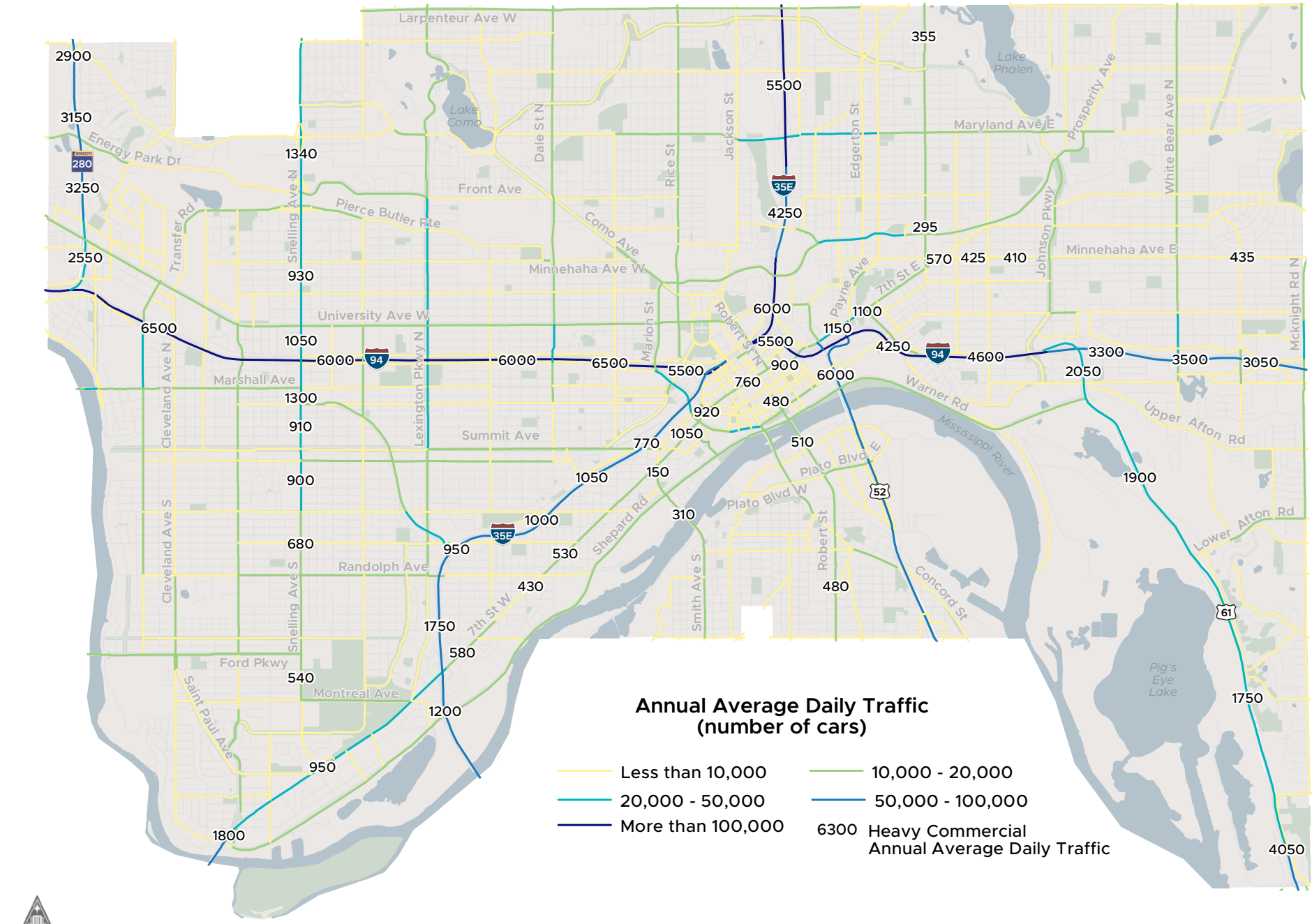
Map T-10: Pavement Condition Index



Map T-11: Functional Road Classification*



Map T-12: Annual Average Daily Traffic (ADT)



Annual Average Daily Traffic (number of cars)

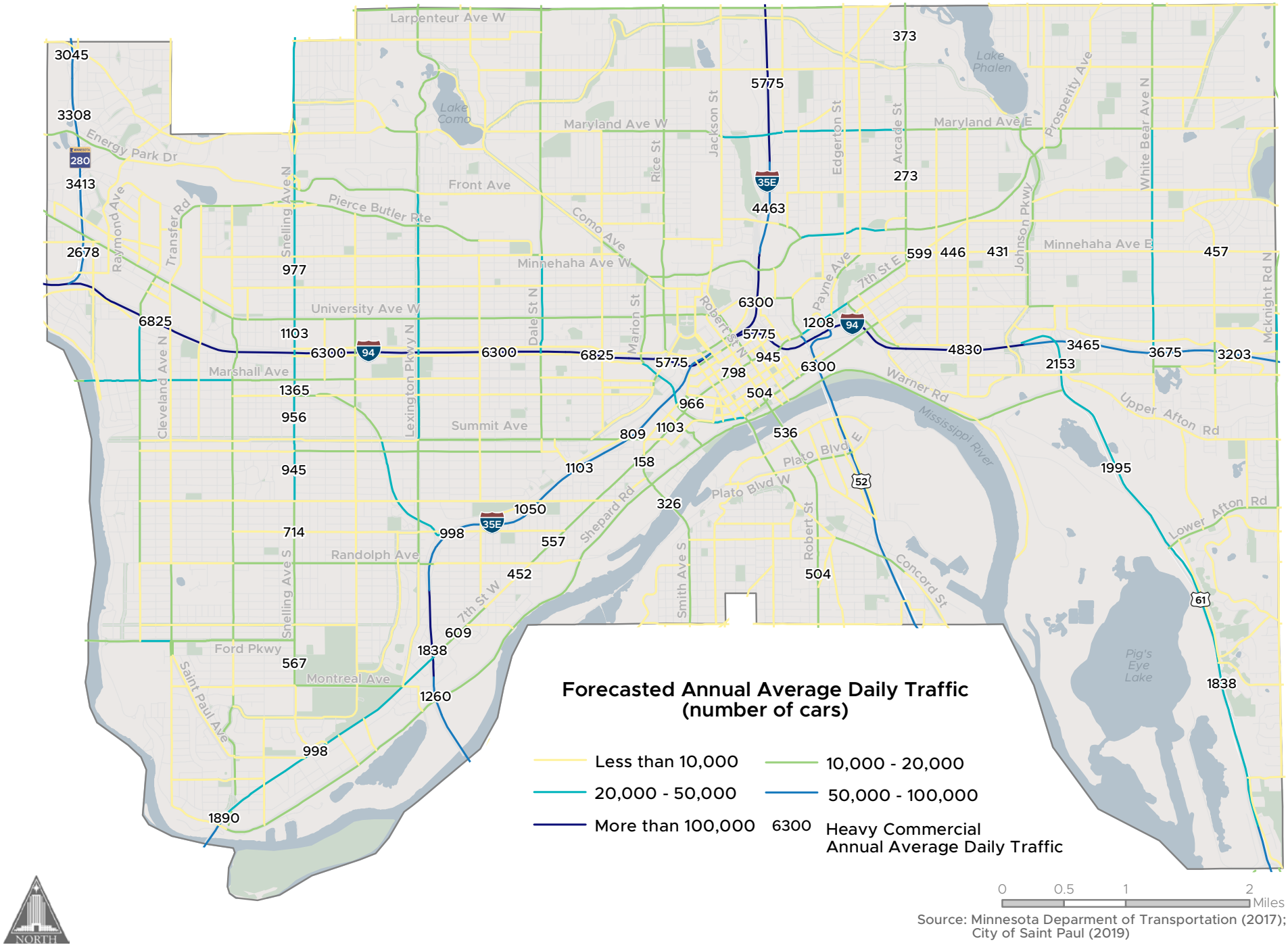
- Less than 10,000
- 10,000 - 20,000
- 20,000 - 50,000
- 50,000 - 100,000
- More than 100,000
- 6300 Heavy Commercial Annual Average Daily Traffic

NORTH

0 0.5 1 2 Miles

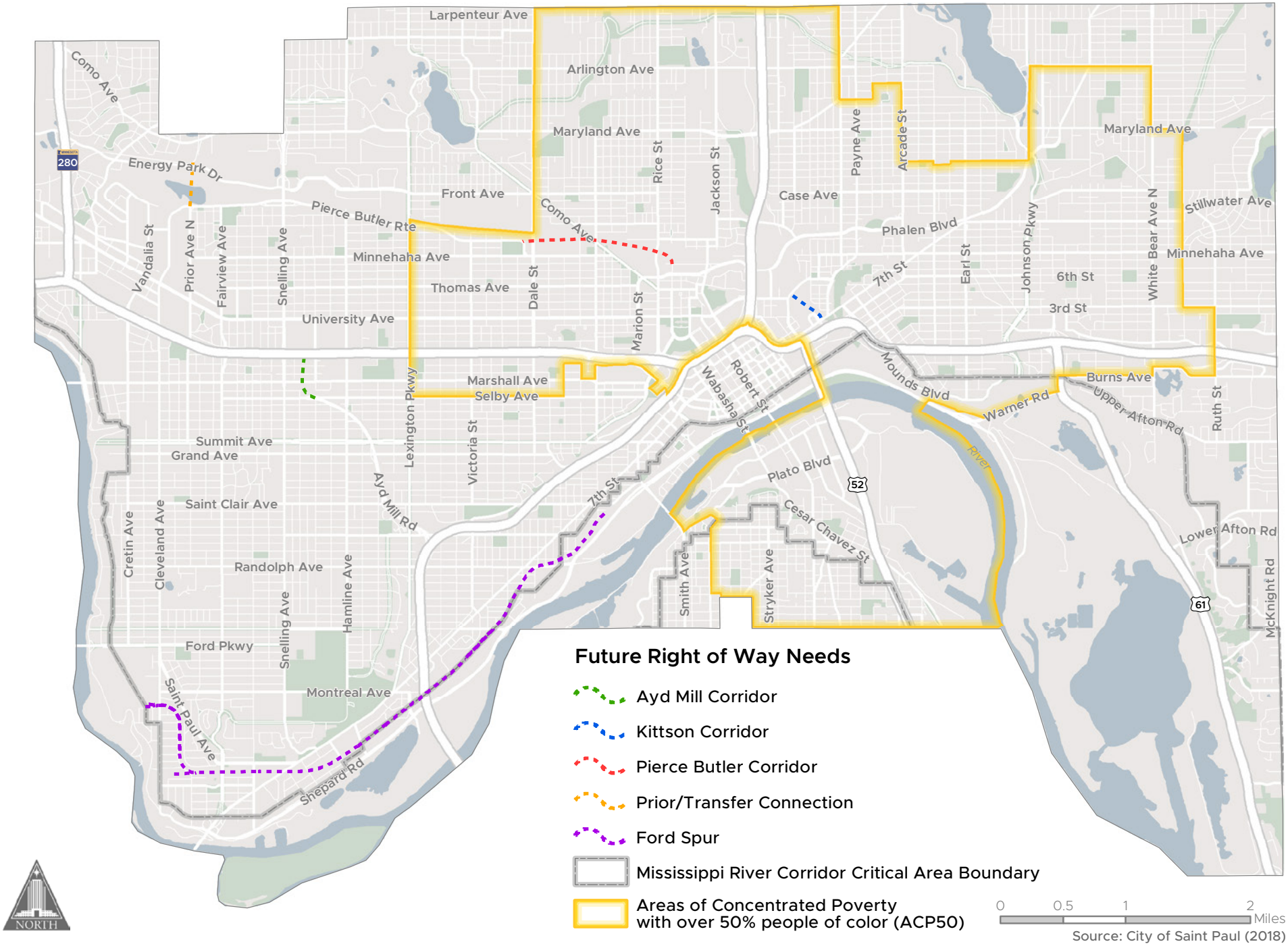
Source: Minnesota Department of Transportation (2017)

Map T-13: Forecasted 2040 Average Daily Traffic (ADT)

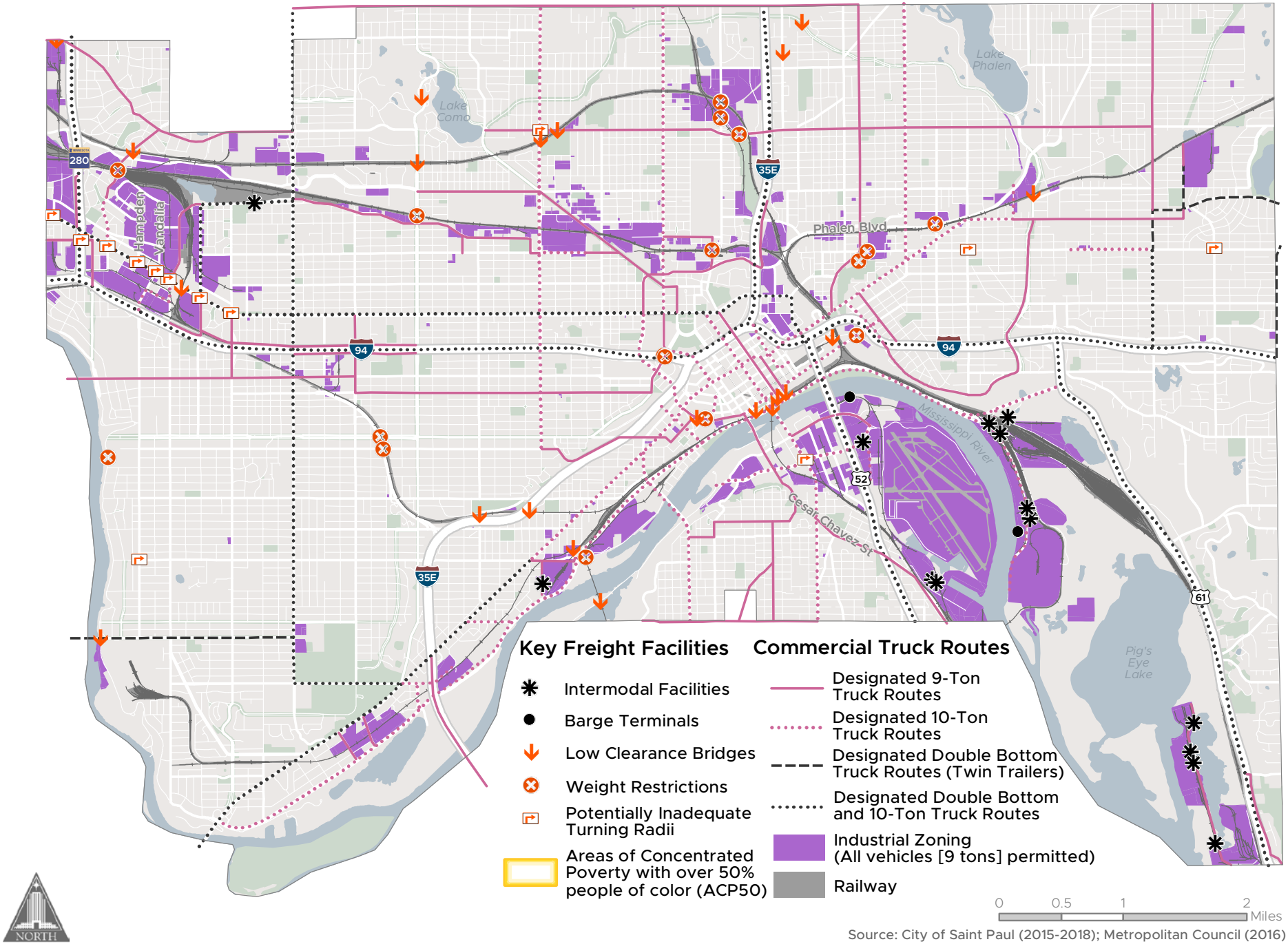


Source: Minnesota Deparment of Transportation (2017); City of Saint Paul (2019)

Map T-14: Potential Major Future Right-of-Way Connections



Map T-15: Commercial Truck Routes

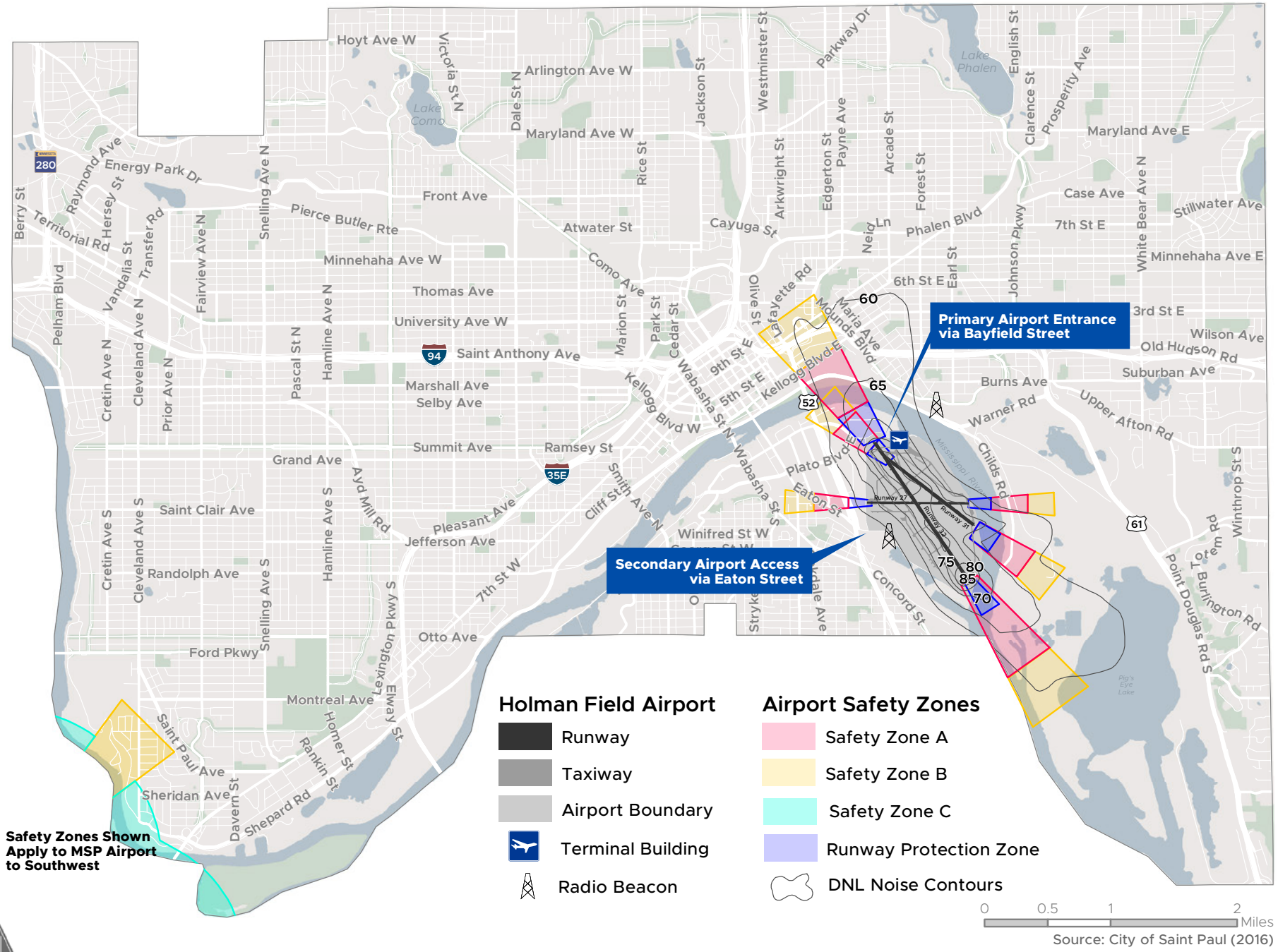


Source: City of Saint Paul (2015-2018); Metropolitan Council (2016)

Map T-16: Planned Improvements to Metro Highways

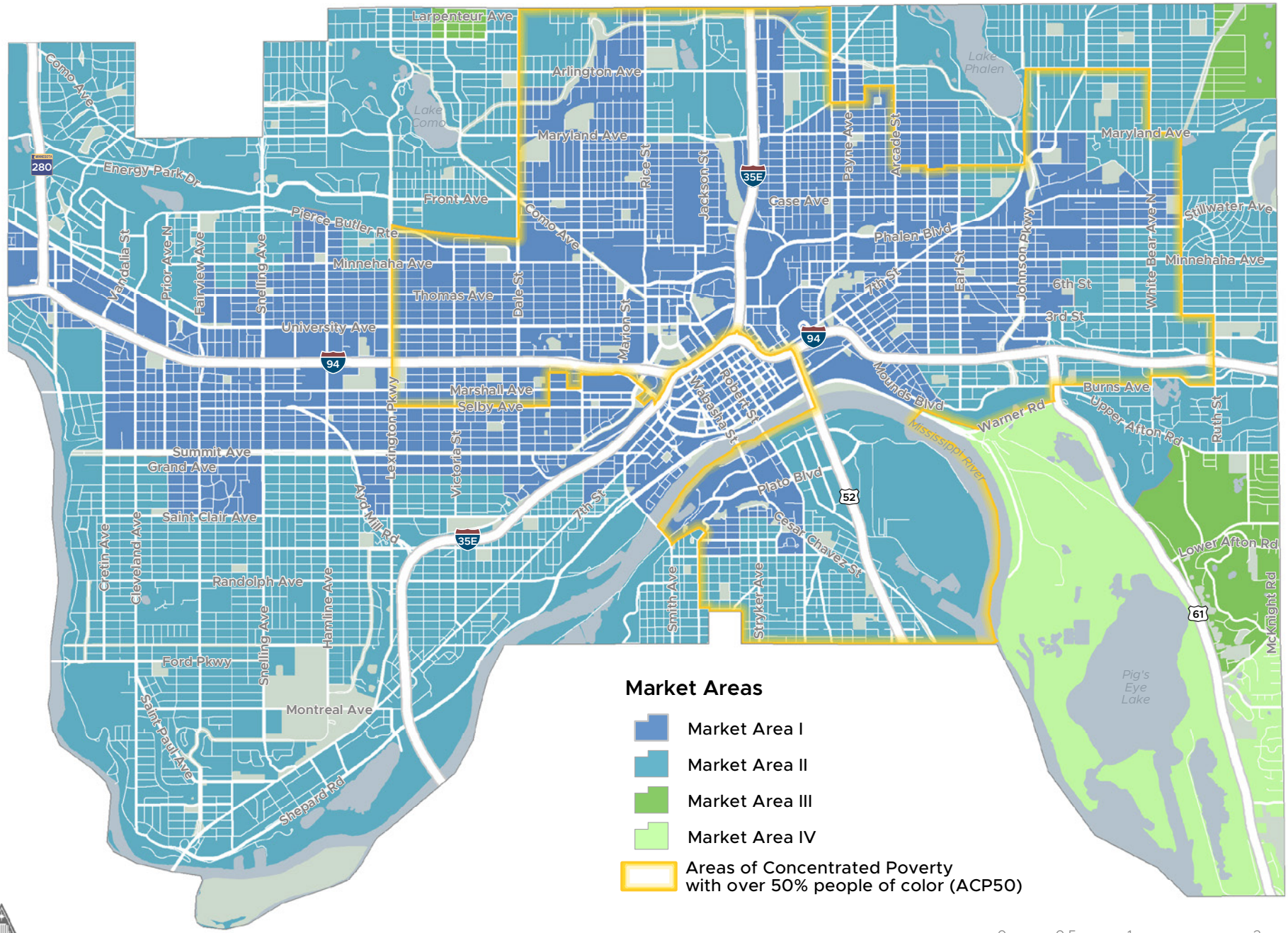
Source: City of Saint Paul (2017-2018); Metropolitan Council (2018)

Map T-17: Airport Safety Zones and Noise Contours



Note: Airport Safety Zones are subject to land use regulations defined in Minnesota Rules Chapter 8800.2400.

Map T-18: Transit Market Areas*



*See Appendix C for Transit Market Areas

0 0.5 1 2 Miles

Source: Metropolitan Council (2015)

Appendix B

List of Potential Projects

The following projects are representative of those that could be considered for implementation of this chapter:

Projects	Description	Transportation Chapter Policy	Source
Conversions of four-lane roadways to three-lane roadways			
Conversions of four-lane roadways to three-lane roadways	Reallocate rights-of-way to improve safety.	Policy T-6	2040 Comprehensive Plan (2020)
Intersection improvements for safety	Improve intersections to reduce crashes overall and enhance pedestrian safety.	Policy T-7	2040 Comprehensive Plan (2020)
Pedestrian facilities	Implement pedestrian infrastructure improvements.	Policies T-25 & T-26	Saint Paul Pedestrian Plan (2020)
Bicycle facilities	Implement bicyclist infrastructure improvements.	Policy T-24	Saint Paul Bicycle Plan (2015)
Bridge improvements to safely accommodate all users, over interstates, rivers, railways, and other obstacles to connectivity	Accommodate all modes on bridge projects.	Policy T-30	2040 Comprehensive Plan (2020)
New transitways and high-frequency bus routes, such as: • Gold Line • Riverview • Rush Line • Robert Street	Develop regional transitways and high-frequency bus routes.	Policies T-22 & T-27	Metropolitan Council Transportation Policy Plan (2018, amended)

List of Potential Projects - Continued

The following projects are representative of those that could be considered for implementation of this chapter:

Projects	Description	Transportation Chapter Policy	Source
	Location-Specific Projects		
Kellogg Boulevard/3rd Street Bridge reconstruction	Replace structurally deficient Kellogg/3rd St Bridge.	Policy T-37	Structural Evaluation (2014)
West Midway (Vandalia/Ellis/280/I-94/ University) trucking improvements	Connect Prior Avenue to Energy Park Drive across the BNSF railroad tracks, and improve Ellis Avenue connection from Vandalia Street to Pierce Butler Road.	Policy T-14	West Midway Industrial Area Plan (2014)
Kittson extension	Connect I-94 to Pennsylvania Avenue/ University Avenue.	Policy T-14	Shepard/Warner/East CBD Bypass EIS (1988), with consideration of more recent US52/I94 connection
Pierce Butler Route extension	Connect eastern end of Pierce Butler Route to 35E.	Policy T-14	Pierce Butler Draft EAW (2009)
Ayd Mill redevelopment, subject to a Supplemental Environmental Impact Statement (EIS) process involving a community task force	Study connections to Ayd Mill Road.	Policies T-22, T-23 & T-35	Ayd Mill EIS (2005)
Shepard, TH 5, and I-35E connection improvements	Realign traffic from Highway 5 to Shepard and improve connections from Shepard to 35E.	Policy T-33	Highway 5 / Shepard Road Study (2015)
Midtown Greenway extension into Saint Paul	Connect the Minneapolis Midtown Greenway across the Mississippi River into Saint Paul.	Policy T-24	District 12 Neighborhood Plan (2013)
Grand Round completion	Construct remaining Grand Round segments.	Policy T-24	Saint Paul Bicycle Plan (2015)
Capital City Bikeway completion	Construct remaining Capital City Bikeway segments.	Policy T-24	Saint Paul Bicycle Plan (2015)
Connect pedestrians to the river by opening new points of river access	Provide safer access to river through traffic calming, intersection improvements, new connections, etc.	Policy T-33	Great River Passage Plan (2013)
Canadian Pacific Rail Spur (Ford Spur) conversion to other transportation uses	Build a trail along the Ford Spur to connect the Ford Site to West 7th Street corridor.	Policy T-24	Re-Imagine the Railway: Studying New Uses for the Ford Spur (2018)

Appendix C

Other Required Transportation Information

1. Roles and responsibilities in transitway development

Transitway planning and development is generally led by county governments or Metro Transit. The City of Saint Paul participates in both the policy and technical aspects of that planning and development. It is possible that in the future the City of Saint Paul might choose to lead development of a transitway, such as a streetcar. The City of Saint Paul is currently participating in the planning for the Riverview/Ford, Rush Line and Gold Line transitway corridors.

2. Seaplanes

Seaplanes may be used on the Mississippi River as regulated by the Minnesota Department of Transportation.

3. Existing and future functional and operational characteristics of the St. Paul Downtown Airport

The St. Paul Downtown Airport (STP) is designated by the FAA as a Reliever Airport for the metropolitan area. It serves an important role to reduce congestion at Minneapolis/Saint Paul International Airport (MSP) by accommodating general aviation traffic that might otherwise use MSP. STP is classified as a Primary Reliever Airport by MAC; a Key Airport by the Minnesota Department of Transportation State Aviation System Plan; and an Intermediate Airport by the Metropolitan Council Regional Aviation System Plan. Further, the FAA has classified STP as a National category general aviation airport. It accommodated approximately 40,500 aircraft takeoffs and landings in 2017. By 2040, approximately 50,000 to 70,000 annual flight operations are predicted.

4. Protecting Regional Airspace

The City protects regional airspace by prioritizing compatible land uses and using FAA 7640 review to ensure that building heights do not unreasonably interfere with airspace operations close to Saint Paul Downtown Airport and Minneapolis-Saint Paul International Airport. It will participate in the Joint Airport Zoning Board (JAZB) to pursue compatible land uses near the aiports, as guided by the Metropolitan Council's Land Use Compatibility Guidelines for Aircraft Noise, which could restrict develoment/redevelopment and construction within the noise contours of 60 or greater. See map T-17 for airport safety zones and noise contours.

5. Transit Services

Most transit service in Saint Paul is provided by Metro Transit, including Green Line Light Rail Transit, Arterial Bus Rapid Transit, regular route buses and express transit service to/from downtown. Express transit service to downtown is also provided by the Minnesota Valley Transit Authority. Transit Link, provided by the Metropolitan Council, is shared-ride public transportation where regular route transit service is infrequent or unavailable. Transit Link is only available where regular fixed-route transit service is more than 1/2 mile away (1/4 mile in winter). Metro Mobility, also provided by the Metropolitan Council, provides shared rides for people who are unable to use regular fixed-route buses due to a disability or health condition. Private/nonprofit transit services also operate in Saint Paul.

Other Required Transportation Information - Continued

6. Functional Class Descriptions

Roads in our region are categorized into functional classes, including Principal Arterials, Minor Arterials, Collectors and Local Streets. Principal Arterials provide the highest vehicle speeds and least access, and are designed for longer trips. Minor Arterials in Saint Paul can either augment (add to) Principal Arterials' function or relieve traffic from them, and are intended for multimodal medium-length trips and to support our businesses. A-Minor Arterials, in particular, support principal arterials and access to regional job concentrations, community amenities, manufacturing and distribution areas, and freight terminals. Other Arterials serve a similar role to A-Minor Arterials, but do not carry the same designation. Collectors provide finer-grained multimodal linkages to larger developments and community amenities, and generally do not link communities to one another. Local Streets provide direct multimodal access to other individual parcels throughout the city.

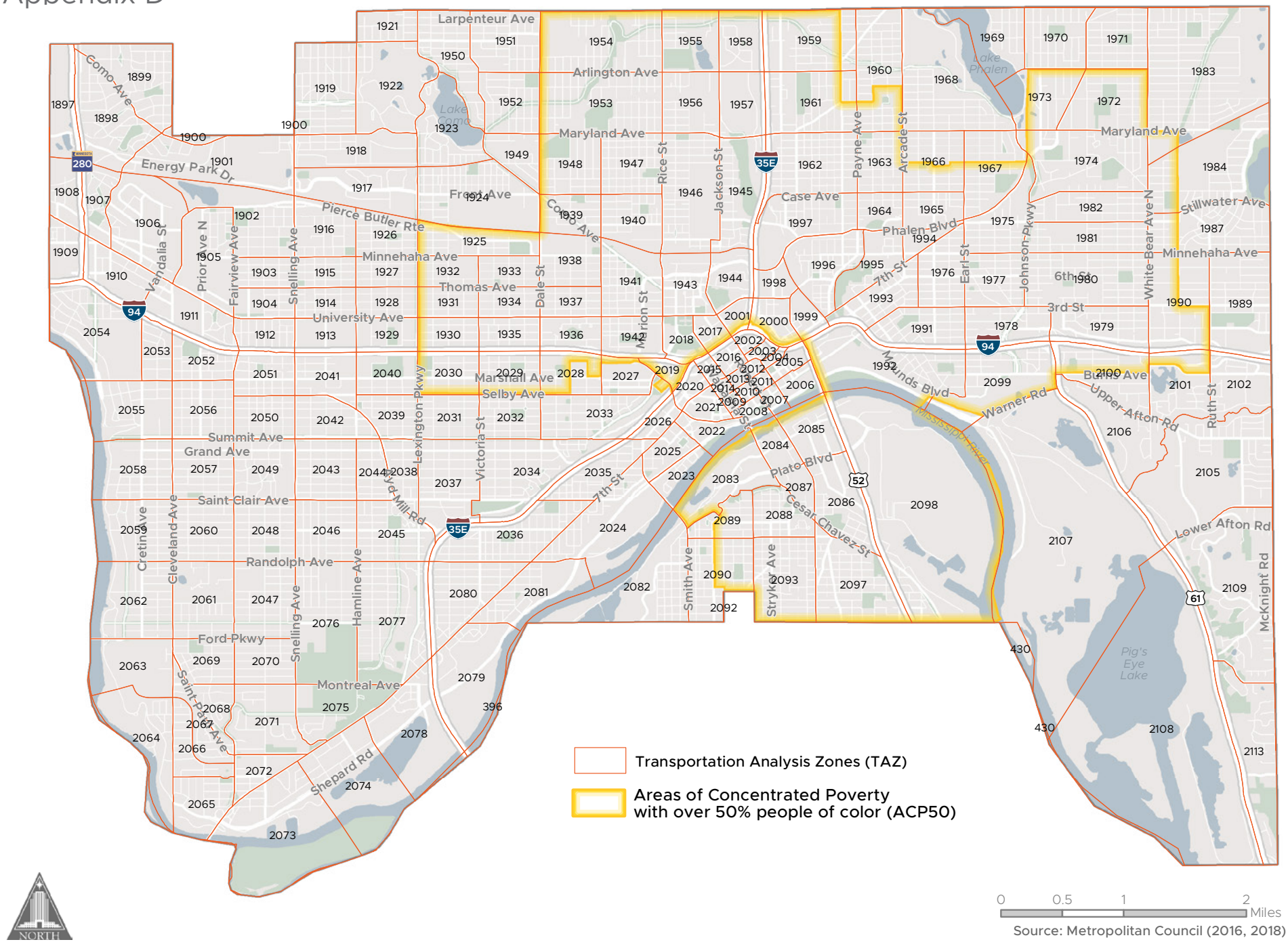
7. Transit Market Areas

Transit Market Areas are Metropolitan Council designations that indicate the likely cost effectiveness of transit service investments. Transit Market Area I has the potential transit ridership necessary to support the most intensive fixed-route transit service, typically providing higher frequencies, longer hours, and more options available outside of peak periods. Market Area II can support many of the same types of fixed-route transit as Market Area I, although usually at lower frequencies or shorter service spans. Market Area III primarily supports commuter express bus service with some fixed-route local service providing basic coverage. Market Area IV can support peak-period express bus services if a sufficient concentration of commuters likely to use transit service is located along a corridor.

8. Access Management

Access management guidelines are provided by the City’s Street Design Manual.

Appendix D



Source: Metropolitan Council (2016, 2018)

Figure T-1: Transportation Analysis Zone (TAZ) Estimates

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
1897	2	1	608	0	0	583	0	0	654	0	0	722
1898	1616	671	838	1683	722	933	1680	720	913	1702	718	909
1899	1848	654	729	2081	825	729	2622	1066	752	3383	1353	773
1900	269	133	0	546	228	0	1229	514	0	2134	899	0
1901	868	422	1267	1086	477	2151	1187	505	2479	1285	526	2785
1902	1435	607	302	1546	622	266	1482	596	251	1444	577	240
1903	1286	554	92	1382	569	68	1326	547	63	1295	532	60
1904	872	481	4337	1211	499	4432	1152	477	4259	1102	454	4140
1905	719	304	3281	783	323	4192	754	311	3892	720	295	3640
1906	890	505	3186	1190	534	4068	1188	505	4734	1194	478	5400
1907	582	276	436	584	293	590	582	278	689	589	264	789
1908	601	171	2415	409	203	3246	495	233	3525	585	261	3797
1909	976	543	1369	1142	567	1682	1137	539	1829	1144	514	1973
1910	43	32	2106	264	149	3487	561	317	4094	815	452	4656
1911	975	475	3212	1428	633	3182	1373	642	3754	1345	653	4316
1912	876	388	1368	1025	485	1563	979	452	1825	951	422	2076
1913	0	0	1551	108	48	2158	521	246	3138	1235	604	4258
1914	1197	506	457	1511	553	573	1542	581	651	1596	611	722
1915	1100	437	77	1269	470	112	1254	478	135	1241	480	158
1916	1668	457	1238	2111	488	1229	2224	492	1194	2342	495	1190
1917	1225	730	4745	1526	773	4454	1613	768	4293	1720	764	4200
1918	1241	600	652	1453	642	551	1442	640	613	1451	638	672

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
1919	3232	1204	1100	3442	1291	1207	3491	1299	1334	3573	1313	1453
1921	1175	617	60	1491	660	109	1480	658	128	1492	656	148
1922	334	145	241	354	155	122	342	150	141	332	143	158
1923	642	272	18	777	292	46	758	283	38	742	273	30
1924	2215	1030	138	2959	1114	148	2953	1114	128	2974	1116	110
1925	1196	529	484	1789	634	789	1730	669	827	1669	701	865
1926	1071	453	205	1199	482	265	1234	482	259	1292	480	260
1927	1106	444	174	1300	475	88	1264	474	118	1220	464	147
1928	1042	413	91	1214	450	212	1229	469	245	1259	487	277
1929	1064	573	1777	1534	691	2348	1484	706	2750	1168	574	3118
1930	954	325	357	1165	367	413	1105	388	488	1047	407	562
1931	1320	435	260	1478	511	292	1419	513	310	1368	515	328
1932	1044	367	124	1227	424	123	1150	415	135	1079	405	149
1933	1487	453	20	1561	539	37	1548	559	47	1534	578	59
1934	1871	478	732	1744	603	673	1874	678	710	2007	758	745
1935	1472	472	638	1695	535	624	1607	568	729	1510	591	828
1936	964	397	351	1188	497	303	1386	596	354	1547	678	405
1937	1572	408	533	1527	502	492	1655	580	470	1800	667	450
1938	1663	451	501	1597	543	533	1673	604	510	1706	654	490
1939	331	120	741	416	141	630	446	150	594	489	161	560
1940	1502	516	630	1678	568	614	1666	568	581	1660	563	550
1941	2584	761	2068	2638	887	2126	2646	947	2042	2650	1005	1970
1942	1599	612	704	1770	694	1555	1823	726	1694	1719	701	1824
1943	484	194	3762	572	232	3370	623	253	3264	658	268	3240
1944	1820	604	77	1607	696	376	1727	786	372	1836	877	370
1945	1307	399	334	1339	445	382	1361	459	394	1388	471	408
1946	2709	847	623	2681	947	437	2746	990	455	2821	1029	476
1947	2254	699	302	2305	775	434	2322	785	411	2351	793	390

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
1948	1696	590	653	1922	651	912	1921	655	870	1928	655	830
1949	931	468	180	1144	487	161	1081	470	176	1042	455	188
1950	1554	644	58	1605	683	99	1570	684	119	1569	687	138
1951	1801	760	18	1889	800	48	1830	793	71	1813	790	98
1952	1322	558	157	1383	588	124	1339	583	142	1326	580	158
1953	4129	1578	126	4276	1689	281	4303	1675	238	4386	1667	200
1954	3004	1305	1527	3552	1392	921	3563	1375	772	3615	1361	639
1955	1376	509	137	1322	556	185	1392	560	181	1467	563	180
1956	867	334	575	867	371	558	932	380	538	1007	390	530
1957	2	1	806	8	4	863	6	1	838	6	0	830
1958	2482	602	83	1690	724	67	2095	856	62	2509	980	60
1959	3970	1288	275	3813	1442	210	3980	1503	195	4169	1562	180
1960	2560	889	542	2581	986	655	2713	1030	630	2858	1068	610
1961	3737	1088	389	3316	1251	499	3604	1357	474	3925	1466	450
1962	4225	1266	548	4252	1448	587	4363	1526	563	4503	1605	550
1963	1975	536	1059	1844	626	970	1969	676	961	2088	722	959
1964	679	201	230	678	230	396	693	237	391	704	241	390
1965	1061	278	358	997	328	362	1067	354	340	1132	379	320
1966	2707	825	428	2845	932	494	2874	956	466	2900	978	440
1967	2512	805	15	2739	908	290	2831	946	507	2910	978	700
1968	1952	800	319	2091	889	356	2191	933	327	2314	971	300
1969	815	277	13	800	303	20	826	309	20	850	310	20
1970	2057	601	114	1767	678	90	1922	731	90	2084	778	90
1971	1759	728	298	2046	795	252	2100	814	255	2165	827	259
1972	2895	1050	42	2933	1150	40	3034	1186	48	3159	1218	59
1973	1368	414	55	1210	463	83	1303	493	81	1416	525	80
1974	4555	1520	735	4634	1650	760	4678	1693	728	4709	1732	710
1975	1755	496	155	1479	567	319	1631	617	339	1831	675	358

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
1976	2450	696	29	2289	784	72	2415	842	108	2561	904	147
1977	1924	574	105	1715	648	120	1846	691	133	1994	728	148
1978	2066	897	310	2587	979	393	2657	994	416	2741	1000	437
1979	1577	509	358	1504	566	580	1595	598	562	1725	633	550
1980	2641	810	310	2411	906	301	2572	961	288	2756	1009	280
1981	1740	578	122	1676	631	138	1718	644	133	1774	651	130
1982	2394	849	366	2578	918	711	2585	934	691	2585	948	680
1983	4959	1764	317	5080	1935	388	6235	2506	382	7389	3076	1380
1984	2527	893	415	2586	988	394	2771	1043	381	2999	1099	370
1987	3088	1218	78	3554	1359	86	3863	1453	77	4225	1547	70
1989	2585	1017	653	2717	1125	577	2902	1195	604	3116	1257	636
1990	2965	1189	355	3315	1320	688	3492	1370	556	3687	1411	430
1991	2482	746	123	2419	826	182	2475	860	226	2520	886	266
1992	1187	465	185	1146	510	35	1253	555	37	1404	614	40
1993	1715	606	1028	1906	670	1183	1968	693	1259	2015	704	1331
1994	35	11	116	36	11	322	25	5	502	9	0	663
1995	511	127	661	526	152	539	618	171	565	717	190	596
1996	1863	598	293	1843	684	439	1904	733	509	1938	775	573
1997	1696	530	1837	1700	607	1751	1741	638	1688	1784	668	1650
1998	353	3	526	366	4	481	385	4	455	353	0	430
1999	0	0	3892	0	0	3923	0	0	3735	0	0	3560
2000	504	28	765	524	28	678	552	19	638	514	8	600
2001	3	1	5258	30	9	5455	129	35	5267	256	70	5180
2002	198	143	110	465	228	188	656	300	245	860	368	295
2003	373	186	52	577	282	127	750	342	164	892	380	197
2004	484	298	560	848	380	975	921	372	1137	957	357	1293
2005	819	585	1332	1451	750	1591	1341	762	1878	1127	773	2150
2006	538	360	322	1042	488	236	1169	513	289	1186	489	345

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
2007	8	0	3536	61	14	4112	97	25	4220	150	40	3802
2008	522	364	4394	1287	512	4628	1221	561	4660	784	527	4830
2009	251	174	3743	607	241	3775	560	254	3720	337	226	3415
2010	0	0	3302	72	23	2795	302	83	2813	650	172	2852
2011	586	411	1868	1188	615	2683	1315	777	3156	1405	950	3601
2012	366	257	2373	775	347	1903	905	365	2350	1024	381	2775
2013	0	0	4878	67	21	5116	276	76	5143	588	155	5206
2014	126	111	1980	374	158	2304	360	180	2316	199	176	2344
2015	893	740	934	1389	818	984	1257	829	1160	994	789	1321
2016	918	641	1137	1748	1003	2276	1407	901	2459	1159	959	2280
2017	45	1	3275	53	0	3488	41	0	3532	28	1	3597
2018	0	0	2023	0	0	2201	0	0	2240	0	0	2292
2019	0	0	407	0	0	319	0	0	283	0	0	250
2020	500	144	2285	728	185	3062	898	247	3555	1094	320	4018
2021	22	15	5797	29	19	6662	28	19	6906	24	15	7183
2022	1	1	2509	119	42	2537	168	55	2765	57	12	2994
2023	1037	608	18	1451	651	43	1509	631	41	1572	612	40
2024	866	377	1595	1239	455	1302	1426	496	1419	1600	529	1543
2025	763	352	412	984	384	600	1037	376	956	1089	369	1315
2026	206	161	6035	405	205	6030	492	244	5838	567	273	5780
2027	861	464	655	1024	489	728	1038	478	720	1063	468	719
2028	1654	701	951	1574	742	769	1611	733	761	1669	725	759
2029	1991	817	91	2278	856	228	2235	838	222	2212	823	220
2030	1568	572	49	1618	602	33	1589	588	31	1573	576	30
2031	1447	565	406	1661	594	385	1631	581	373	1614	569	370
2032	1727	797	401	2219	835	285	2177	817	274	2153	801	270
2033	3170	1873	1149	3777	1958	1237	3563	1911	1222	3343	1581	1218
2034	3107	1604	1269	3532	1679	1271	3457	1629	1204	3440	1592	1140

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
2035	1543	635	496	1822	706	449	1871	721	468	1927	732	488
2036	2371	1056	477	2696	1122	706	2699	1108	710	2755	1095	718
2037	2586	1240	972	2696	1306	1235	2652	1277	1176	2657	1257	1120
2038	881	484	1225	1147	514	1674	1127	506	1584	1121	499	1500
2039	1310	502	45	1229	550	40	1271	569	35	1328	589	30
2040	1021	272	700	1106	289	669	1091	282	623	1092	274	580
2041	363	172	647	411	184	580	399	178	544	392	172	510
2042	1405	662	141	1506	694	175	1452	679	191	1420	666	208
2043	1942	842	478	1960	901	542	1947	909	574	1965	920	606
2044	989	473	283	1070	497	321	1031	485	340	1007	475	358
2045	2008	996	182	2268	1043	167	2147	1014	188	2079	991	208
2046	2192	980	202	2290	1055	240	2247	1065	264	2253	1080	287
2047	2192	953	474	2407	1010	458	2350	1007	449	2358	1005	450
2048	2192	912	209	2273	973	182	2221	980	190	2234	987	199
2049	2337	512	1376	2499	548	1428	2624	560	1377	2709	569	1350
2050	1642	701	194	1592	755	165	1619	767	176	1664	779	188
2051	1381	591	520	1348	635	743	1366	642	769	1397	649	796
2052	1239	537	97	1233	571	149	1232	569	143	1245	567	140
2053	697	256	63	631	281	85	653	290	81	689	299	80
2054	908	392	209	948	435	210	976	455	203	1009	469	200
2055	3514	644	2162	3940	714	2360	4015	708	2247	4118	701	2170
2056	2069	838	228	1953	908	219	2010	935	207	2095	963	200
2057	2090	962	191	2135	1020	169	2103	1016	159	2105	1014	150
2058	1759	543	89	1695	586	131	1709	581	125	1730	577	120
2059	1728	677	100	1701	721	94	1709	737	91	1741	754	90
2060	2258	940	259	2377	977	266	2304	970	261	2248	964	260
2061	2043	458	1578	2120	481	1546	2177	477	1488	2221	472	1450
2062	2643	1322	969	3122	1384	1042	3074	1372	939	3097	1361	850

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
2063	636	464	1312	2068	1031	2271	5317	2850	3254	8763	4770	3019
2064	380	166	2	635	316	91	811	397	162	790	377	243
2065	842	360	1952	973	382	952	940	367	981	923	352	1010
2066	736	337	26	831	356	113	793	341	133	773	326	156
2067	993	534	42	1305	564	120	1249	543	137	1223	525	156
2068	562	223	3	560	242	55	547	237	70	544	231	88
2069	1042	466	256	1143	494	693	1096	476	709	1073	460	728
2070	1187	474	115	1313	508	145	1330	512	157	1349	510	169
2071	1234	466	332	1364	505	289	1421	522	312	1497	540	337
2072	789	352	359	974	379	420	998	386	440	1030	391	458
2073	2835	1336	306	2874	1510	502	3238	1619	872	3662	1732	1230
2074	1561	1033	796	2070	1169	934	2092	1262	1272	2145	1360	1609
2075	116	45	40	110	51	47	101	47	43	92	42	40
2076	1612	759	474	1780	808	454	1702	800	426	1665	795	400
2077	2675	1146	615	2696	1254	592	2695	1300	555	2747	1351	520
2078	797	512	966	1161	557	1352	1255	570	1733	1359	581	2102
2079	253	136	752	1005	383	1173	1203	484	1561	1451	557	1937
2080	2372	1002	319	2389	1073	342	2412	1086	339	2465	1096	339
2081	874	360	273	1480	623	559	1304	544	975	1167	481	1377
2082	1155	464	92	1309	500	104	1334	512	97	1379	521	90
2083	82	50	1120	139	72	1108	176	94	980	200	108	860
2084	0	0	2009	772	242	2177	874	273	2238	633	191	2309
2085	0	0	2942	0	0	3287	0	0	3485	0	0	3685
2086	1517	459	1848	1490	524	1871	1537	574	1915	1582	615	1962
2087	626	172	560	566	203	629	657	228	651	766	247	677
2088	1731	683	615	2222	726	609	2276	729	650	2349	732	685
2089	1072	409	8	1128	435	14	1141	434	21	1171	433	29
2090	2328	833	129	2288	881	146	2307	877	171	2350	871	198

Figure T-1: Transportation Analysis Zone (TAZ) Estimates - Continued

TAZ #	2010			2020			2030			2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
2093	2589	957	215	2635	1016	161	2675	1020	188	2755	1024	217
2097	3121	1010	142	3322	1105	163	3425	1135	222	3549	1160	284
2098	738	239	1299	815	282	873	897	313	575	978	335	290
2099	1348	529	404	1354	569	480	1395	574	444	1451	578	410
2100	1687	649	259	1742	701	260	1786	710	250	1847	716	240
2101	1148	417	728	1240	502	628	1496	585	655	1737	654	685
2102	1996	1053	206	2260	1118	210	2220	1105	224	2149	1079	238
2105	2722	946	129	2744	1008	39	2786	1015	24	2807	1005	10
2106	485	183	2	493	213	15	557	234	13	618	250	10
2107	0	0	134	0	0	297	0	0	186	0	0	80
2108	0	0	500	0	0	600	0	0	230	0	0	130
2109	2938	1005	289	2965	1080	153	2999	1094	100	3035	1103	50
2113	625	213	132	1189	384	94	1848	596	97	2349	754	99

PARKS, RECREATION AND OPEN SPACE

Introduction

The Parks, Recreation and Open Space Chapter sets broad policy to create an equitable, safe, connected and sustainable park system for all users. The Saint Paul Parks and Recreation system consistently ranks as one of the best in the nation, with more than 179 city-managed parks and open spaces, 25 recreation centers, more than 100 miles of trails, aquatic facilities, municipal golf courses, and the Como Park Zoo and Conservatory. It comprises a large, diverse and vibrant network of people, spaces and facilities that is recognized by Saint Paul residents as one of the city's great shared assets. Together, the system components form a vital connective tissue, facilitating a sense of community, and fostering stewardship of nature and community spaces.

Park facilities and programs improve the quality of life for all residents and visitors. Beautiful landscapes and facilities for recreation foster public health by promoting mental and social well-being, and providing opportunities for physical fitness. Community centers and parks serve an important role for the city's youth by providing safe and healthy places and activities. Parks connect us to the Mississippi River and lakes by providing access and spaces to enjoy them. Great public spaces are an important component of sustainable economic development, drawing and retaining residents, increasing nearby property values and attracting businesses.

Changes in demographics, technology and development are constant. The City will need to be vigilant to ensure that the park system responds to changing needs, challenges and opportunities, and that a person's access to the benefits provided by our world-class parks is not pre-determined by race, ethnicity, age, income or ability.

The following goals guide the Parks, Recreation and Open Space chapter:

1. Equitable allocation of programs, resources and amenities.
2. People, programming and spaces responsive to changing needs.
3. Environmental and economic sustainability.
4. A healthy network of community partnerships.
5. Strong and accessible connections.

Goal 1: Equitable allocation of programs, resources and amenities.

Policy PR-1. Ensure equitable access to Parks and Recreation programs, resources and amenities.

Policy PR-2. Reduce barriers to Parks and Recreation facilities and programming, including those caused by financial, physical, language and perception issues.

Policy PR-3. Engage diverse community groups and all potentially impacted stakeholders early in setting balanced priorities for park-related matters.

Policy PR-4. Prioritize investment to ensure that residents have access to a park within a 10-minute walk.

Policy PR-5. Prioritize investment in physical assets of community centers, play areas, pools, and other amenities to ensure that common minimum standards are met.

Policy PR-6. Use mobile recreation to fill park or recreation service gaps, enhance events, and provide quality recreation at neighborhood and community parks.

Policy PR-7. Foster opportunities for community-building and personal connections through Community Center facility use and programming.

Policy PR-8. Ensure that communications are up-to-date, understandable and engaging.

PERCEPTIONS OF "PARK"

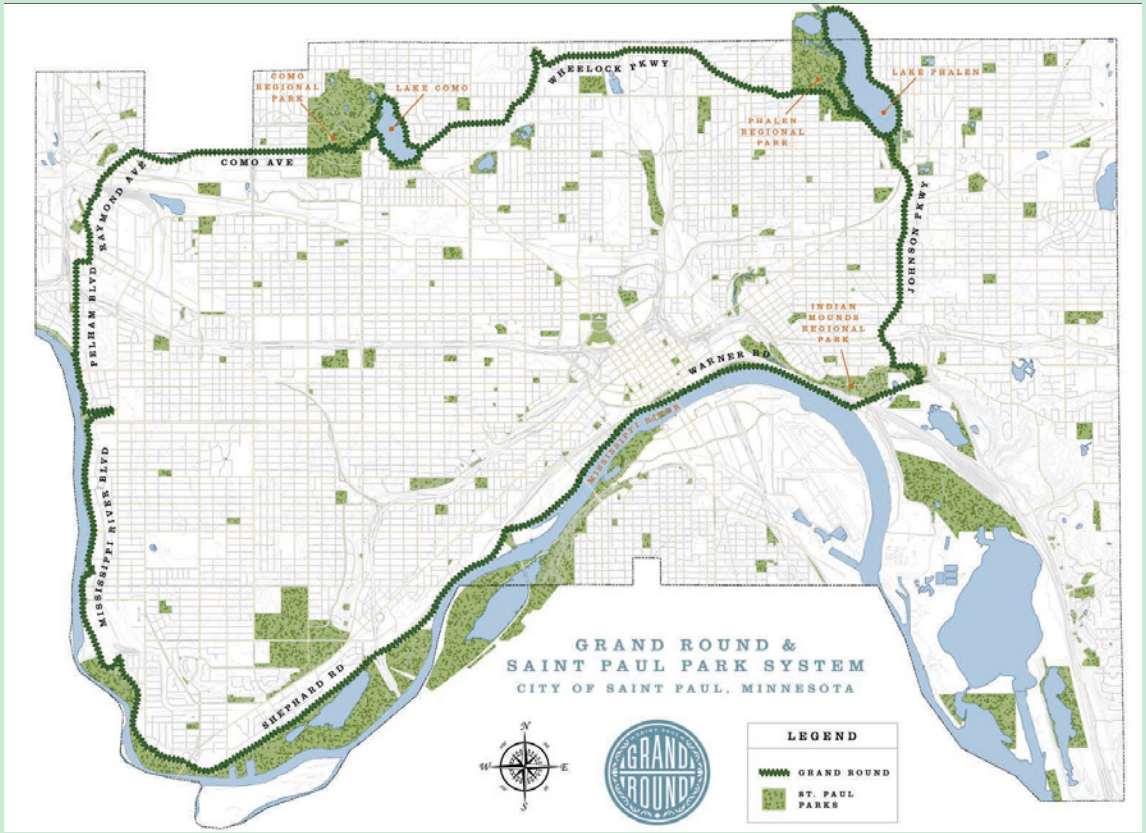
The term "park" generally conjures up the image of a manicured landscape with amenities that include lawns, picnic benches, formal trails, perennial gardens, etc. These tend to be the most heavily used places in our public lands. However, natural and naturalized areas are significant components of our system of public recreational space in the city. Such landscapes provide important opportunities to experience nature, understand the natural world around us, and promote the urgency to care for it. White people, though, are significantly more likely to explore those parts of our park system than are African Americans, African Immigrants, Asian Americans, Asian immigrants and Hispanic/Latino/Latina people (Kaplan & Talbot, 1988; Ozguner, 2011). As a city, we are obligated to ensure that everyone has access to and feels welcome within our public lands.

We have chosen to add the phrase "Open Space" to the chapter title to promote an understanding that the entire spectrum of park types is open to all members of the Saint Paul community. As the stewards of our system of open spaces, we need to continually consider ways to ensure that everyone feels welcome and everyone has an opportunity to explore the greater natural environment for improved collective well-being.

THE GRAND ROUND

The Saint Paul Grand Round was conceived of in 1872 by landscape architect H.W.S. Cleveland. He envisioned a park system connecting all parts of Saint Paul with expansive boulevards and luxurious greenery that would serve cyclists and pedestrians.

Although the Grand Round was conceived in the late 19th Century, it was only partially realized in the decades that followed. In the early 2000s, a focus on completing the system was renewed. This effort was supported by community interest and prioritized through the adoption of planning documents, including the Comprehensive Plan. More than 140 years after it was initially conceived, the Grand Round is finally close to being realized as a unifying recreation, wildlife corridor and transportation asset for the entire city.



Goal 2: People, programming and spaces responsive to changing needs.

Policy PR-9. Use customer and resident feedback on needs, satisfaction and trends to improve park experience, advance equity and bring in new users.

Policy PR-10. Embrace and integrate emerging cultural and recreation trends, particularly those that meet the recreational needs of youth, underserved populations and emerging resident groups.

Policy PR-11. Strengthen the cultural competency of Parks and Recreation staff.

Policy PR-12. Ensure Parks and Recreation staff reflect the demographic diversity of a dynamic city to better inform decisions regarding operations and facilities.

Policy PR-13. Account for seasonality and climate resiliency in the design, maintenance and programming of Parks and Recreation assets to maximize activity throughout the year.

Policy PR-14. Support volunteer engagement and participation to enhance stewardship, programming, social cohesion and ownership.

Policy PR-15. Innovate in park design and maintenance, while making use of best practices.

Policy PR-16. Improve safety in existing and future parks through design, maintenance and programming.

Policy PR-17. Support innovative and sustainable transportation options that enhance access to and use of Parks and Recreation facilities, such as electric vehicles, bike share and ride share.

Policy PR-18. Ensure that investment in City parks accounts for planned increases in development density through tools such as parkland dedication.

Goal 3. Environmental and economic sustainability.

Policy PR-19. Improve the environmental sustainability and resiliency of parks through strategies such as shared, stacked-function green infrastructure; best management practices in stormwater management; increased tree canopy; increased plant diversity and pollinator-friendly plantings.

Policy PR-20. Closely monitor invasive species on park property and respond to threats.

Policy PR-21. Ensure that programming and facilities support public health and personal improvement efforts, such as education, job training, and fitness and nutrition programs.

Policy PR-22. Model sustainable practices in park construction and operations when possible.

Policy PR-23. Perform routine and preventative maintenance on park assets to protect them and maximize the service life of structures and natural resources.

Policy PR-24. Develop publicly-accessible shared-use facilities as a first option when contemplating new or replacement indoor recreation facilities.

Policy PR-25. Strive to make programming financially self-sustaining.

Policy PR-26. Use data-driven evaluation of park assets to develop a maintenance and replacement schedule, and plan for future budgetary needs.

Policy PR-27. Rate future building investments as they are presently but with additional weight given to cost benefit analyses and return on investment principles.

Policy PR-28. Promote the ecological function of parkland and open space, while balancing it against nature-based recreation and other public uses.

Goal 4: A healthy network of community partnerships.

Policy PR-29. Collaborate with other public and private entities to maximize use and create operational efficiencies of existing facilities and programming when there is a net benefit to the public.

Policy PR-30. Seek out partnerships with private entities, such as Como Friends, to finance capital and maintenance costs of Parks and Recreation facilities without compromising good design solutions, reducing public access or over-commercializing the public realm.

Policy PR-31. Encourage and support private landowners and developers to create and maintain privately-owned public space (POPS) and green infrastructure, especially as land use intensity and activity levels increase.

Policy PR-32. Support community gardens and private landscape beautification efforts where physically and financially feasible.

"NO NET LOSS" POLICY

Parkland in Saint Paul is protected for future park users through the City's "no net loss" policy. The policy is a part of Saint Paul's City Charter and reads in part, "Lands which may have been heretofore acquired by any means or which may hereafter be acquired by any means for park purposes shall not be diverted to other uses or disposed of by the city…"

Any diversion or disposal is reviewed by both the Saint Paul Parks and Recreation Commission and the City Council. When the City Council decides that diversion or disposal of parkland is in the public interest, additional parklands must be acquired to replace the lands that are diverted, preferably within the same District Council area and of a similar nature to the diverted parkland. (City Charter Section 13.01.1)

Poilcy PR-33. Encourage business partnerships that provide value-added services to park users, cover city costs, and generate revenue to enhance and expand programming.

Policy PR-34. Coordinate with Saint Paul Public Schools to reduce redundancies, and become more efficient in maintaining physical plants and managing fields.

Goal 5: Strong and accessible connections.

Policy PR-35. Prioritize safety and equity when filling gaps in the trail and bikeway system to ensure seamless connections throughout the city for pedestrians and bicyclists of all ages and abilities.

Policy PR-36. Integrate parkways and trails with the city's broader transportation network to provide convenient and safe access to the park system.

Policy PR-37. Pursue strategic acquisitions to fill existing gaps and address changing needs in the parks system.

Policy PR-38. Improve and encourage pedestrian and bicycle connections between park facilities and other significant destinations, such as lakes and rivers, schools, transit facilities and Neighborhood Nodes.

Policy PR-39. Emphasize safety, convenience and comfort when designing new trails or rebuilding those that already exist.

Policy PR-40. Provide interpretive elements to educate users about unique aspects of the park system.

Policy PR-41. Provide consistent wayfinding signage in each project or park so that it is recognizable as part of the broader City system.

Policy PR-42. Involve staff from the Department of Parks and Recreation from the beginning of discussions regarding large-scale land redevelopment sites.

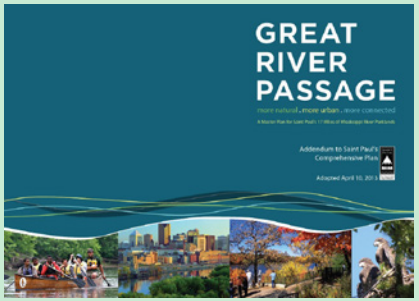
Policy PR-43. Address physical park encroachments that impair use through effective parkland management and protection.

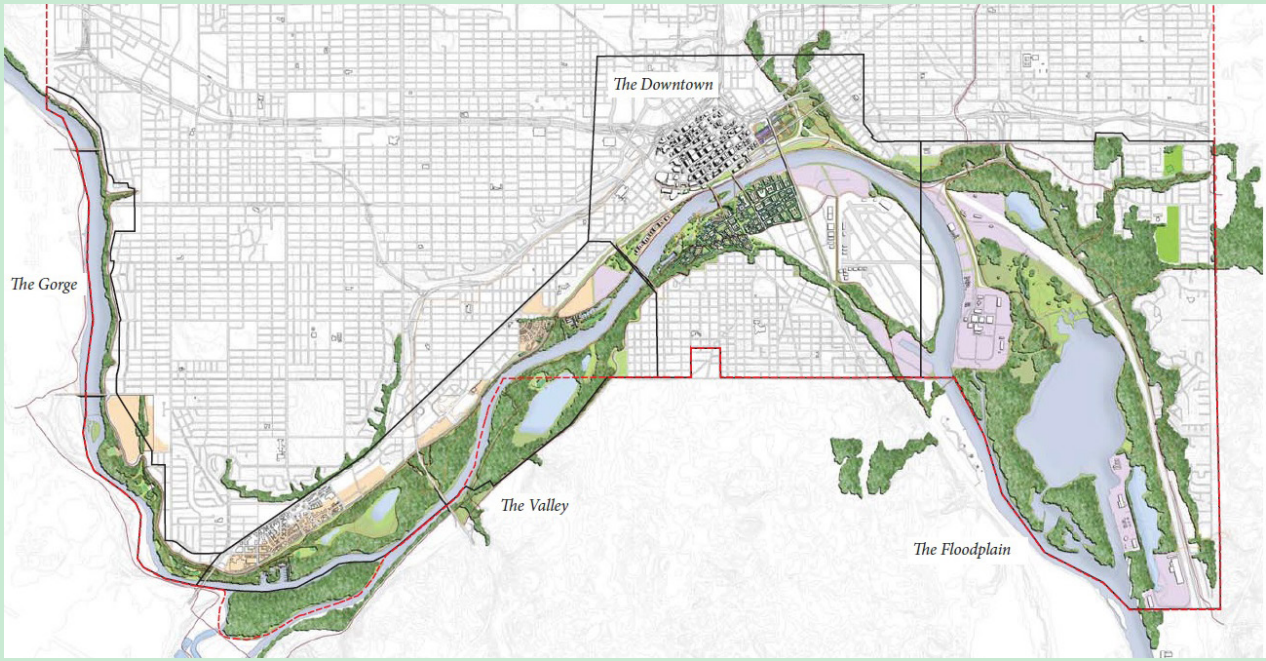
Policy PR-44. Support facility improvements that better connect neighborhoods to the Mississippi River.

Great River Passage Master Plan

In 2013, the City of Saint Paul adopted the Great River Passage Master Plan – a comprehensive framework for creating vibrancy in the city's 3,500 acres of parkland along the river. The Saint Paul Parks and Recreation Department is now implementing the next phase of the Great River Passage – a bold initiative to steward and tap into the potential of the 26 miles of riverfront in Saint Paul.

The recently-created Great River Passage Conservancy, an independent 501(c)3 nonprofit, advocates for projects and guides private fundraising efforts for projects that create places and activities to strengthen existing connections and create new ones along the Mississippi River.





Appendix **A**

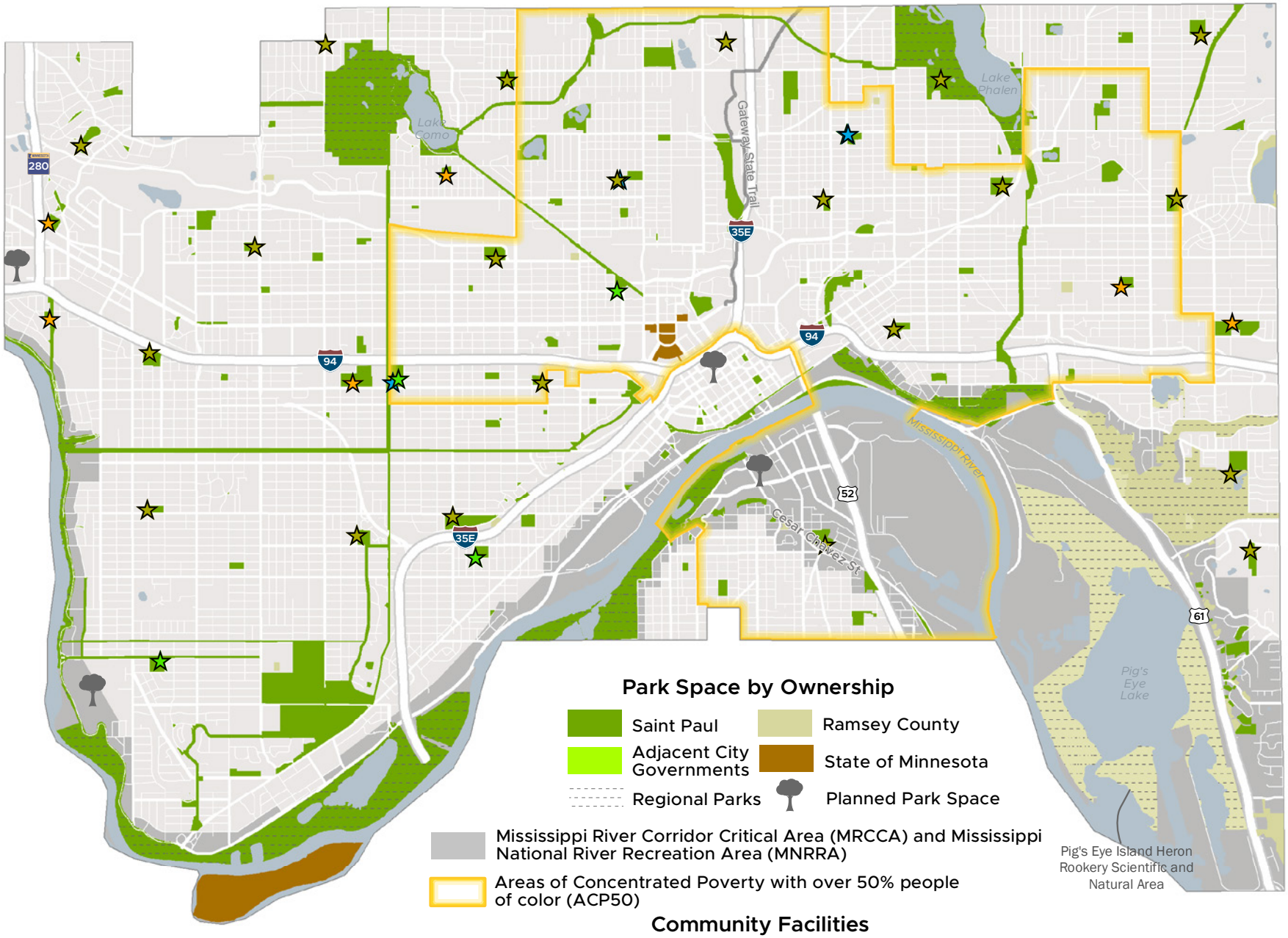
Appendix **B**

Notes: These appendices provide supporting content for parks and recreation-related policies and satisfy associated Metropolitan Council requirements.
1. ACP50 data for all from Metropolitan Council via MN Geospatial Commons, from annual release (2/5/2018). Other data as noted.
2. The City of Saint Paul is in the process of redesigning its Capital Improvement Budget Process. An improvement plan from Parks and Recreation will be developed once the new process is in place and will be shared with the Metropolitan Council at that time.
3. Local trails not associated with regional system are not included in these maps or descriptions. For more complete information on the trail system in Saint Paul, please see Map T-3, Bikeways or the Saint Paul Bicycle Plan.

Map P-1: Regional Parks and Trails

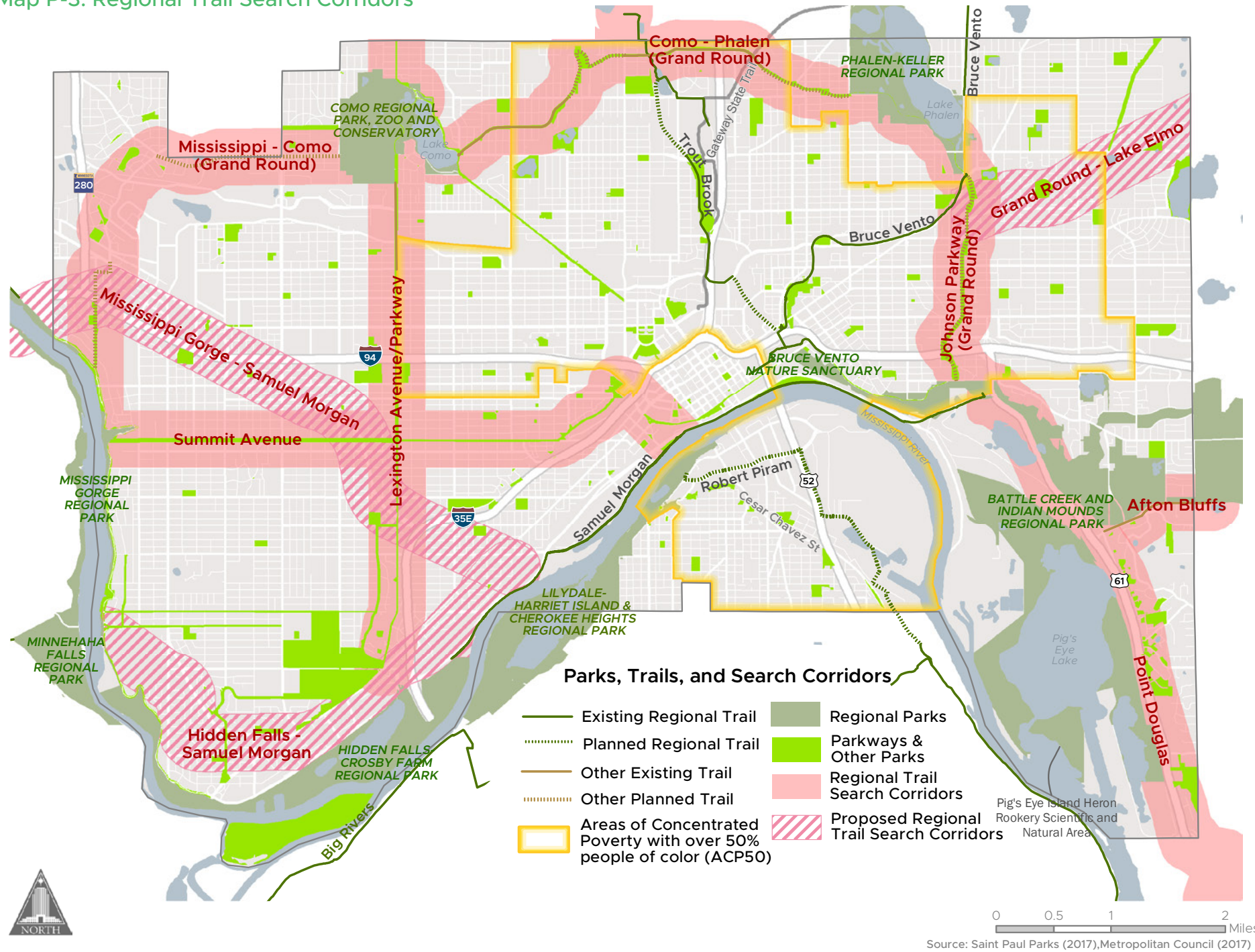
Source: Saint Paul Parks (2017),Metropolitan Council (2017)

Map P-2: Existing and Proposed Local Parks



Source: Saint Paul Parks (2017), Metropolitan Council (2017)

Map P-3: Regional Trail Search Corridors



Source: Saint Paul Parks (2017),Metropolitan Council (2017)

Regional Trail Search Corridors

Regional trail corridors are intended to provide for recreational travel along linear pathways throughout the metropolitan area. To achieve regional trail status and be eligible for Regional Parks System funding, corridors must be part of a Metropolitan Council-approved master plan. Regional trail search corridors are proposed general trail alignments that have not yet been through that process.

Regional Trail Search Corridor Descriptions

1. Mississippi - Como, Como - Phalen, Johnson Parkway

These three search corridors constitute the northern segment of the Grand Round, a city-wide loop originally conceived of in 1872 by Horace W.S. Cleveland. They would provide the connections between the Mississippi Gorge, Como, Phalen, and Indian Mounds Regional Parks.

2. Point Douglas

The Saint Paul segment of the Point Douglas search corridor extends from Indian Mounds Regional Park to the southern boundary of the city, generally paralleling Highway 61. The corridor will contain the main trail on the east side of the Mississippi River east of downtown, with the planned terminus being the Mississippi River Regional Trail in Washington County.

3. Summit Avenue

The Summit Avenue search corridor extends from the Mississippi Gorge Regional Park in the west to the Samuel Morgan Regional Trail near downtown in the east. The search area includes two National Historic Districts and two City of Saint Paul Heritage Preservation Districts and parallels Grand Avenue, one of the City's major commercial streets.

4. Lexington Avenue

The Lexington Avenue search corridor runs north and south and connects the Rice Creek North Regional trail to Hidden Falls - Crosby Farm Regional Park, and passes through Como Regional Park. Significant commercial and residential areas are present along the corridor, including Energy Park, the Green Line, Central High School, Oxford Community Center, and Grand Avenue.

5. Mississippi Gorge - Samuel Morgan (Proposed)

The Mississippi Gorge - Samuel Morgan corridor (also known as the Midtown Greenway Extension or the Saint Paul Greenway) parallels Interstate 94 and Ayd Mill Road, and would connect the northern reach of the Mississippi Gorge to the Samuel Morgan Regional Trail near Island Station.

6. Hidden Falls - Samuel Morgan (Proposed)

The Hidden Falls - Samuel Morgan corridor (also known as the Canadian Pacific or Ford Spur) would connect Hidden Falls / Crosby Farm Regional Park to the Samuel Morgan Regional Trail near Island Station and link neighborhoods within the West 7th and Highland planning districts of Saint Paul. The Ford Spur was originally used to serve the Ford Twin Cities Assembly Plant (Ford Site), which closed in 2011. With the railway no longer in use and considering the physical barriers to the Samuel Morgan trail, there is potential for the Ford Spur to serve as a community and regional asset, providing opportunities for transportation, recreation, and economic development for the neighborhoods along the corridor.

7. Grand Round - Lake Elmo (Proposed)

The Grand Round - Lake Elmo search corridor would connect the northeastern portion of the Grand Round near Phalen-Keller Regional Park to the Lake Elmo Park Reserve.

Appendix B

Regional Park and Trail Inventory

Regional Park Name	Acreage
Como Regional Park, Zoo and Conservatory	441.29
Hidden Falls - Crosby Farm Regional Park	569.49
Battle Creek and Indian Mounds Regional Park	624.39
Lilydale-Harriet Island & Cherokee Heights Regional Park	609.42
Mississippi Gorge Regional Park	87.63
Phalen-Keller Regional Park	505.28
Bruce Vento Nature Sanctuary	26.95
Trout Brook Nature Sanctuary	39.34
TOTAL	**2903.79**

Regional Trail Name	Mileage
Bruce Vento Regional Trail	6.53
Samuel H. Morgan Regional Trail	11.24
Trout Brook Regional Trail	0.72
TOTAL	**18.49**

City-Owned Non-Regional Park Inventory

Notes: Totals do not represent the entirety of City-owned and maintained park and open space land, such as parkways. Sites managed by partner organizations are indicated by an asterisk (*).

Park Name	Acreage
Alden Square Park	0.59
Aldine Park	1.76
Alice Park	0.55
Ames Lake Park	8.81
Arlington Arkwright Park	20.44
Arlington Hills Community Center	4.82
Baker Field*	5.59
Battle Creek Rec. Center	12.72
Bay Triangle	0.56
Belvidere Park	7.89
Bluff Park	6.21
Bluff Preservation	7.44
Bohland Triangle	0.18
Boyd Park	1.53
Burns Avenue Park	3.97
Cambridge Triangle	0.07
Capital View Park	0.28
Carty Park	3.62
Cathedral Hill Park	1.42
Cato Park	0.29
Cayuga Park	1.7
Central Village Park	4.14
CHS Field	10.58
Clayland Park	0.88
Cochran Park	0.55
College Park	5.19

Park Name	Acreage
Commonwealth Park	1.05
Como Ave Horseshoe Courts	0.77
Concord Park Field	2.79
Conway Field Rec Center*	21.63
Crocus Hill Terrace Park	1.87
Crocus Triangle	0.23
Cromwell Square	0.15
Culture Park	0.44
Dawson Park	1.99
Dayton's Bluff Rec. Center	5.99
Depot Tot Lot	0.17
Desnoyer Park*	2.14
Dickerman Park	2.42
Douglas Park	1.63
Dousman Park	0.47
Duluth and Case Rec. Center	11.42
Dunning Sports Complex*	20.53
Eagle Street Plaza Park	0.39
Eastview Rec. Center	6.08
Ecolob Plaza	0.5
Edgcumbe Rec. Center	7.08
El Rio Vista Rec. Center	5.68
Feronia Square	0.01
Forest Street Triangle	0.03
Fountain Park	0.45
Frogtown Park and Farm	12.77

City-Owned Non-Regional Park Inventory (Continued)

Park Name	Acreage
Front Field	3.72
Frost Lake Park	6.76
Furness Parkway	23.4
Gordon Square	0.06
Griggs Field*	3.07
Groveland Rec. Center	3.73
Hamline and Hauge Park	0.58
Hamline Park	2.15
Hamm Memorial Plaza	0.13
Hamm Park	0.41
Hampden Park	3.08
Hayden Heights Rec. Center	8.31
Hazel Park Rec. Center	9.62
Hendon Triangles	0.93
Henry Park	11.15
High Bridge North Park	0.85
Highland Park	248.16
Highland Park Comm. Center	5.92
Highwood Preserve	18.08
Hillcrest Knoll Park	5.93
Holcombe Circle	0.18
Holly Park	0.34
Homecroft Park	3.24
Horton Park	3.48
Howell Park	0.76
Iris Park	1.84

Park Name	Acreage
Irvine Park	1.78
Kellogg Mall	2.78
Kenwood Park	0.19
Kidd Park	0.14
Landmark Plaza Park	0.64
Lane Place	0.93
Langford Rec. Center	9.99
Leroy Triangle	0.05
Lewis Park	2.89
Linwood Rec. Center	19.98
Lockwood Park	1.6
Lyton Park	0.35
Margaret Field*	3.65
Maria Ave. Triangle	0.04
Martin Luther King Jr. Rec. Center	2.78
Marydale Park	23.95
Maryland Ave. Open Space	5.04
Mattocks Park	3.69
May Park	0.81
McDonough Rec. Center	0
McDonough Preserve	7.14
McQuillan Park	0.54
Mears Park	2.09
Merriam Park Rec. Center	10.22
Midway Peace Park	5.4
Mounds Park Maintenance Building	4.51

City-Owned Non-Regional Park Inventory (Continued)

Park Name	Acreage
Nathan Hale Park	0.5
Newell Park	12.1
North Dale Rec. Center	8.32
Oakland Terrace Park	0.84
Oakley Square	0.01
Orchard Rec. Center*	3.97
Oxford Comm. Center	10.66
Palace Rec. Center	5.88
Parque de Castillo	1.11
Pedro Park	0.45
Pelham Triangle	0.18
Point of View Park	0.36
Prospect Park	3.1
Prospect Terrace Park	1.07
Prosperity Heights Park	9.45
Prosperity Park	8.25
Rice Arlington Complex	23.31
Rice Park	1.62
Rice Rec. Center	5.98
Ryan Park	1.18
Sackett Park	13.28
Scheffer Rec. Center	3.65
Skidmore Park	0.39
South St. Anthony Rec. Center*	5.98
St. Clair Rec. Center*	6.43
Stinson Park	0.88
Stonebridge Oval	0.21
Summit Overlook	0.44
Summit Park	0.05
Swede Hollow Park	25.56
Sydney Triangle	0.12
Sylvan Park	3.18
Tatum Park	0.62
Taylor Park	3.72
Terrace Park	1.17
Tilden Park	1.61
Valley Park	12.78
Van Slyke Triangle	0.07
Victoria Park	50.19
Wacouta Commons	1.08
Walsh Park	0.78
Webster Park	4.38
Weida Park	1.54
West Minnehaha Rec. Center	10.85
Western Park	4.51
Wilder Rec. Center*	3.56
Willow Reserve	22.56
Xinia Triangle	0.22
TOTAL	**975.67**

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HOUSING

Introduction

Housing meets a fundamental human need and, as such, is a critical infrastructure system of a city. Unlike other infrastructure systems, such as roads or water, a City does not have full control of housing development, maintenance, replacement or cost, as housing is generally provided through the private market. What cities can do is administer planning, zoning and building codes to guide the location of residential development, and ensure that housing is healthy and safe. Saint Paul has responsibilities to manage a complex set of issues around housing fairness, supply, choice, health, stability and affordability, all of which are tied to a Saint Paul's core values.

The Housing chapter continues to embrace Saint Paul's decades-old commitment to an all-incomes housing strategy by addressing the broad continuum of housing needs and challenges faced by Saint Paul residents—from those experiencing homelessness to those in need of affordable housing to those wishing to buy a home or rent an apartment. The chapter begins to challenge some deeply-rooted beliefs around neighborhood housing and household types to help provide additional housing choice for Saint Paul's growing, aging and increasingly diverse population over the next 20 years. Finally, housing policy cannot be considered in a vacuum. It needs to be thought of in terms of economic development (to build household income and net worth), transportation (to connect people from home to work) and land use (to locate parks, employment, education and other uses in close proximity to housing). Additional supporting materials for Housing Chapter policies can be found in the appendices beginning of page 140.

The following goals guide the Housing chapter:

1. Decent, safe and healthy housing for all Saint Paul residents.
2. Well-designed, energy-efficient buildings and sites constructed with quality materials.
3. Fair and equitable access to housing for all city residents.
4. A supportive environment for homeownership.
5. Stable rental housing.
6. Improved access to affordable housing.
7. Strong neighborhoods that support lifelong housing needs.

Goal 1: Decent, safe and healthy housing for all Saint Paul residents.

Policy H-1. Ensure upkeep and maintenance of the aging housing stock through enforcement of property maintenance codes.

Policy H-2. Address housing deficiencies and encourage reinvestment in residential properties by supporting maintenance and rehabilitation programs for property owners.

Policy H-3. Consider the expected lifecycle, market viability and ongoing maintenance needs of residential structures prior to providing public rehabilitation funds to ensure responsible investment of public funds and not overburden future owners with future maintenance costs.

Policy H-4. Ensure safe housing through the continuation and refinement, as needed, of the rental Certificate of Occupancy and the Truth in Sale of Housing programs.

Policy H-5. Work to reduce lead exposure in homes built prior to 1978 through the support of lead identification and mitigation programs offered by the City of Saint Paul, Saint Paul-Ramsey County Public Health, and other partner agencies and organizations.

Policy H-6. Improve indoor air quality to reduce asthma and address other air quality-associated health issues by reducing exposure to mold, indoor tobacco smoke, radon and soil vapors in homes; supporting City requirements and partner agency programs; and seeking state and regional cleanup funding. Mitigation of these issues should be prioritized for existing structures.

Policy H-7. Reduce overcrowding within housing units, caused by doubling up of households and inadequate space for large families, through the production of small and family-sized affordable housing options.

Metropolitan Affordable Housing Allocation

As part of the 2040 Housing Policy Plan, the Metropolitan Council identified the number of all households expected to need affordable housing (rental and ownership) in the region, and allocated a share of the projected regional affordable housing need to each municipality in the seven-county metropolitan area. The region is projected to need an additional 37,400 housing units affordable to households at 80% of AMI or lower between 2020 and 2030, with 51% of those units affordable at 30% of AMI, 25% of those units affordable to households at 31- 50% of AMI, and 24% of those units affordable to households at 51- 80% of AMI.

Saint Paul's affordable housing allocation is summarized in the following table.

Figure H-1: Affordable Housing Allocation for the City of Saint Paul

Affordable Level	Number of Units
At or below 30% of AMI	832
31 to 50% of AMI	128
51 to 80% of AMI	1,013
Total	1,973

Passive House Principles

While passive building principles have been used widely throughout Europe, interest in these ultra-energy efficient buildings is starting to grow in the Unites States. A passive building is designed and built in accordance with these five building-science principles:

- The building employs continuous insulation throughout its entire envelope without any thermal bridging.
- The building envelope is extremely airtight, preventing infiltration of outside air and loss of conditioned air.
- The building employs high-performance windows (typically triple-paned) and doors.
- The building uses some form of balanced heat- and moisture-recovery ventilation, and a minimal space conditioning system.
- Solar gain is managed to exploit the sun's energy in the heating season and minimize overheating during the cooling season.

Passive building principles can be applied to all building types – from single-family homes to multi-family apartment buildings, offices and skyscrapers.

Goal 2: Well-designed, energy-efficient buildings and sites constructed with quality materials.

Policy H-8. Encourage creativity in building design and site layout.

Policy H-9. Encourage the use of universal design elements to make housing accessible for all residents.

Policy H-10. Encourage the use of energy efficient mechanical systems and building products in rehabilitation and new construction to decrease building operation costs and impacts on the environment.

Policy H-11. Partner with utility companies, nonprofits and other agencies to reduce the number of energy-burdened households by encouraging building owners to undertake energy audits of their properties and make improvements, such as new metering technologies that allow sub-metering.

Policy H-12. Demonstrate the effectiveness of new construction technologies or techniques, such as passive building standards, that push the boundaries of energy efficiency in housing.

Policy H-13. Encourage the use of long-lasting, high-quality building materials for residential buildings to decrease long-term housing maintenance and energy costs.

Policy H-14. Encourage the use of low-impact landscaping, such as no-mow yards, native landscaping and rain gardens, to reduce the consumption of natural resources in yard maintenance and encourage the use of yards as carbon sinks.

Goal 3: Fair and equitable access to housing for all city residents.

Policy H-15. Accommodate a wide variety of culturally-appropriate housing types throughout the city to support residents at all stages of life and levels of ability.

Policy H-16. Increase housing choice across the city to support economically diverse neighborhoods by pursuing policies and practices that maximize housing and locational choices for residents of all income levels.

Policy H-17. Ensure that the regulatory definitions of family and allowable dwelling types meet the needs of residents and reflect how people want to live, while meeting fair housing requirements.

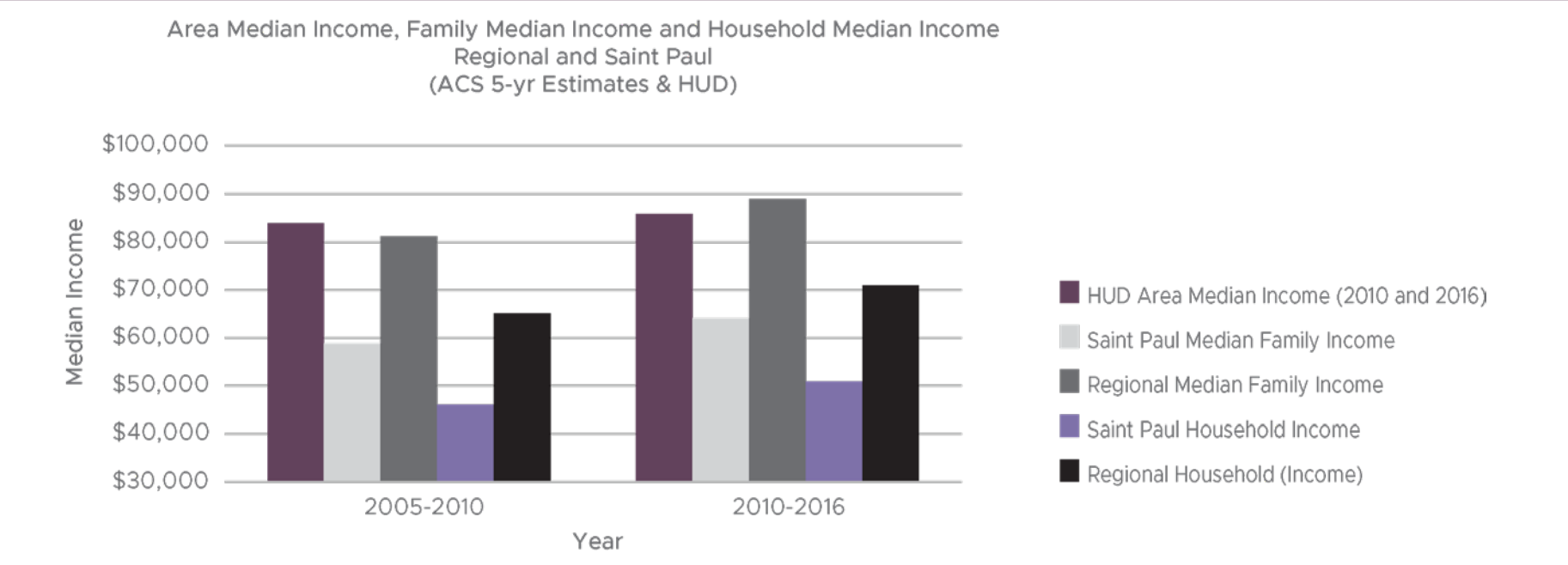
Policy H-18. Foster the preservation and production of deeply affordable rental housing (housing affordable to those at 30% or less of AMI), supportive housing and housing for people experiencing homelessness.

Policy H-19. Continue interdepartmental coordination and implementation of the recommendations in the Analysis of Impediments report and other fair housing issues.

Area Median Income (AMI), Family Median Income and Household Median Income

Median income is an important factor in housing affordability, and is used by the federal government to establish affordability limits on income-restricted housing. Annually, the Department of Housing and Urban Development (HUD) calculates the area median income (AMI) for metropolitan areas throughout the country. HUD focuses on the region instead of the individual city, because families searching for housing are likely to look beyond a city itself to find a place to live. These calculations are used to determine eligibility in income-restricted housing and to establish rent limits for these units. AMI is used as the standard annual income for a family of four - the number is adjusted up or down for larger and smaller families.

The 2017 AMI for the region is $90,400. AMI for the Minneapolis-Saint Paul-Bloomington Metropolitan Statistical Area (MSA) increased by approximately 6% between 2009 and 2016, from $80,900 to $85,800. Saint Paul's AMI increased 9% during the same period, from $58,742 to $64,072. On average over this period, Saint Paul's median family income was 28% lower than the region. Looking beyond family households and including non-family households, the median income is lower for both the region and the city. In 2016, the median household income for the region was $70,922 and $50,820 for the city.



Affirmatively Furthering Fair Housing and the Analysis of Impediments

Federal fair housing laws protect all individuals seeking housing, including renters, homebuyers, persons obtaining a mortgage or homeowners insurance, and others. The federal Fair Housing Act prohibits discrimination in housing due to being affiliated with a "protected class," including race, color, religion, national origin, gender, disability or familial status (presence of children under the age of 18 and pregnancy). The Minnesota Human Rights Act law adds creed, sexual orientation, marital status, receipt of public assistance, age and local human rights commission activity to the federal list of protected classes.

The Department of Housing and Urban Development requires that its grantees work to affirmatively further fair housing, by:

1. conducting an analysis to identify impediments to fair housing choice within the jurisdiction;
2. taking appropriate actions to overcome the effects of any impediments identified through the analysis; and
3. maintaining records reflecting the analysis and actions taken in this regard.

HUD interprets those broad objectives to mean:

- analyze and eliminate housing discrimination in the jurisdiction;
- promote fair housing choice for all persons;
- provide opportunities for inclusive patterns of housing occupancy regardless of race, color, religion, sex, familial status, disability and/or national origin;
- promote housing that is structurally accessible to, and usable by, all persons, particularly persons with disabilities; and
- foster compliance with the nondiscrimination provisions of the Fair Housing Act.

The Analysis of Impediments (AI) is a process by which HUD grantees examine what issues may impede fair housing requirements within their jurisdiction, and identify ways in which those issues may be mitigated. Saint Paul is a member of the ad hoc Fair Housing Implementation Council (FHIC), which was established in 2002 to coordinate efforts of its participating members to comply with their obligations to affirmatively further fair housing throughout the Twin Cities metro housing market area. This includes the development of the AI.

Goal 4: A supportive environment for homeownership.

Policy H-20. Collaborate with partner agencies, lenders and the real estate industry to reduce racial disparities in homeownership that could be attributed to unequal access to fair lending, intentional steering to specific neighborhoods or historic housing discrimination.

Policy H-21. Promote shared-equity ownership options, such as land trusts or cooperatives, to help make homeownership achievable for a greater number of households.

Policy H-22. Consider a City- or HRA-sponsored down-payment assistance program and support partner organizations' down-payment assistance and first-time homebuyer mortgage programs to help homebuyers invest in Saint Paul.

Policy H-23. Collaborate with the lending community on development of culturally-appropriate mortgage products and other lending instruments that create an avenue to access financial capital for all of Saint Paul's cultural communities.

Policy H-24. Encourage homeowner education through continued support of organizations that provide services, such as financial counseling and pre-and post-purchase training, to help potential and new homeowners make well-informed financial and maintenance decisions.

Policy H-25. Continue foreclosure prevention counseling to help residents understand available options, and provide guidance throughout the process.

Figure H-2: Overview of Rent Subsidized Housing Programs

	Public Housing	Project-Based Section 8 (PBV)	Section 8 Housing Choice Vouchers (HCV)	Low-Income Housing Tax Credits (LIHTC)
What it is	• Publicly-owned and -managed rental units for low-income households. • Some units are reserved for seniors or people with disabilities. • This is a project-based subsidy- i.e. the subsidy stays with the unit.	• Privately-owned and -managed rental units for low-income households. • Property owners commit to have Section 8 units for a fixed term, e.g. 15 or 20 years, which may be extended. • Some units are reserved for seniors, people with disabilities or other populations. • This is a project-based subsidy – i.e. the subsidy stays with the unit. In some cases, a renter who moves out may receive a subsidy to use at a different apartment.	• Government-funded program that helps low-income households pay the rent on private, market-rate rental units. • A renter finds a unit (within certain requirements); a housing authority pays a portion of the rent directly to the property owner. • This is a tenant-based subsidy – i.e. the subsidy goes with the tenant.	• Government-funded program that provides the private market tax credits to develop income-restricted rental units. • Property owners commit to a minimum term of at least 15 years (often longer) for income restrictions, which may be extended. • Rent limits are set by HUD, based on area median income. • This is a project-based subsidy that stays with the project.
What it costs	• Most units rent for 30% of the household's adjusted gross income. • The renter must pay at least a minimum amount toward the rent and utilities (as required by Federal law).	• Most units rent for 30% of the household's adjusted gross income. • The renter must pay at least a minimum amount toward the rent and utilities (as required by Federal law).	• 30% to 40% of a household's adjusted gross income. • The renter must pay at least a minimum amount toward the rent and utilities (as required by Federal law).	• Rents are set to be equal to 30% of income at specific income levels (e.g. 50% and 60% of AMI) based on unit size. • Renter may be responsible for utility payments.
What is available in Saint Paul	• 4,274 dwelling units • 16 high-rise buildings; 4 family townhouse developments; and 402 two- to six-bedroom units in scattered site single-family houses and duplexes. • Managed by Saint Paul Public Housing Agency (PHA). • Go to www.stpha.org/publichousing for more information.	• Approximately 3,100 units in 37 projects are subsidized under direct contracts with HUD and administered by Minnesota Housing. • Approximately 500 units in 24 projects are subsidized under contracts with PHA and administered by PHA. • Go to www.housinglink.org to find Project-Based Section 8 units.	• Approximately 4,700 HCV are administered by PHA. • PHA's Section 8 waiting list is closed and was most recently opened for one week in 2015 after being closed for eight years. • Go to www.stpha.org/section-8 for more information.	• Approximately 15,337 income-restricted units are available in Saint Paul. • Go to www.housinglink.org to find income-restricted units.

Source: Adapted from HousingLink, 2006 (https://www.housinglink.org/Files/Big%203%20-%20Subsidized%20Housing.pdf)

Examples of Affordable Housing in Saint Paul

Income-restricted affordable housing is designed and built to blend into its surroundings. That is, if a passerby does not know the rental requirements of these buildings, they would not know they are affordable housing. The accompanying pictures are all recent affordable or mixed-income housing developments built in Saint Paul.

Goal 5: Stable rental housing.

Policy H-26. Increase awareness around tenant and landlord rights, responsibilities, best practices and resources to increase access to rental units and decrease conflicts that could lead to evictions.

Policy H-27. Collaborate with HUD, Minnesota Housing Finance and affordable housing providers to preserve project-based Section 8 units within the city that are at risk of being withdrawn from a building or transferred to another building outside of Saint Paul.

Policy H-28. Advocate for research on and best practices for tenant screening criteria, such as credit, criminal and rental history reviews, to reduce housing insecurity for those with low credit scores, past evictions or criminal convictions.

Policy H-29. Support efforts and/or legislation to discourage renter displacement due to a change in ownership that increases rents and/or eliminates acceptance of Section 8 vouchers.

Policy H-30. Support efforts to reduce non-just-cause evictions filings.

Goal 6: Improved access to affordable housing.

Policy H-31. Support the development of new affordable housing units throughout the city.

Policy H-32. Continue to use City/HRA resources to support affordable rental housing citywide with at least 30 percent of the total rental units (both market-rate and affordable) financially assisted by the City/HRA being affordable to households earning 60 percent or less of AMI with at least:

- 10 percent of all units being affordable to households earning 30 percent of AMI;
- 10 percent of all units being affordable to households earning 50 percent of AMI; and
- 10 percent of all units being affordable to households earning 60 percent of AMI.

Policy H-33. Further affordable *ownership* housing goals in HRA/City-financially-assisted projects by working toward 10 percent of all ownership units being affordable to residents earning 60 percent of AMI and 20 percent of all ownership units being affordable to residents earning 80 percent of AMI.

Policy H-34. Support the development of new affordable ownership opportunities through the Inspiring Communities program, including selling vacant HRA-owned single-family lots and identifying sites appropriate for new ownership housing.

Policy H-35. Work with partners to develop and implement mechanisms to ensure that affordable ownership units developed with City/HRA assistance remain affordable beyond the first generation of owners.

Policy H-36. Encourage the development of family-sized affordable housing in strong market areas.

Policy H-37. Encourage the development of affordable housing in areas well-served by transit and/or in proximity to employment centers.

Policy H-38. Encourage acquisition, if put up for sale, of naturally-occurring affordable housing by nonprofit organizations, community development corporations, religious institutions, tenants and/or private-sector actors committed to preserving and investing in affordable housing, as well as the long-term upkeep and maintenance of these properties.

Policy H-39. Promote preservation of existing income-restricted affordable housing units to ensure continued affordability of those units.

Policy H-40. Prioritize preservation of income-restricted and naturally-occurring affordable housing in areas with improved/improving transit and/or planned reinvestment to reduce resident displacement.

Policy H-41. Consider use of official controls to require affordable housing to achieve mixed-income neighborhoods.

Policy H-42. Pursue public and private funding sources, including local sources, for affordable housing preservation and production.

Policy H-43. Encourage and support state and federal legislation that preserves existing programs and provides new funding, including a dedicated funding source, for affordable ownership and rental housing.

Policy H-44. Make achieving the Metropolitan Council's affordable housing goals a top priority both in planning and legislative efforts.

Policy H-45: Support the preservation and maintenance of historic housing stock as an affordable housing option.

Benefits of Missing Middle Housing

The “missing middle” is a segment of the housing market that contains small-scale multifamily or clustered housing types compatible in scale with single-family neighborhoods. It is a land use, economic development and urban design strategy that allows cities to support walkable, transit-supportive neighborhoods without significantly increasing densities in predominantly single-family neighborhoods. Missing Middle housing provides more housing choice and therefore allows the city to better adapt to housing trends and market cycles. It is more sensitive to neighborhood context, allowing for gradual transition from Urban Neighborhoods to Mixed-Use areas and/or Neighborhood Nodes. Missing Middle housing types include accessory dwelling units, duplexes, triplexes, fourplexes, courtyard apartments, bungalow courts, mansion-style multi-family and multiplexes. Excellent examples of these housing types can be found throughout Saint Paul.

Goal 7: Strong neighborhoods that support lifelong housing needs.

Policy H-46. Support the development of new housing, particularly in areas identified as Mixed Use, Urban Neighborhoods, and/or in areas with the highest existing or planned transit service, to meet market demand for living in walkable, transit-accessible, urban neighborhoods.

Policy H-47. Encourage high-quality urban design for residential development that is sensitive to context, but also allows for innovation and consideration of market needs.

Policy H-48. Expand permitted housing types in Urban Neighborhoods (as defined in the Land Use Chapter) to include duplexes, triplexes, town homes, small-scale multi-family and accessory dwelling units to allow for neighborhood-scale density increases, broadened housing choices and intergenerational living.

Policy H-49. Consider amendments to the zoning code to permit smaller single-family houses and duplexes to facilitate the creation of small-home development types, such as pocket neighborhoods and cottage communities.

Policy H-50. Balance the market demand for larger homes in strong market areas with the need to maintain a mix of single-family housing types that is sensitive to the surrounding neighborhood context.

Policy H-51. Analyze the neighborhood context of residential structures, in addition to general safety, prior to moving forward with City-sponsored demolition to ensure neighborhood housing assets are not prematurely removed.

Policy H-52. Collaborate with Saint Paul Public Schools and other educational partners to ensure that school choice and location further housing investment and neighborhood stability.

Policy H-53. Continue to work with neighbors, neighborhood organizations and colleges/universities to reduce conflicts between students and longer-term neighborhood residents.

Policy H-54. Support alternative household types, such as co-housing, intergenerational housing, intentional communities or other shared-living models, that allow residents to "age in community."

Policy H-55. Support housing for older people that is proximate to transit.

Policy H-56. Improve the stability and health of communities of concentrated disadvantage by implementing placed-based investments, such as public infrastructure, improvements and maintenance.

Appendix **A**

Appendix **B**

Appendix **C**

Note: These appendices provide supporting content for housing-related policies and satisfy associated Metropolitan Council requirements.

Appendix **A**
Housing Conditions and Trends Inventory

Striving for safe, dignified and affordable housing for all residents is a core value for the City of Saint Paul. To develop meaningful policy towards this, the City needs to understand existing conditions and identify key trends that affect housing today and impact the provision of housing in the future. This housing assessment examines four key components to the City's housing infrastructure—housing units, affordability of existing housing units, cost-burdened households and homelessness. Each section analyzes current conditions using a variety of data sources, and identifies key trends to monitor over the course of this Plan's implementation.

1. Housing Units

- General housing information, including total number of units, vacancy rates, tenure breakdown and overall unit composition
- Age and condition of units
- Vacant structures
- New construction trends

2. Affordability of Housing

- Affordability of housing broken down by owner and renter units
- Naturally-occurring affordable housing
- Inventory of obligated affordable housing, including public housing, project-based Section 8, and income-restricted affordable housing units

3. Cost-burdened households

- Race
- Age
- Household type

4. Homelessness

1. Housing Units

The City of Saint Paul has approximately 119,625 housing units as reported in the American Community Survey (ACS) 5-year estimates, 2012-2016[1]. Over the last 25 years, housing vacancy rates in Saint Paul have been relatively low. Vacancy rates in owner-occupied housing have been stable, ranging from a low of 0.7% to a high of 2.7% (during the recession of the mid-2000s). The rental market has shown some variability, and in 1990 and 2010, rental vacancy rates peaked at 7.7% and 7.2% respectively. Currently, vacancy rates are trending downward, with 1.5% for owner-occupied units and 3.7% for rental units. Rental markets are typically considered stable at 5% vacancy. With low available housing supply and increased housing demand, there is upward pressure on rents.

Tenure of units is nearly equally divided between owner- and renter-occupied units, with a slightly higher percentage of renter-occupied units—1.0% or 1,081 units. This is the first time in modern city history that the number of renter-occupied units has surpassed the number of owner-occupied units. From 1990 to present, there has been a 2% increase in the number of total households, a 9% decrease in the number of owner-occupied households and a 14% increase in the number of renter households. This change can be attributed, in part, to an increased number of single-family homes that have become rentals[2], as well as the construction of more multifamily rental housing within Saint Paul.

1 The 2010 Census reported that the City had 120,795 housing units, while the most recent ACS 5-year estimate report 119,625 +/- 869 units. After reviewing demolition and building permits records, the City does not believe there was a decrease in the number of units from 2010 Census to the estimate period.

2 Over the last eight years, the percentage of renters living in single-family homes rose from 10.6% to 14.7% (2009 - 2011 and 2012-2016 ACS 5-year estimates).

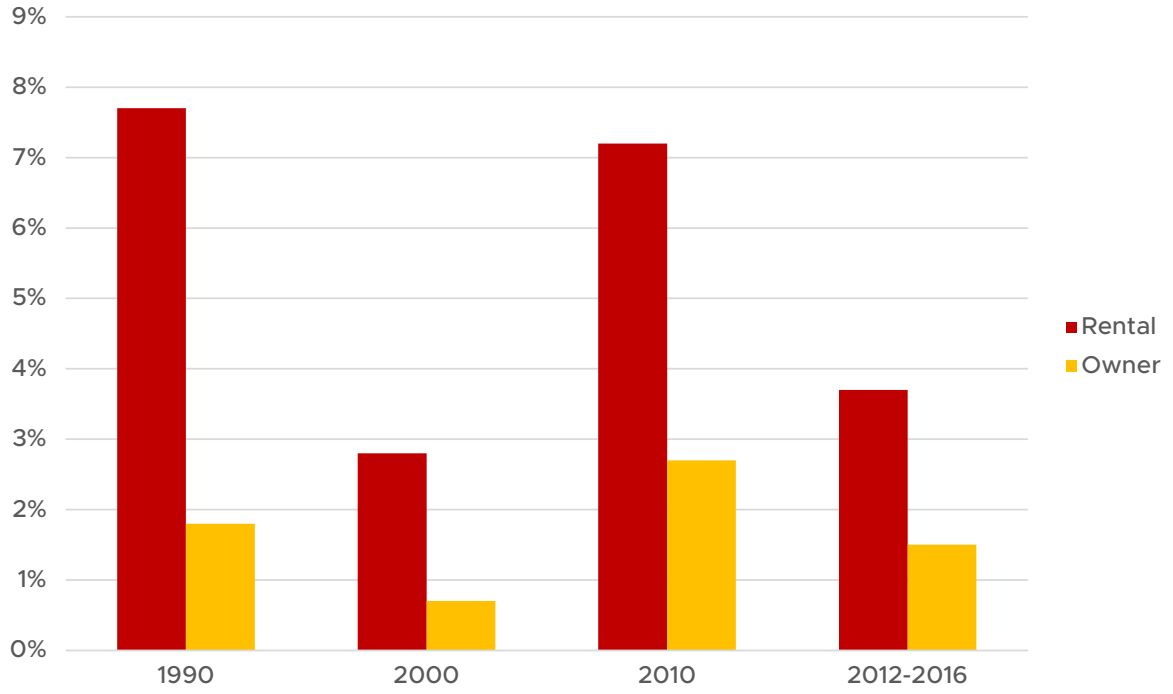
Figure H-3: Housing Units, Occupancy and Tenure

	Units	
	Number	Percent
Total Units	119,625	100%
Occupied/Vacant*		
Occupied	112,571	94.1%
Vacant	7,054	5.9%
Tenure of Occupied Units		
Owner-Occupied	55,745	49.5%
Renter-Occupied	56,826	50.5%

*Vacancy rates: Owner-occupied: 1.5%; Renter-occupied: 3.7%

Source: ACS 5-year Estimates, 2012-2016

Chart 1: Percent Owner and Rental Vacancy Rates, 1990 - 2016



The number of housing units is nearly evenly divided between single-family homes and all other housing types; however, according to Ramsey County Property Tax Records (January 2018), the amount of land dedicated to single-family homes (9,200 acres) exceeds that of all other housing types (2,500 acres) by approximately 350%. In comparison, larger multi-family buildings (20 or more units) contain nearly 25% of all units while occupying only 3% of the platted land area. Map 1 shows the distribution of housing unit types throughout the city.

Chart 2: Housing Units, Occupancy and Tenure

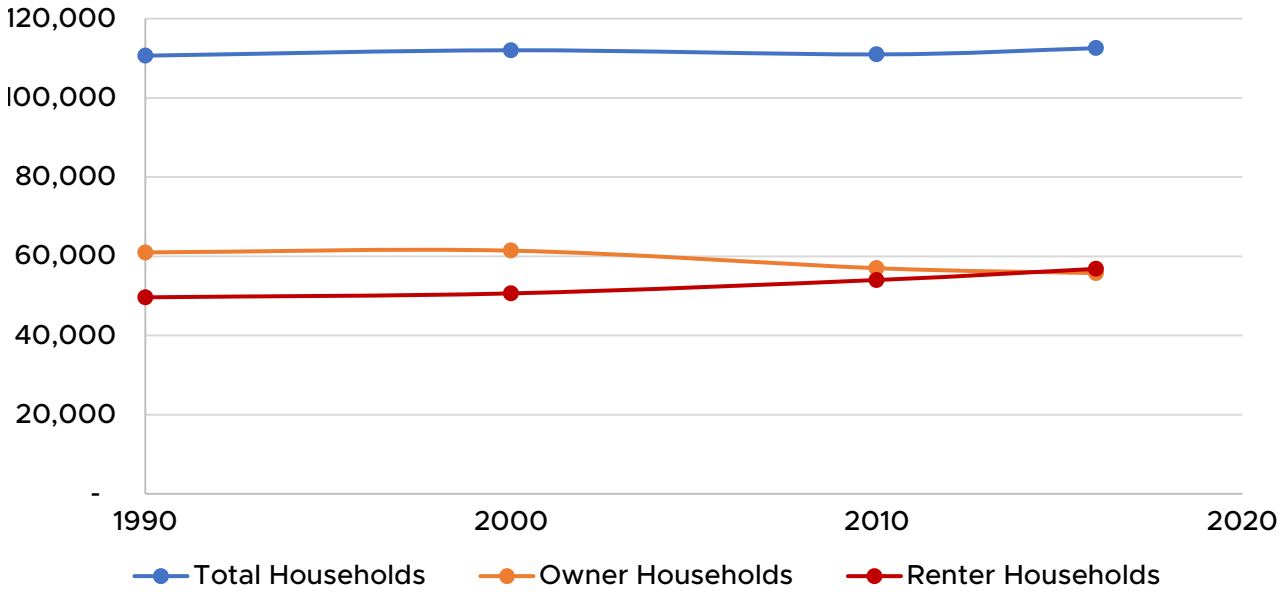
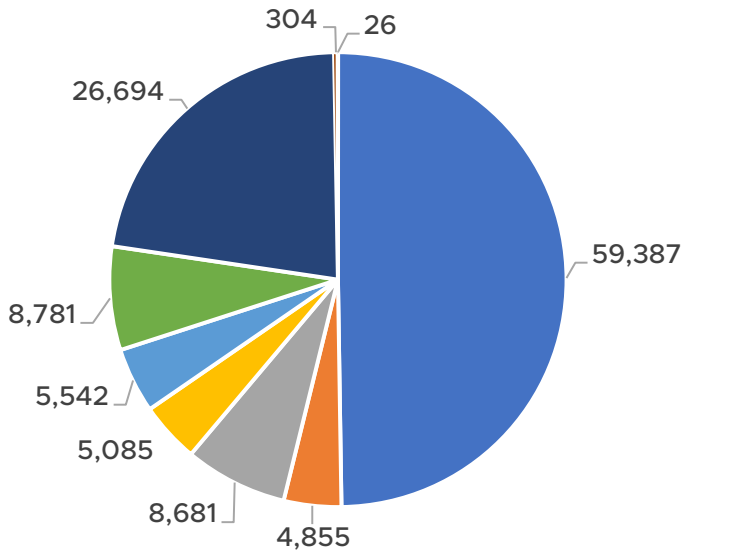
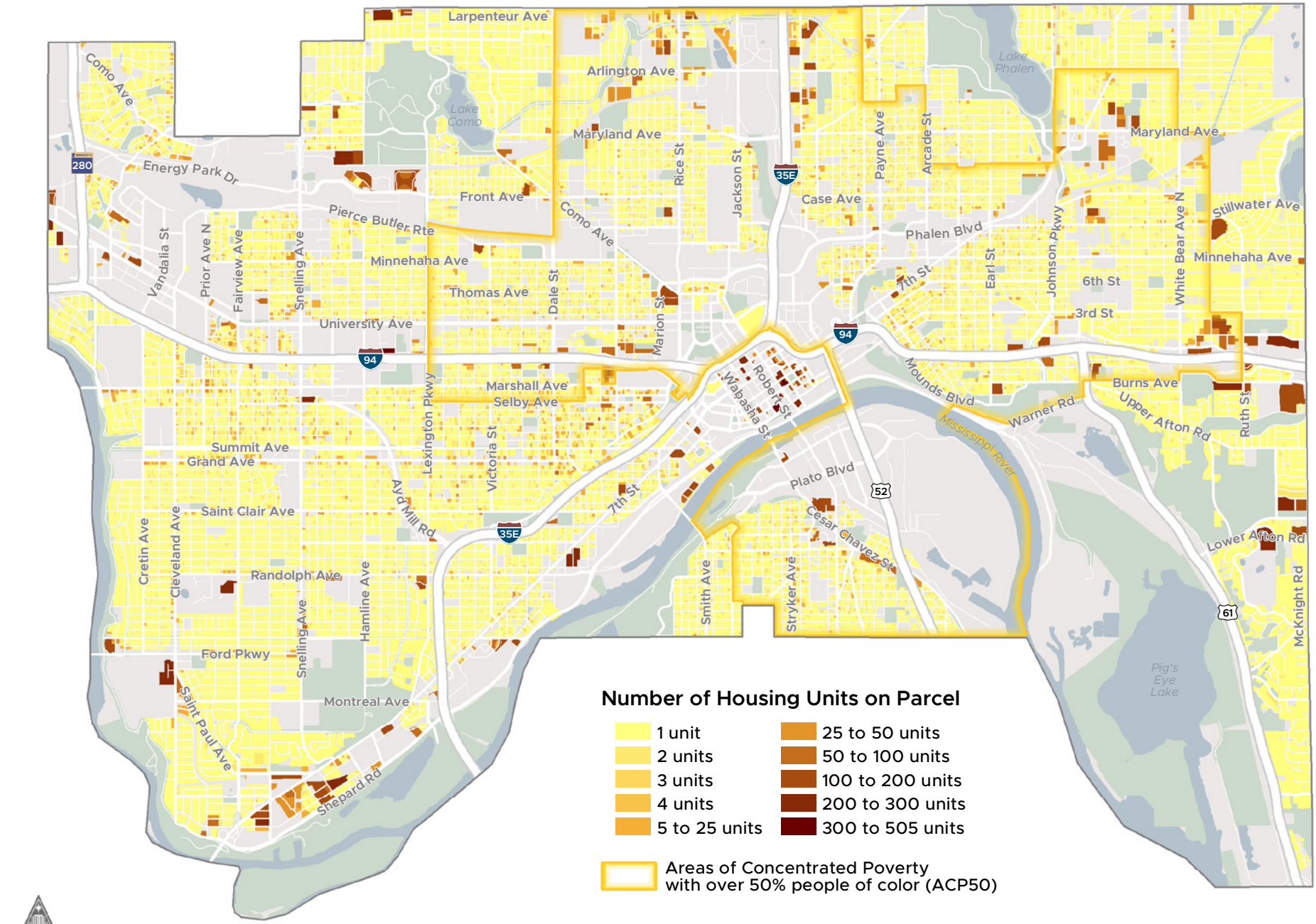


Chart 3: Type of Housing Units



Map H-1: Housing Types



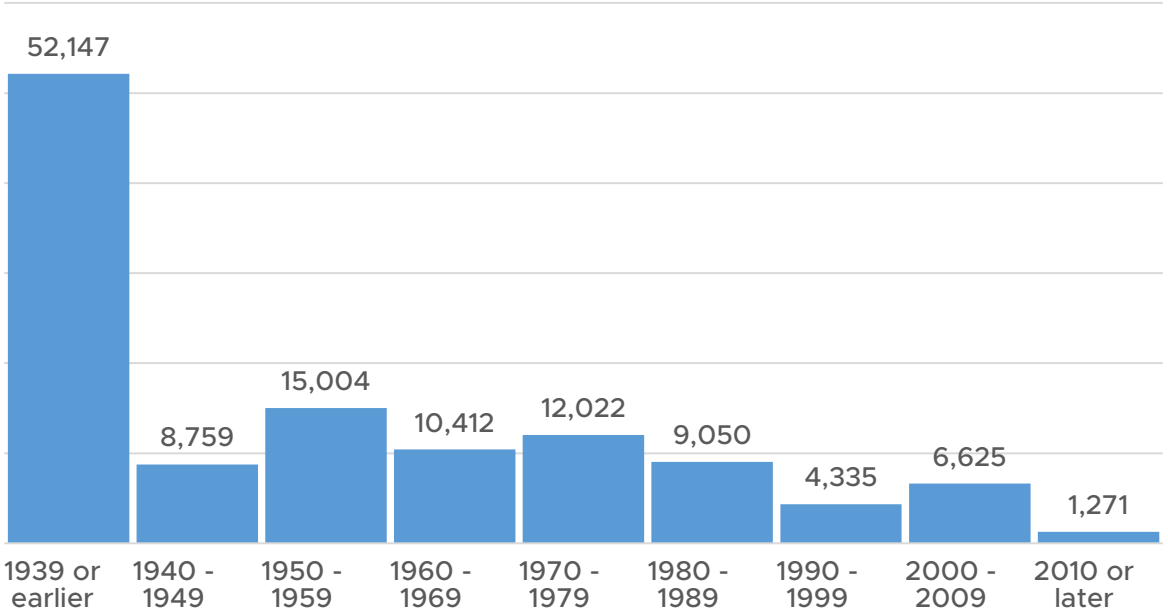
Data source: Ramsey County Parcel Dataset, 1/29/2018

Age and Condition of Housing Units

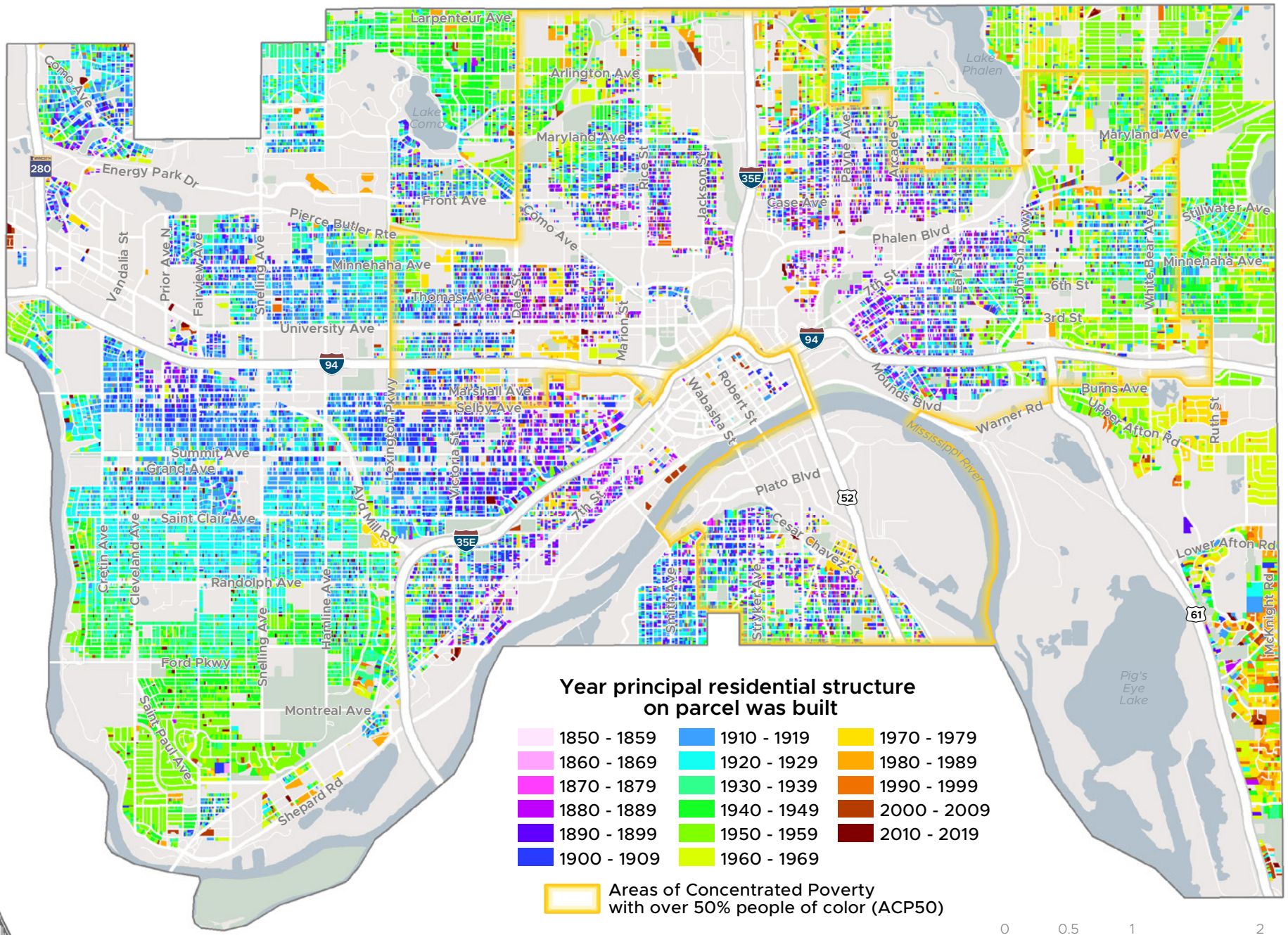
Saint Paul is a fully developed city with an aging housing stock. The median age of residential units is 69 years old. Fifty-seven percent of single-family, duplex and triplex structures were built before 1930; development of those structure types peaked in the 1920s with one-fifth of them built during that decade. Small-scale, multi-family buildings, those with between 4 - 19 units, have a median age of 96 years old (median year built is 1922). Larger apartment complexes (20 or more units) were generally developed later with a median year built of 1965 (median age 53 years old) (Ramsey County Property Tax Records).

Map 2 shows the age distribution of residential structures throughout the city. The oldest of these structures form a ring around downtown and the Capitol area, and are found near other important historic commercial and industrial nodes. The early 1900s brought rapid expansion of single-family and small-scale multi-family development, particularly in areas that were well-served by the streetcar lines. The end of World War II brought the third wave of housing expansion that resulted in the city being "built out" to its northern and eastern borders, as well as in Highland Park. Since the 1990s, new housing has been "infill development" on scattered undeveloped land and redevelopment of previously developed properties. As will be discussed later in this assessment, age of structure is one indicator of unit affordability.

Chart 4: Age of Housing Units



Map H-2: Decade Built



Source: City of Saint Paul (2016); Ramsey County (2018)

With a housing stock predominated by structures nearing a century in age, working with property owners to ensure they are safe and well-maintained is critical to the health and safety of city neighborhoods and residents. The City and HRA have several programs to work with property owners to maintain structures and housing units. Two existing City programs help to identify housing conditions issue, the Truth-in-Sale-of-Housing Program and Fire Certificate of Occupancy program. Four programs help property owners finance improvements.

Truth-in-Sale-of-Housing

The Saint Paul Truth-in-Sale of Housing disclosure report is a visual overview of the building components and fixtures. This required report is to inform prospective buyers of the observed condition of a dwelling at the time of the evaluation. The disclosure report is intended to provide basic information to the home buyer and the seller prior to the time of sale.

Fire Certificate of Occupancy Program

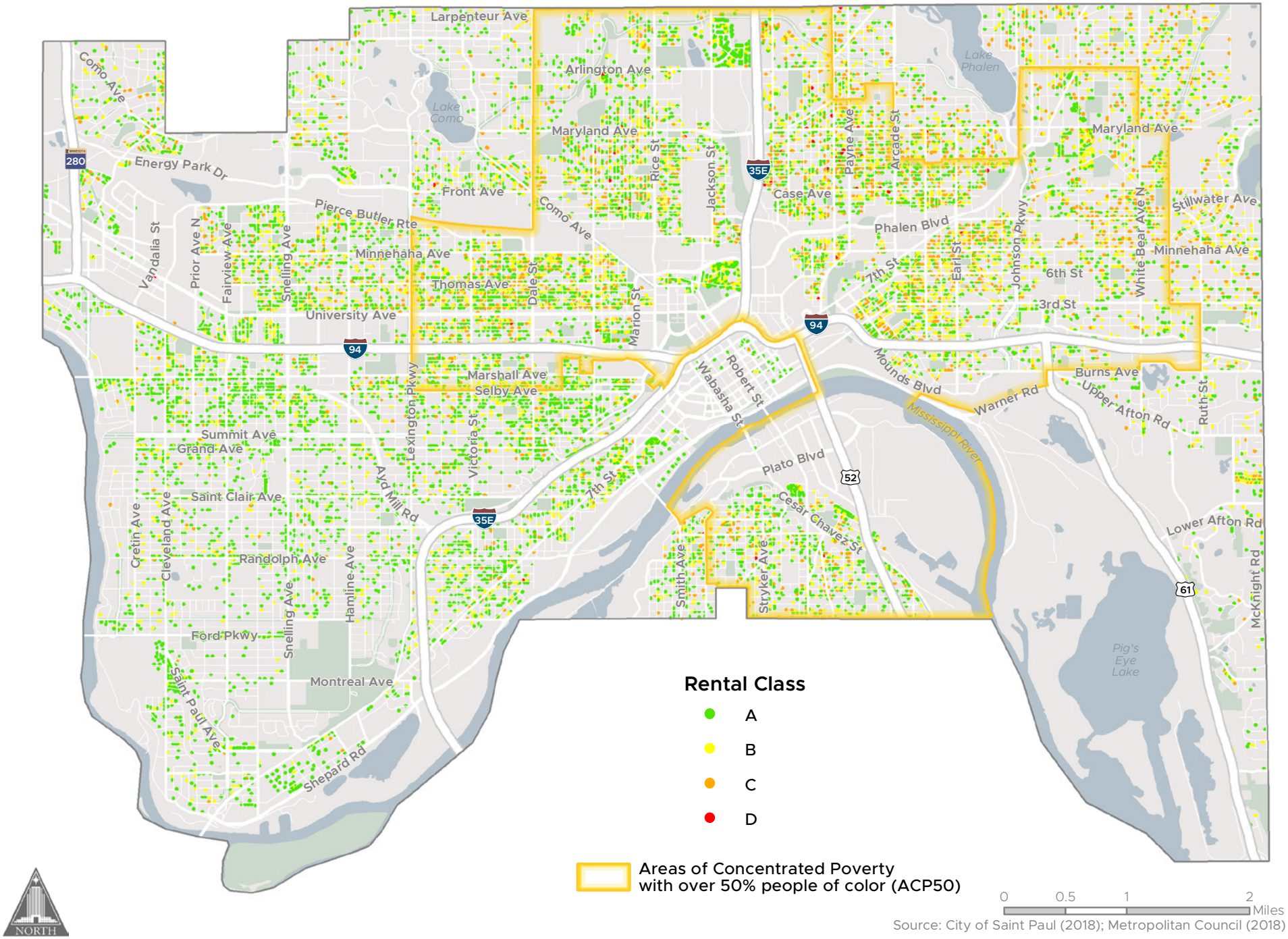
To ensure that residential rental buildings comply with applicable fire, building, housing and other relevant codes, non-owner-occupied one- and two-unit buildings, and all buildings with three or more units, must receive a fire Certificate of Occupancy (C of O). If violations are found during an inspection, orders will be issued to correct the violations. The C of O can be revoked for severe violations that are not corrected. A building cannot be occupied or used if the C of O has been revoked. The properties are graded A through D, based on the number and severity of code compliance issues identified at the time of the inspection. See Map 3 to see the location and grades of rental units throughout the city.

Property owners are incented to keep their properties code compliant and to receive and maintain a high score as the frequency of inspection is based on the score. Inspection frequency based on rating is: A, every six years; B, every four years; C, every two years and D, annually.

Figure H-4: Building C of O Ratings

Rating	Number of Buildings
A	8,335
B	4,063
C	2,781
D	72

Map H-3: Certificate of Occupancy Rental Ratings



Source: City of Saint Paul (2018); Metropolitan Council (2018)

Citywide Deferred Rehabilitation Loan

A 0% interest loan up to a maximum of $25,000 is available to homesteaded and owner-occupied dwellings (4-unit maximum) with incomes at or below 60% of area median income (AMI) and adjusted for household size. The loan is forgiven after 30 years unless the owner moves from or sells the property, at which point the loan must be repaid.

Citywide Low Interest Rehabilitation Loan

Three percent and 4% interest loans up to a maximum of $50,000 are available to homesteaded and owner-occupied dwellings (4-unit maximum) with incomes at or below 115% of AMI. The loan provides financial assistance to homeowners who have home repair issues or want to remodel their homes or make their home energy-efficient.

Citywide Deferred Emergency Loan

A 0% interest loan up to a maximum of $25,000 is available to homesteaded and owner-occupied single-family dwellings for households earning at or below 80% of AMI and adjusted for household size. The loan provides financial assistance to homeowners who have serious home repair issues including, furnace/heating systems, sewer lines, electrical, and health and safety issues. The loan is forgiven after 30 years unless the owner moves from or sells the property, at which point the loan must be repaid.

Rental Rehabilitation Loan Program

A 10-year, 0% interest loan up to a maximum of $30,000 is available to owners of one- to four-unit rental buildings. Eligible properties must have a valid C of O and be classified as C or D through the C of O program anywhere in the city or be in an ACP50 area. Participating landlords cannot increase rents of assisted units by more than 3% per year while remaining at or below the HUD Fair Market Rent during the rent loan term.

Vacant Residential Structures

The City requires property owners register properties as vacant structures if the building is unoccupied and they meet any of the following conditions:

- unsecured;
- secured by other than normal means;
- a dangerous structure;
- condemned;
- has multiple housing or Building Code violations;
- is condemned and illegally occupied; or
- is unoccupied for a period longer than one year during which time the Enforcement Officer has issued an order to correct nuisance conditions.

The City has three categories of vacant building based on the level of deficiencies or safety hazards. Sale of registered vacant buildings must be reviewed by the City.

As of January 2018, there are 602 registered single-family, duplex, multi-family and mixed-use buildings in the city. Nearly three-quarters of those are single-family structures. As Map 4 shows, registered vacant buildings are located throughout the city, but there is a higher occurrence of vacant buildings within the ACP 50 areas.

Figure H-5: Definitions of Categories of Vacant Buildings

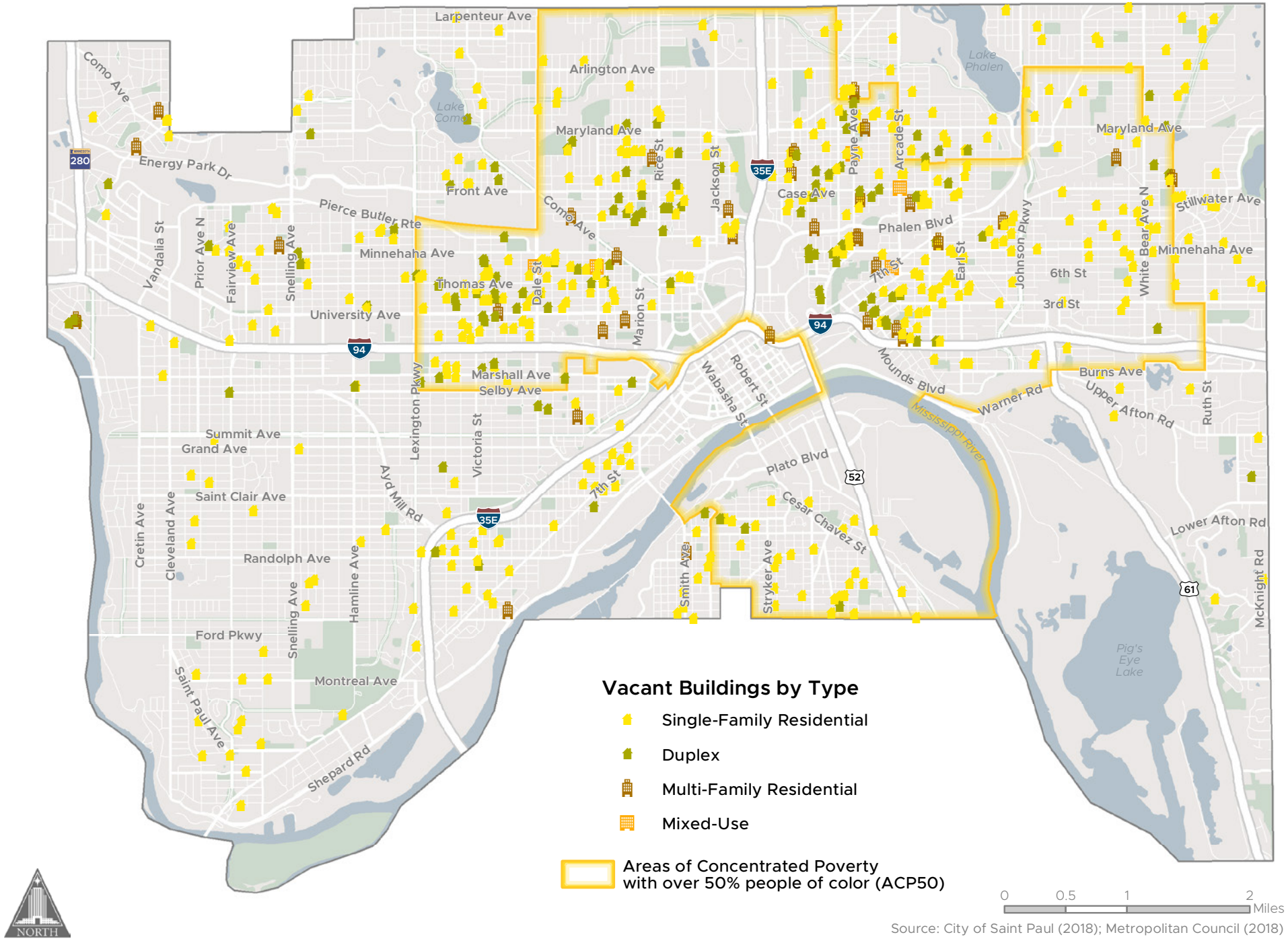
Category 1	Category 2	Category 3
• Unoccupied and unsecured, or • Unoccupied and boarded, or • Unoccupied for one year with history of nuisance orders (not necessarily boarded)	Unoccupied and boarded and one of the below:	Unoccupied and declared nuisance building for one of the below:
FIRE EXEMPT Category 1 • Unoccupied (vacated or condemned) due to fire damage	• Condemned as uninhabitable • Condemned or vacated by Fire Certificate of Occupancy • Unoccupied with multiple violations of housing and building code (based on inspection by Vacant Building or Housing Code Enforcement staff)	• Dangerous structure • Condemned with conditions constituting material endangerment • Has multiple violations with conditions constituting material endangerment

Figure H-6: Requirements for the Sale of Registered Vacant Buildings

Category 1		Category 2	Category 3
The seller must:	The buyer (and/or seller) must:	The seller (or prospective buyer) must:	May not be sold unless one of the following are obtained:
Obtain a Truth-in-Sale of Housing report to market the property.*	1. Register or re-register ownership 2. Pay outstanding fees 3. Comply with existing or outstanding orders for legal occupancy	1. Register or re-register ownership 2. Pay outstanding fees 3. Obtain a code compliance report** 4. Submit for approval: a cost estimate by a licensed contractor for completing the code compliance, AND a schedule for completion of all code compliance work 5. Submit proof of financial capability: e.g. performance bond, escrow account, or other proof accepted and approved by the City	1. Certificate of Occupancy 2. Certificate of Code Compliance 3. Fire Certificate of Occupancy

* A TISH report is required to market a category 1 vacant building.
** A TISH report is required for marketing purposes if the property is offered for sale prior to obtaining the code compliance.

Map H-4: Registered Vacant Buildings by Building Type



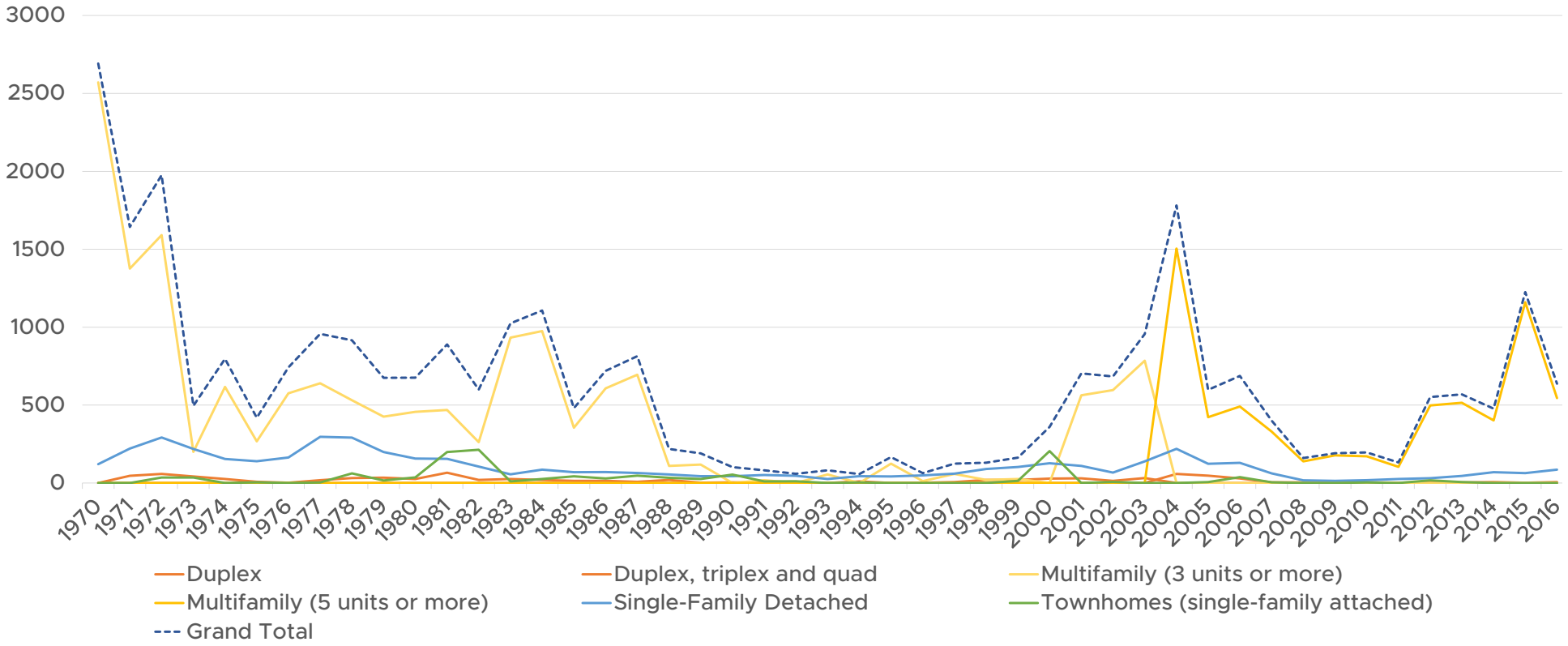
Source: City of Saint Paul (2018); Metropolitan Council (2018)

New Residential Construction

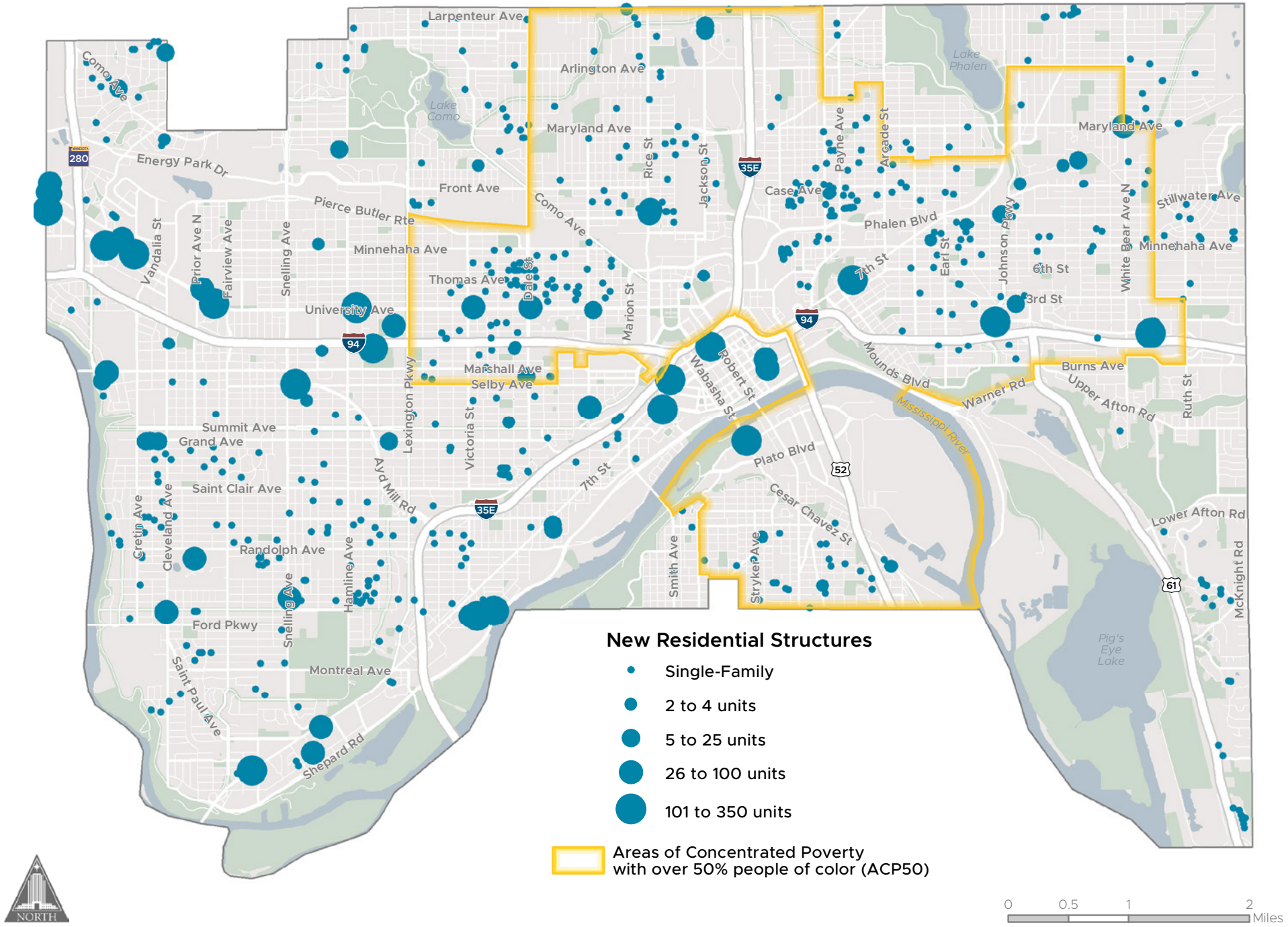
While new unit development has not reached pre-recession levels, construction of new units in Saint Paul began to pick up in 2012 and steadily increased through 2015. Building permits were down in 2016, and in 2017, City data shows 834 new units built. As in the in the 1970s, 1980s and early 2000s, multi-family development is the dominate type of housing being developed. Much of the new multi-family development is being built in area with strong transit connections, including downtown and near the Green Line stations, which opened in June 2014. 3,850 new units are completed or under construction within one-half mile of the Green Line.

There has also been an uptick in new single-family residential and large-scale additions. As the following map shows, this activity has been occurring throughout Saint Paul. The City considers a significant remodel a new home when exterior walls are removed and/or the structure is removed to the first-floor joist system.

Chart 5: Residential Building Permits by Housing Type (1970 - 2016)



Map H-5: New Residential Structures, 2010-2017



2. Affordability of Existing Housing

Housing is considered affordable to a household when 30% or less of its gross household income is spent on monthly housing costs. Monthly costs for ownership units are mortgage payments, taxes, insurance and utilities; for renters, monthly costs include rent and utilities paid by the tenant. The following provides an analysis of supply of units—both ownership and rental--that are affordable to households at different income levels.

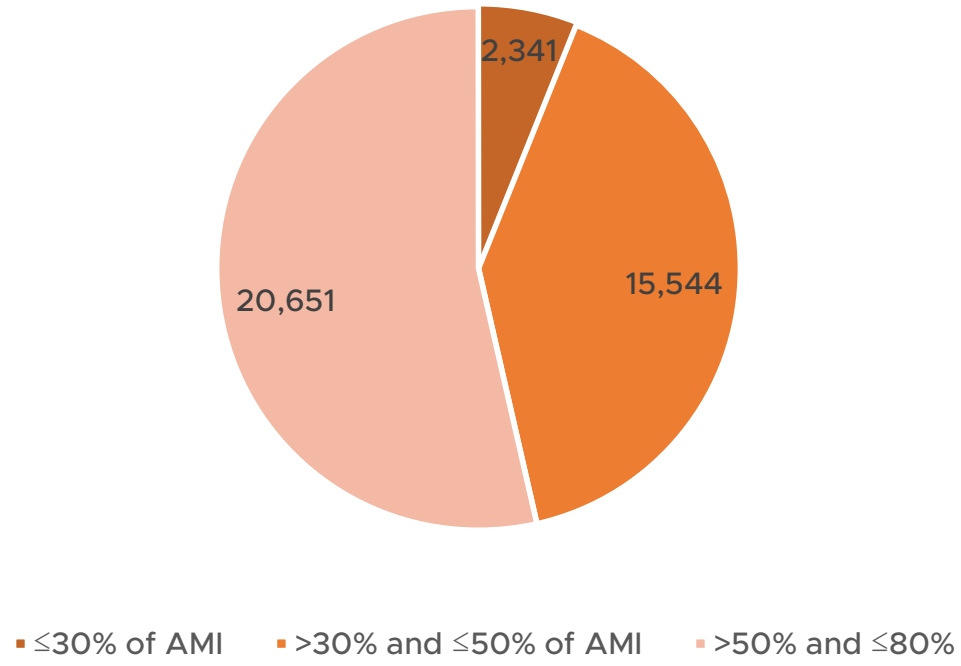
Ownership Housing

The Metropolitan Council developed a formula to determine the value of a house that is affordable to a household of four earning 80% of AMI. The formula takes into consideration the cost of a fixed-interest, 30-year mortgage; down payment; property taxes; and mortgage and homeowners insurance. In 2017, the value of an ownership unit affordable to a household of four earning 80% of AMI ($68,000) was $236,000.

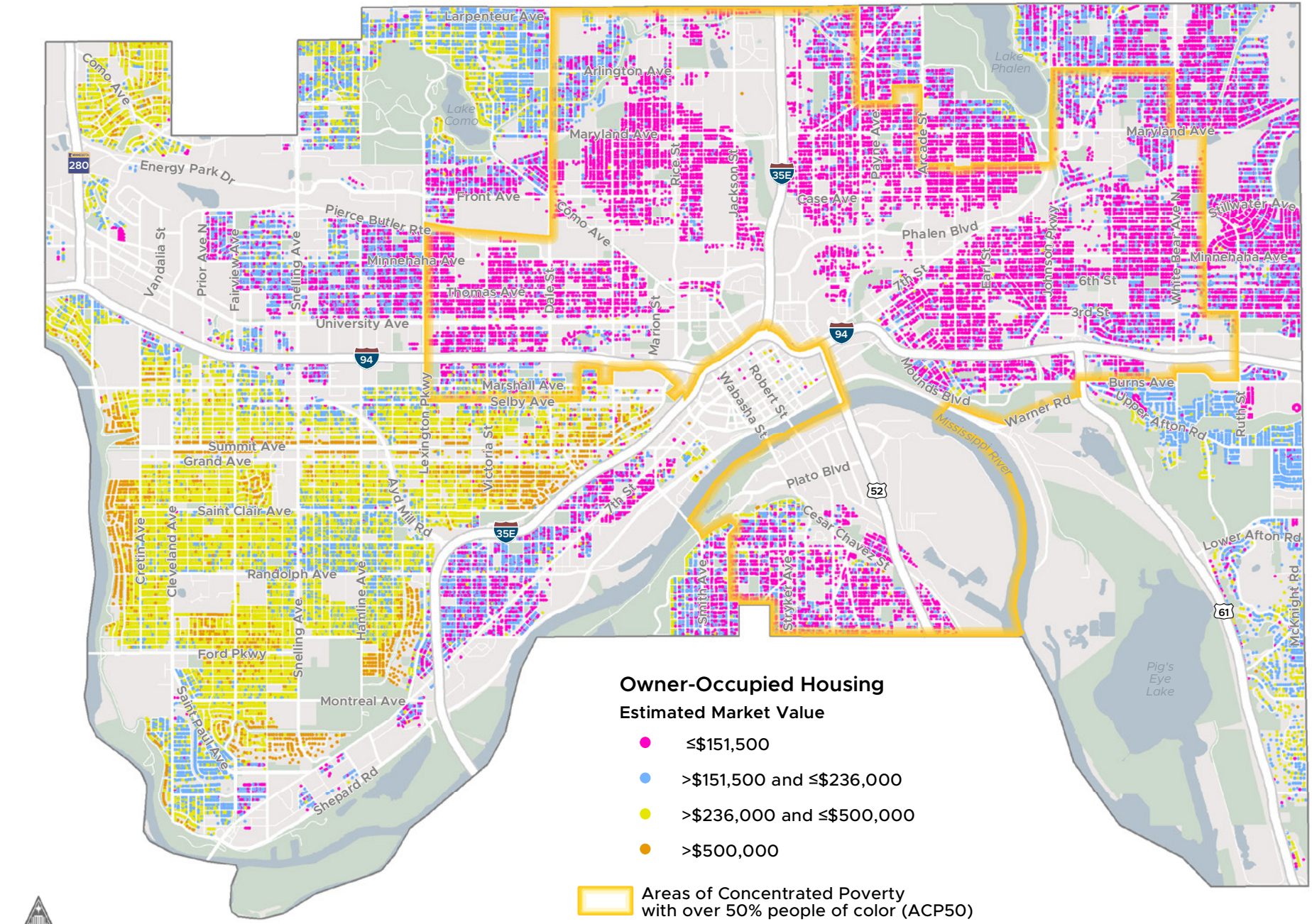
Saint Paul has a significant supply of ownership housing units affordable to four-person households earning up to 80% of AMI. According to Ramsey County's assessment records (January 2018), Saint Paul had 38,536 homesteaded properties affordable to these households (69% of homesteaded properties). Of those, 6% are affordable to households earning 30% of AMI or less, 40% are affordable to those earning between 30% to 50% of AMI, and 54% are affordable to households earning between 50% and 80% of AMI. It should be noted that while this estimate captures affordability of monthly costs often associated with escrowed loan payments based on the current value of the property, it does not take into consideration any deferred maintenance costs, condominium association fees or utility costs, all of which contribute to a household's ability to afford a unit.

As Map 6 shows, ownership unit values are not uniformly distributed across the city. Units with the highest values are found on the southwestern quadrant of the city generally bound by Interstate 94, Interstate 35E, and West Seventh and the Mississippi River as well as in the northern portion of Saint Anthony Park, around Como Park and Highwood. The ownership units with the greatest affordability are found east and west of Interstate 35E in the north-central and east part of the city, as well as on the city's West Side

Chart 6: Affordability of Units (Owner)



Map H-6: Affordability of Owner-Occupied Housing



Source: Ramsey County Parcel Database, 2017. ACP50 data from Metropolitan Council via MN Geospatial Commons, from annual release on 2/5/2018

Rental Housing

Affordablity of rental housing is more difficult to track than that of ownership housing, as no governmental unit collects rent data by unit and relies on renters to report their rental costs. The Department of Housing and Urban Development (HUD) receives custom tabulations of the American Community Survey(ACS) 5-year estimate data to demonstrate the extent of housing problems and needs, particularly for low-income households. The Comprehensive Housing Affordability Strategy (CHAS) data provides information on the number of rental units affordable to households at various income levels. However, CHAS data should be looked at as a general reflection of patterns and trends, since the data lags the market by at least three years. For example, at the drafting of this document, the most recent CHAS data set is based on the 2010-2014 ACS 5-year estimates.

According to CHAS, 2010-2014, approximately 94% of all rental units are affordable to households earning 80% of AMI or less. Of those units, 21% are affordable to households earning 30% of AMI or less, 48% are affordable to households earning more than 30% and less than 50% of AMI, and 31% are affordable to households earning more than 50% and less than 80% of AMI. These counts include public housing and income-restricted and naturally-occurring affordable housing units (NOAH). As there are no income restrictions on NOAH units, households that could potentially spend more on housing often choose to spend less, with one-third of units affordable in the income bands being lived in by households with higher incomes.

Map H-7 shows the median gross rents by census tract. The most affordable rental housing is located between University Avenue and Interstate 94, along Rice Street, south of the Mississippi River, and scattered on the city's East Side. The table below shows rents that can be charged for income-restricted affordable housing based on number of bedrooms. Comparing those rent limits with median rents show the very limited locational choice for households with extremely low incomes. In addition, it also reflects why low-income households within areas of currently low rent cannot afford income-restricted housing. The rents the market is charging in those areas are less than that which is allowed under the affordable housing programs.

Figure H-7: Housing Tax Credit & Tax-Exempt Bond Income and Rent Limits (2017)

Income - % of AMI	Maximum Gross Rents by Bedroom Size (post 1989)						
	0	1	2	3	4	5	6
30%	$474	$508	$610	$705	$786	$868	$949
35%	$553	$593	$712	$822	$917	$1,012	$1,107
40%	$633	$678	$814	$940	$1,049	$1,157	$1,265
45%	$712	$763	$915	$1,058	$1,180	$1,302	$1,423
50%	$791	$848	$1,017	$1,175	$1,311	$1,446	$1,582
55%	$870	$932	$1,119	$1,293	$1,442	$1,591	$1,740
60%	$949	$1,017	$1,221	$1,410	$1,573	$1,736	$1,898

Chart 7: Number of Units Affordable by Income (Renter)

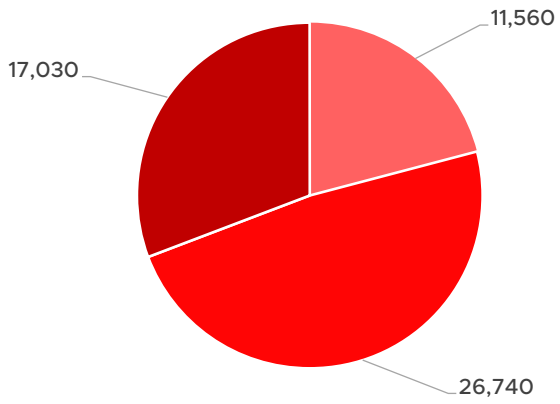


Chart 8: Number of Unit by Gross Rent

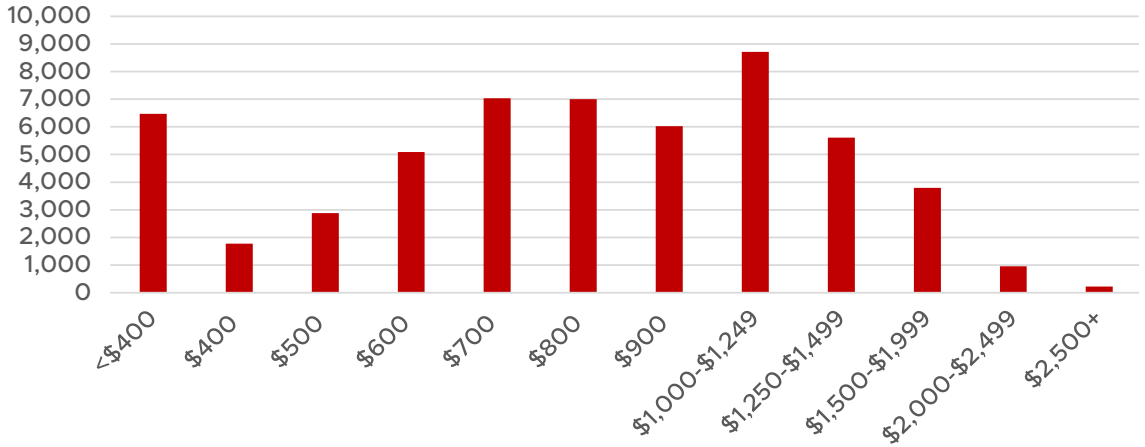


Chart 9: Affordablity of Unit by Income of Tenant (percent)

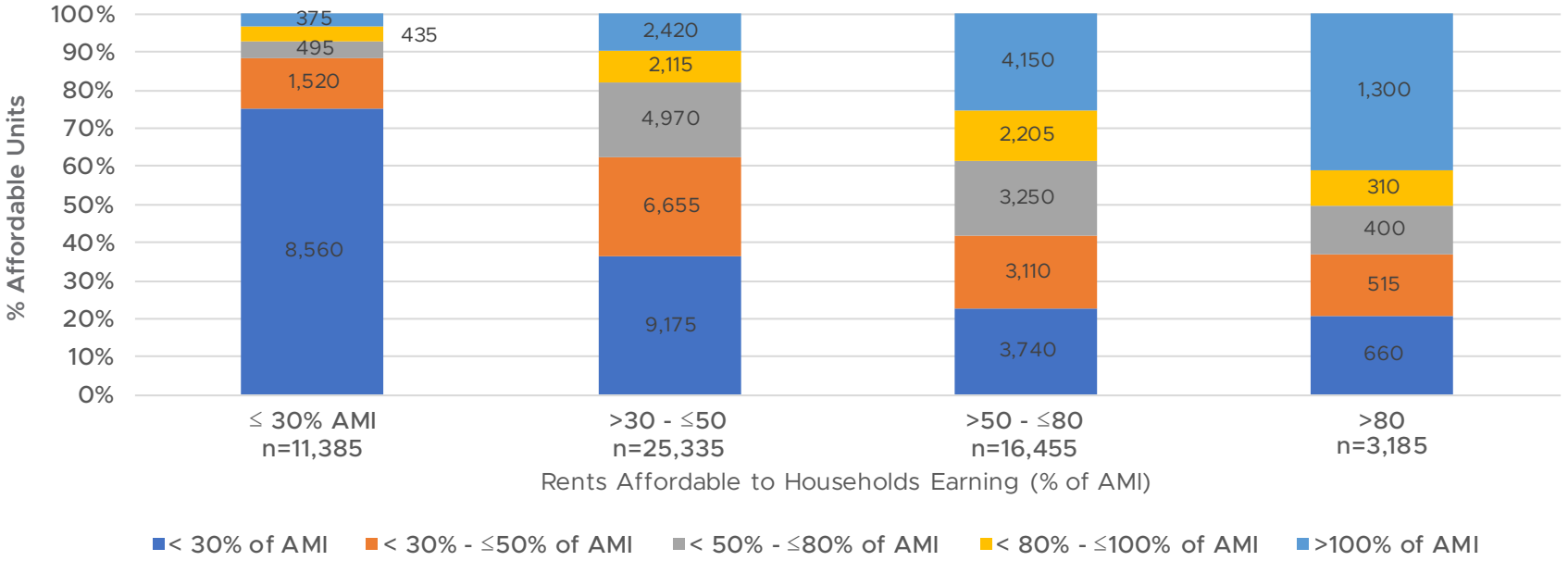
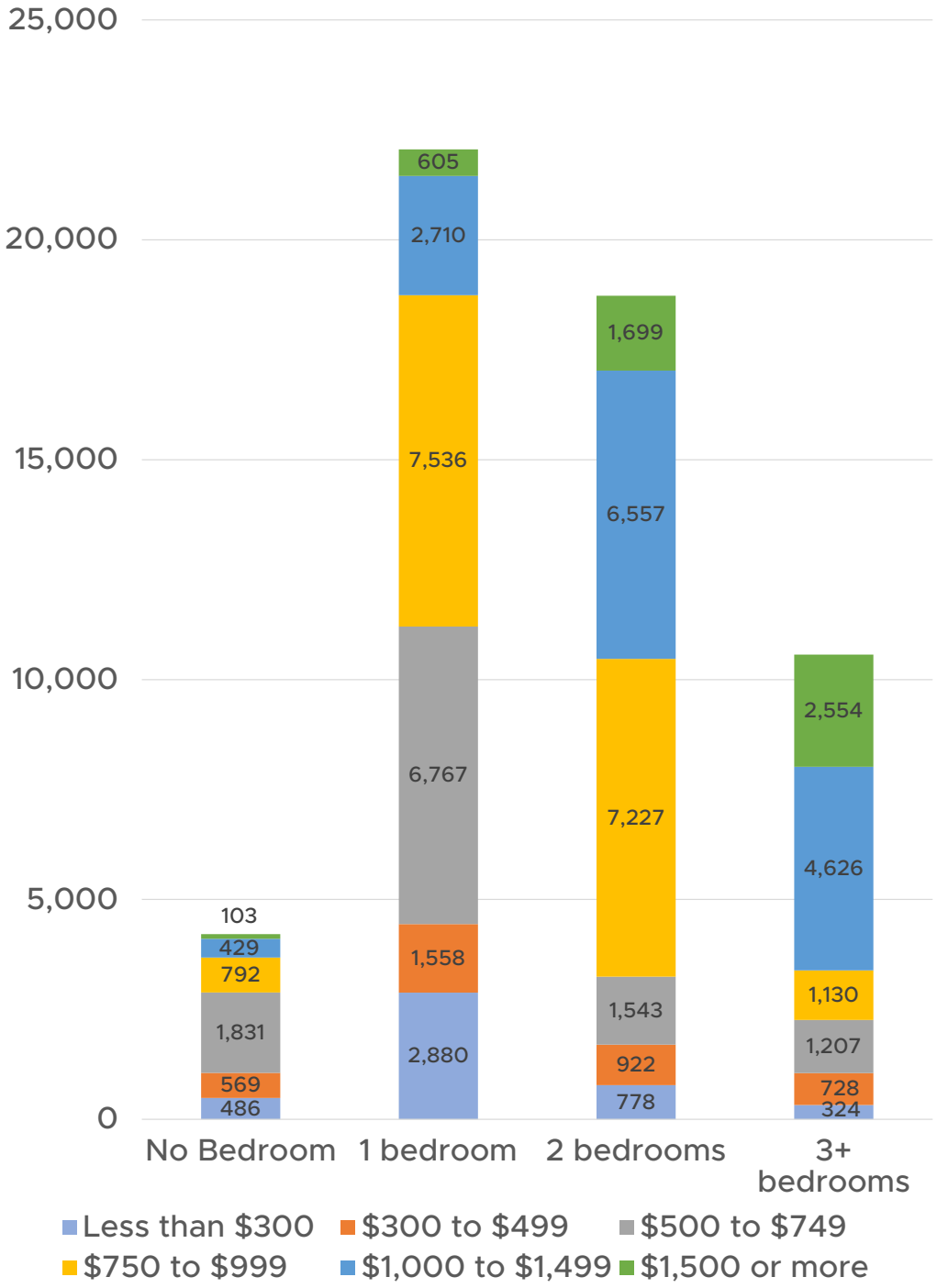
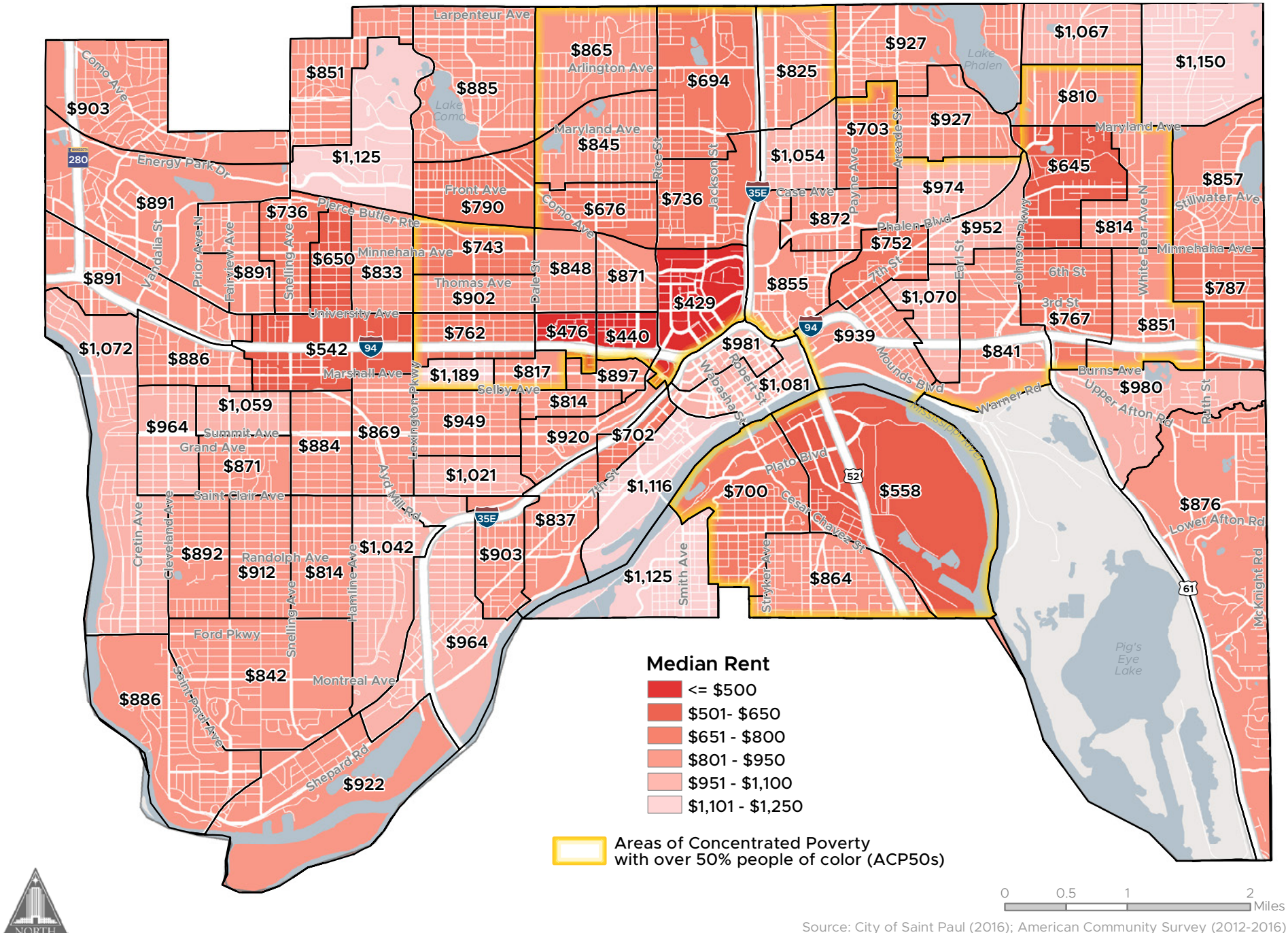


Chart 10: Units by Size by Monthly Rent Paid



Map H-7: Median Gross Rent by Census Tract



Source: City of Saint Paul (2016); American Community Survey (2012-2016)

Affordable Housing Preservation and Production

The City of Saint Paul and Saint Paul HRA continue to work to preserve existing and produce new affordable housing units.

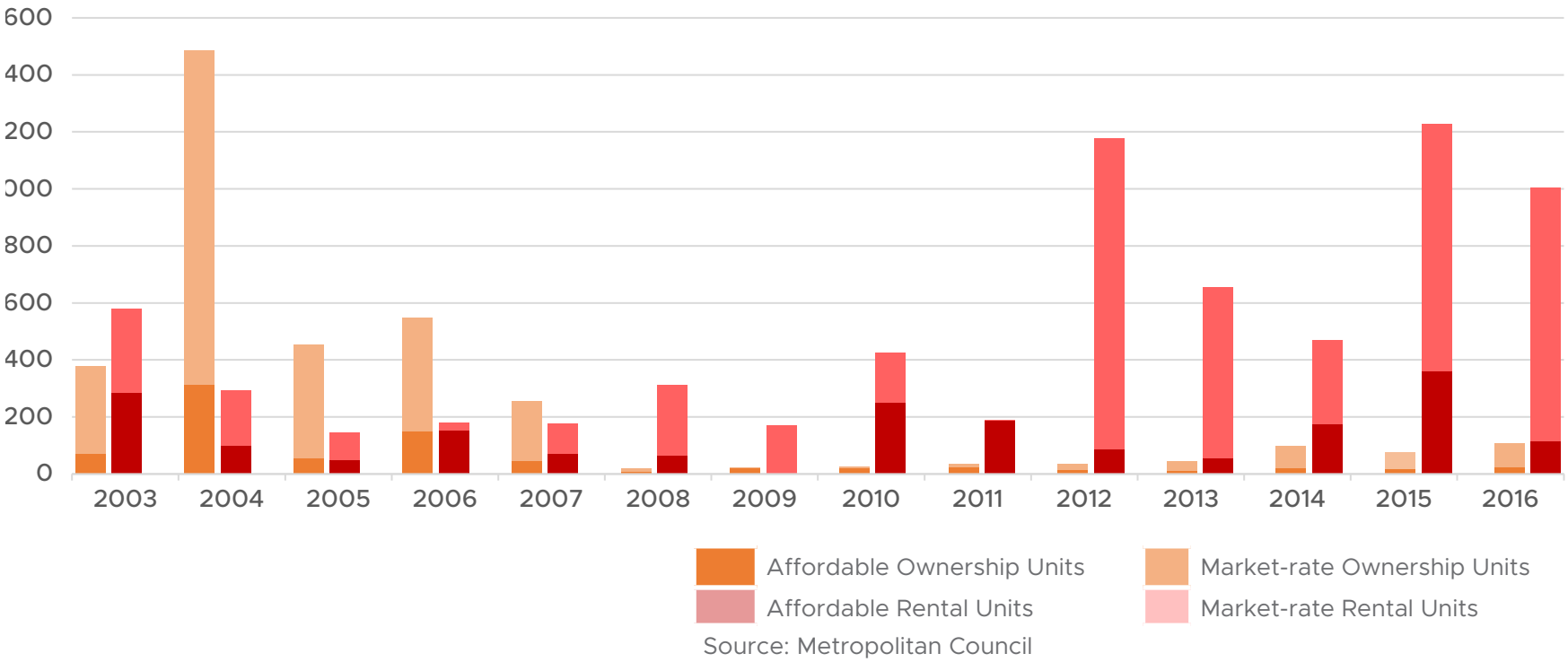
Preservation

Available City data show that between 2004 and 2016, the City/HRA refinanced approximately 2,700 units of affordable housing, which preserved affordability by extending the term of the income restriction. Approximately 34% are affordable to households earning 30% or less of AMI, 14% are affordable to households earning 50% or less of AMI and 52% are affordable to households earning 60% or less of AMI.

Production

According to Metropolitan Council data, between 2003 and 2016, one out of four housing units produced in Saint Paul were units affordable to households at or below 60% AMI. There were approximately 10,585 units built, of which 2,730 were affordable units—785 ownership units and 1,945 rental units.

Chart 11: Total Housing Production - Market Rate and Affordable (2003-2016)



Source: Metropolitan Council

Income-to-Housing Cost

The following charts show the income to housing cost trends for owner and renter households over the last 25 years.

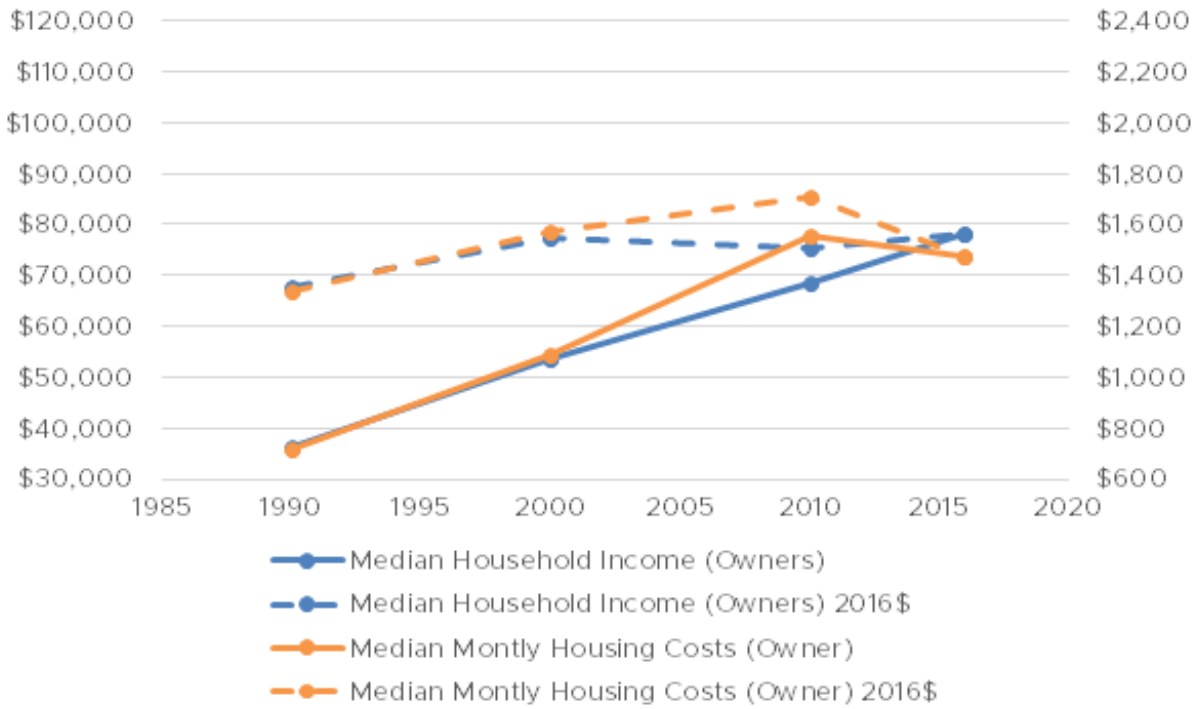
Owner Households

Owner housing costs and income have risen over the 25-year period. Between 2000 and 2010, the rate of increase of housing costs accelerated, while increases to income stayed at approximately the same rate of increase. Between 2010 and 2016, there was a decrease or "correction" in housing costs, which can be attributed to the housing crisis, an overall decrease in unit values and changes in lending practices. Adjusting both housing cost and income to 2016 values shows that household income has gone up for owner households by about 16% while monthly housing costs have gone up by 10%.

Renter Households

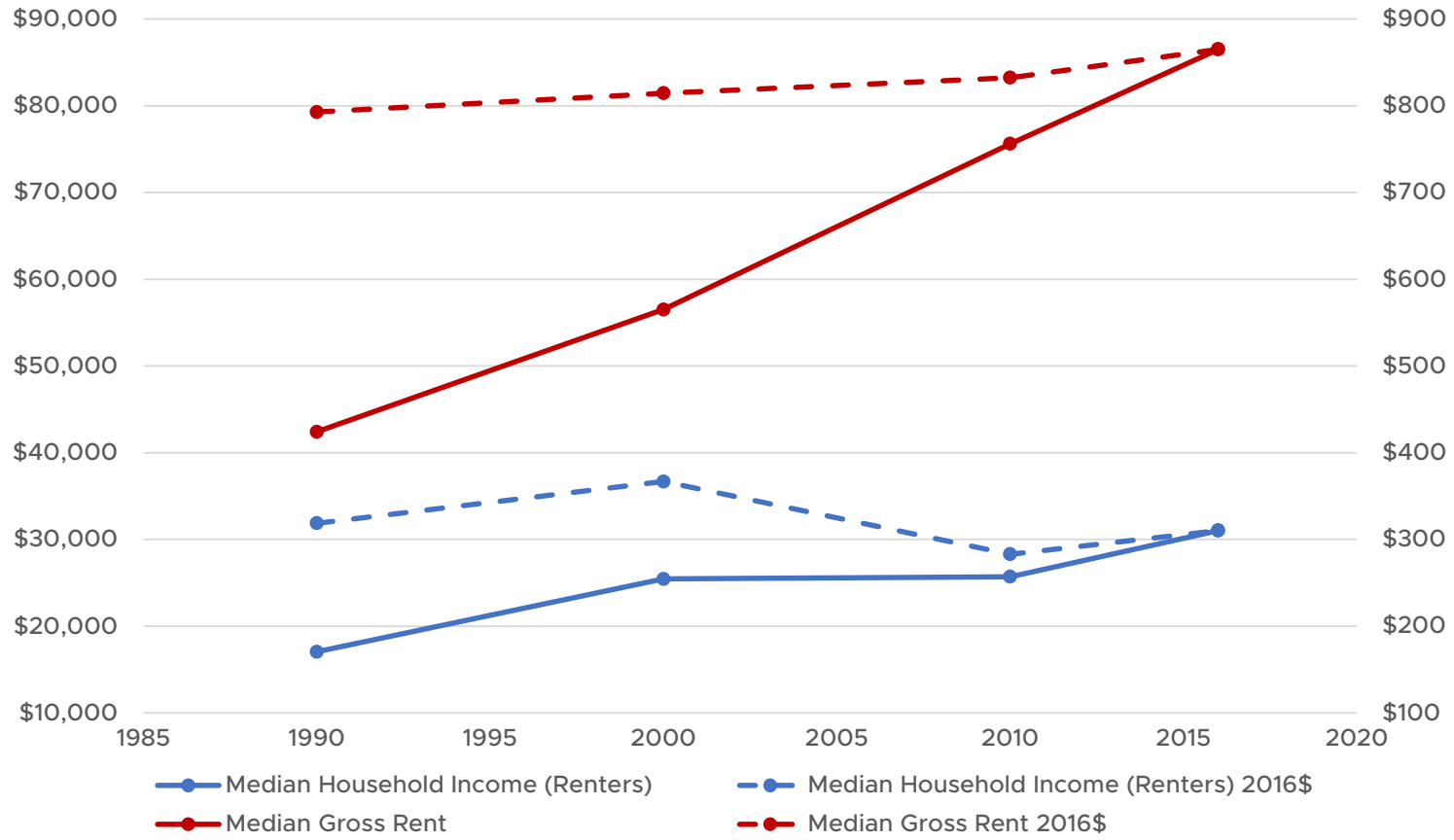
Median gross rents have increased at a faster rate than median renter household incomes over the last 25 years, with rent increasing by 104% and income by 82%. Adjusting for inflation, gross rent has increased by 9%, while renter household income has declined by 3%.

Chart 12: Median Household Income (Owner) to Median Monthly Costs (Owner) in Actual $ and Adjusted to 2016$



Source: U.S. Census 1990, 2000, and ACS 5-year Estimates, 2006-2010 and 2012-2016

Chart 13: Median Gross Rent & Median Household Income (Renters) Annual Values & Adusted for Inflation 2016$



Source: U.S. Census 1990, 2000, and ACS 5-year Estimates, 2006-2010 and 2012-2016

Naturally-Occurring Affordable Housing

While more in-depth research is being conducted as part of the City's Fair Housing Working Group, the following is a basic analysis of the existing supply of naturally-occurring affordable rental housing in Saint Paul. Data from the 2012-2016 ACS 5-year estimates show that units built between the 1950s and 1990s are the most affordable units in the city.

Median gross rent for units produced in the 1970s is approximately half of new market-rate apartments ($791/month to $1,543/month). In addition, examining cost burden by age of unit shows that very low-income households are able to find housing affordable to them most often in buildings built in 1939 or earlier and between 1960 and 1979. These households are less severely cost burden in housing built in between 1940 and 1959 and 1980 and 1999. Map 8 shows the distribution of rental units throughout the city coded by age.

Chart 14: Rental Units and Median Gross Rent by Year Built (American Community Survey, 2012-2016 5-year Estimates)

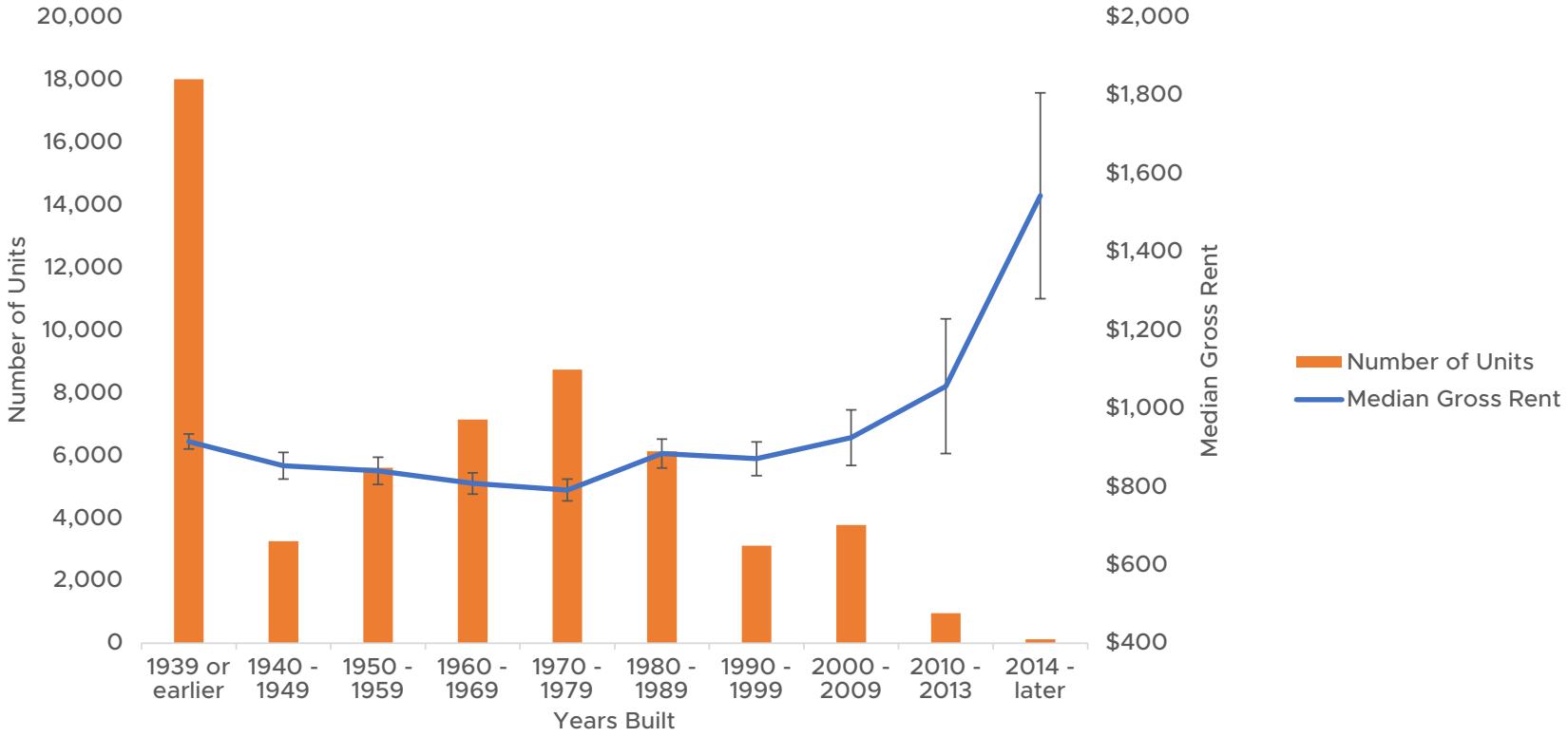


Chart 15: Cost Burden by Age of Structure Income ≤ 50% AMI

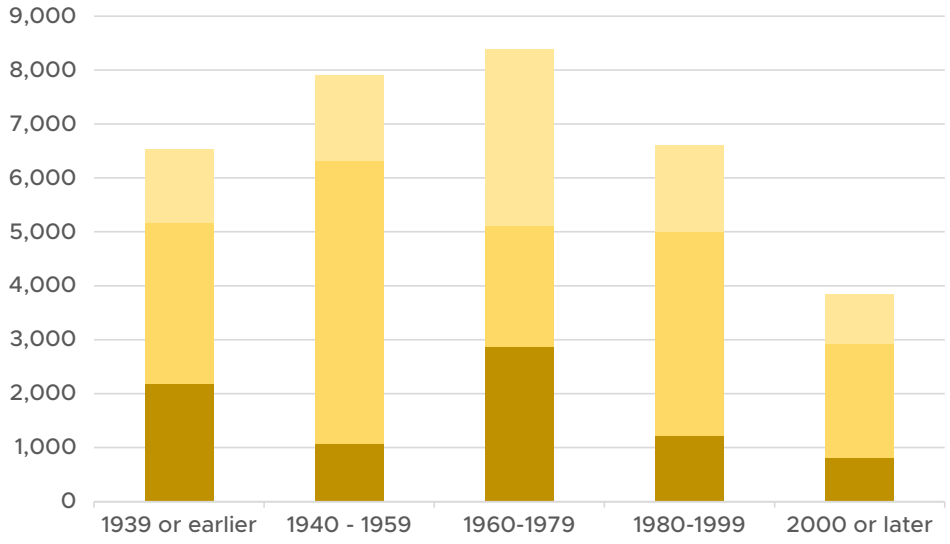


Chart 16: Cost Burden by Age of Structure Income >50 - ≤ 80% AMI

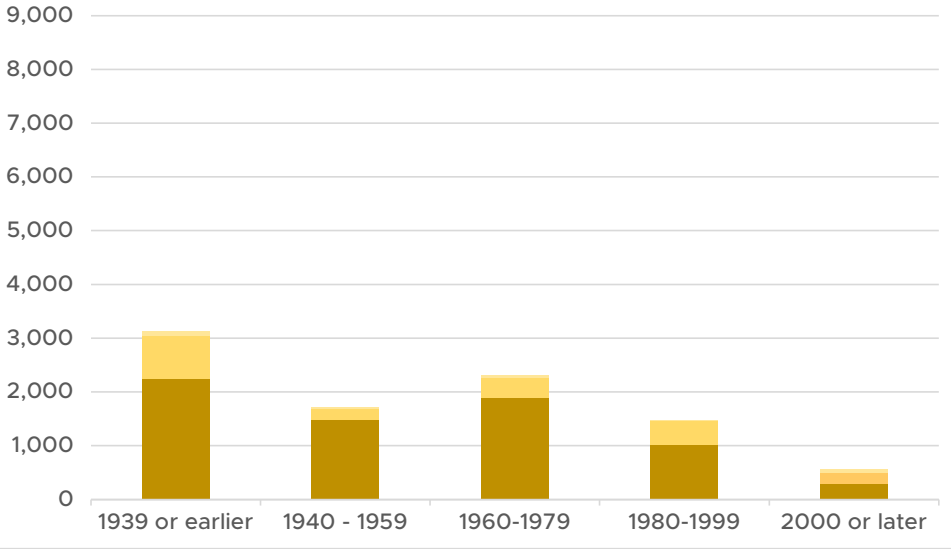
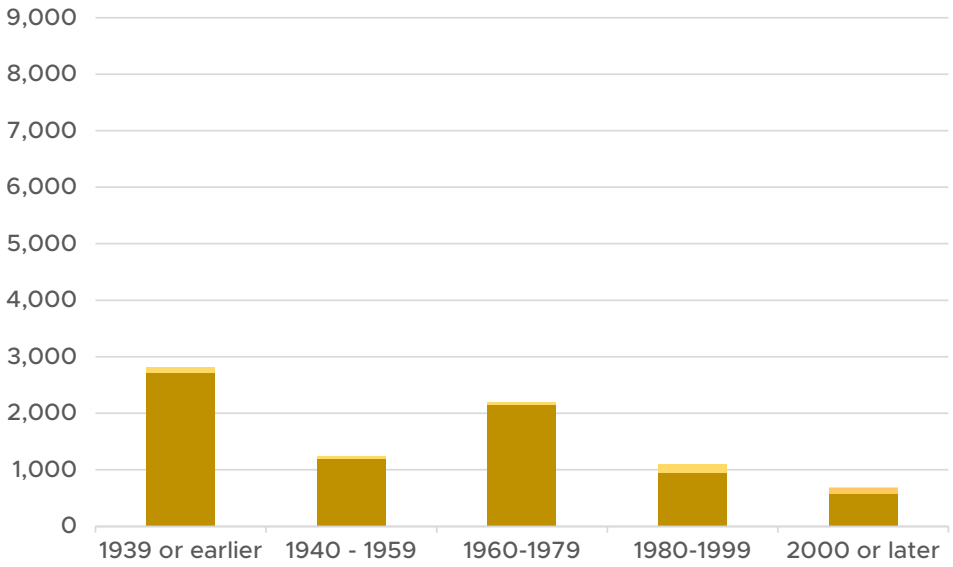


Chart 17: Cost Burden by Age of Structure Income >80 - ≤ 120% AMI



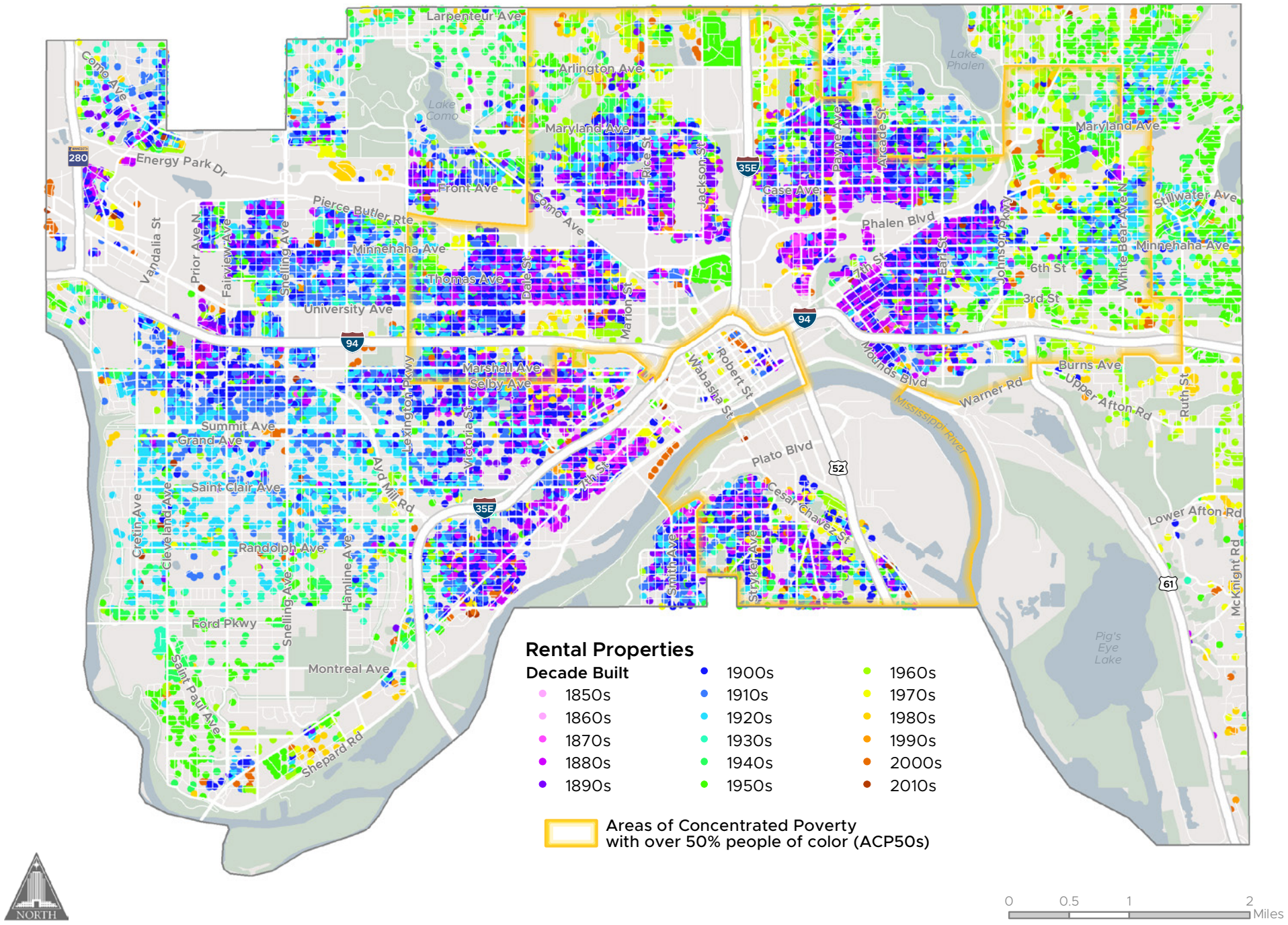
Not Cost-burdened (2010-2014)

Cost-burdened (2010-2014)

Severely Cost-burdened (2010-2014)

Source: CHAS, 2005-2009 and CHAS, 2010-2014 (Table 9)

Map H-8: Rental Property by Decade Built



Inventory of Income-Restricted Affordable Housing

There are 15,337income-restricted units in Saint Paul, including those units owned by the Saint Paul Public Housing Authority (SPPHA), those that are contractually obligated as project-based Section 8 units, and those that are income-restricted through development agreements between developers and the Saint Paul HRA or Minnesota Housing. Of these units, 1,918 are senior units and 420 are suitable for those with disabilities. (Data provided through HousingLink STREAMS data as of August 30, 2018).

Public Housing

SPPHA is an important provider of affordable housing for thousands of Saint Paul households with the greatest need. The SPPHA owns and operates 4,274 units of HUD-subsidized public housing in Saint Paul, which provides housing to approximately 10,000 residents.

SPPHA units are found in several building types, including:

- 2,554 efficiencies and one- and two-bedroom units in 16 high-rise apartment buildings;
- 1,318 one- to five-bedroom units in townhouse developments; and
- 402 one- to six-bedroom units in scattered-site single-family and duplex structures.

Eligibility for public housing is set by Congress (annual income based on a percentage of AMI adjusted for family size). For high-rise applicants, admission preference points are given to elderly (62+ years), near-elderly (50-61 years) and disabled applicants (18+ years), and to veterans, residents of Saint Paul, students and those enrolled in special SPPHA programs. For family units, preference points are given to applicants who are veterans or residents of Saint Paul. The residency preference applies to persons who live, work or attend school in Saint Paul, or who have been accepted for work or school in Saint Paul.

At the end of January 2018, there were 6,367 households on the SPPHA's public housing waiting list. The length of the wait to be housed varies based on the type of housing needed and the type of applicant. An elderly or disabled person or veteran seeking an efficiency or one-bedroom unit has a typical wait of six months, while a family seeking a larger unit (2+ bedrooms) may wait three to four years to be housed. Waiting lists for public housing open periodically.

Project-Based Section 8 Voucher Rental Assistance

Project-based Section 8 Voucher Rental Assistance (PBV) is another critical program to provide housing to Saint Paul's very low-income households. This is one form of project-based rental subsidy that provides long-term affordability with a deep subsidy for specific housing units owned by a private entity. (Another form of project-based Section 8 rent subsidy to private property owners is administered by Minnesota Housing.) PBVs are vouchers from the PHA's regular tenant-based Section 8 Housing Choice Voucher Program, which the PHA awards to specific projects through a competitive process. These are privately-owned units where the owners have entered into a Housing Assistance Payment contract with the PHA that obligates a unit(s) as PBV for an agreed upon period of time, up to 15 years. Eligible families receive rental assistance by agreeing to live in the PBV-assisted unit, and they continue to receive assistance as long as they reside in the specific project-based unit. In some cases, the renter who moves out may take a subsidy with them. Almost any type of structure may be used for PBV. Up to 25% of the units in a building (4+ units) can be assisted under the PBV program, except for buildings for elderly or disabled households or those households receiving supportive services, which can be up to 100% PBV assisted.

There are currently 24 projects with 516 PBV units in Saint Paul under contract with the SPPHA. Another 37 projects with 3,048 units are assisted by project-based subsidies under contract administered by Minnesota Housing.

Other Income-Restricted Projects

The City of Saint Paul, Saint Paul HRA and other project partners, including Minnesota Housing and Metropolitan Council, help finance income-restricted affordable housing projects. To meet conditions set forward through programmatic requirements and/or contractual obligations, these projects may only charge rents that are affordable to a set percent of AMI, typically 30%, 50%, 60% or 80% of AMI, for a specified term. Requirements for various programs are discussed in the Housing Toolkit section.

3. Cost-burdened Households

Housing cost burden has grown in Saint Paul over the last thirty years, peaking during the housing crisis of the mid-2000s when 42% of all households were considered cost-burdened. As the effects of the housing crisis have subsided, cost burden has decreased slightly, but remains 8% higher than the pre-crisis numbers. Renter households have typically experienced cost burden at least twice the rate of owner households; the 2012-2016 ACS 5-yr estimates, show that 37% of all households are cost-burdened with 23% of owners and 51% renters being cost-burdened.

As Table 4 shows, housing cost burden is not evenly distributed between the identified income ranges, but is much more acutely experienced at the lowest incomes levels. The percent of cost-burdened households by income levels are:

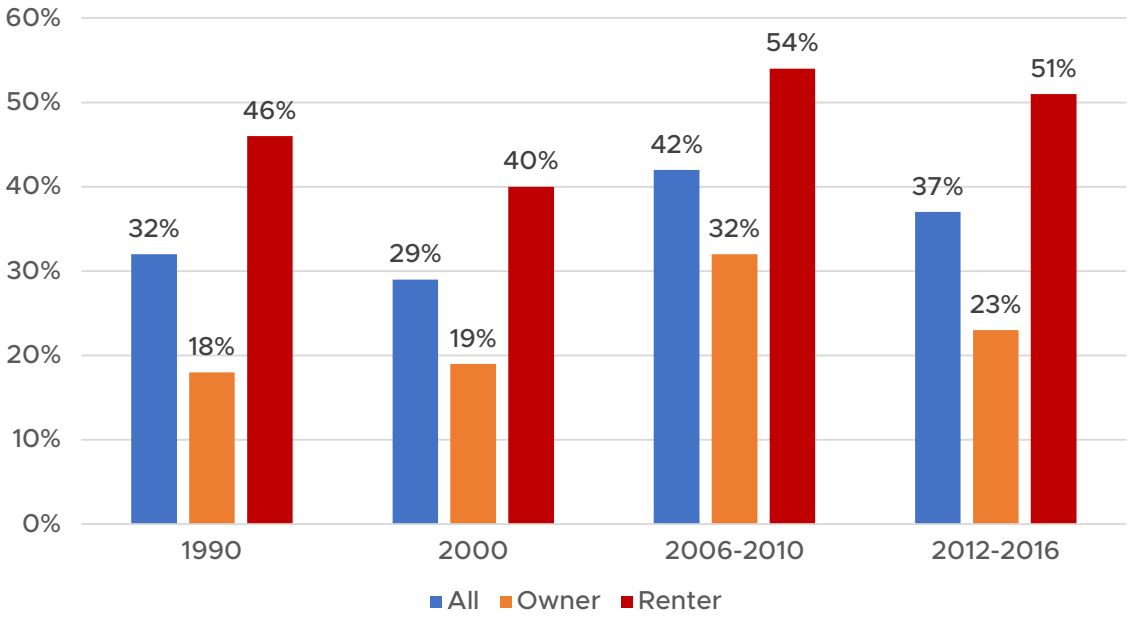
- 78% of households earning 30% of AMI or less (81% of owners and 77% of renters)
- 63% of households earning between 30% and 50% of AMI (58% of owners and 66% of renters)
- 32% of households earning between 50% and 80% of AMI (40% of owners and 25% of renters)
- 16% of households earning between 80% and 100% of AMI (22% of owners and 7% of renters)
- 6% of households earning more than 100% of AMI (7% of owners and 2% of renters)

The following analysis begins to identity what groups are more likely to be cost-burdened in Saint Paul, and includes information on cost burden by race, age and household type differentiated between owners and renters.

Levels of Cost Burden

- A *cost-burdened household* is one that pays more than 30% of its gross income towards housing costs.
- A *severely cost-burdened household* is one that pays more than 50% of its gross income toward housing costs.
- Housing costs for *owners* include mortgage payments, taxes, insurance and utilities, and for *renters*, they include rent and utilities paid by the tenant.

Chart 18: Percent of Cost Burdened Households



Source: U.S. Census, 1990 and 2000; ACS, 5-yr Estimates 2006-2010 and 2012-2016

Area Median Income

Area Median Income is calculated for the Minneapolis-Saint Paul region annually by HUD. This calculation lays the foundation for all other housing analysis, and is used to determine income and rent limits for income-restricted or -qualifying housing. The 2017, AMI for the region was $90,400 for a household with a family of four. The CHAS, 2010-2014 data uses the 2014 AMI, which was $82,900.

It is important to understand how incomes are distributed within the broad income bands—for example, there is a substantive difference between a household earning just over 30% of AMI and one earning 50% of AMI or those earning 50% of AMI compared to those earning 80% of AMI. The following charts show the distribution of AMI within the standard HUD income bands for owner households and renter households.

Chart 19: Household Income (Renter)

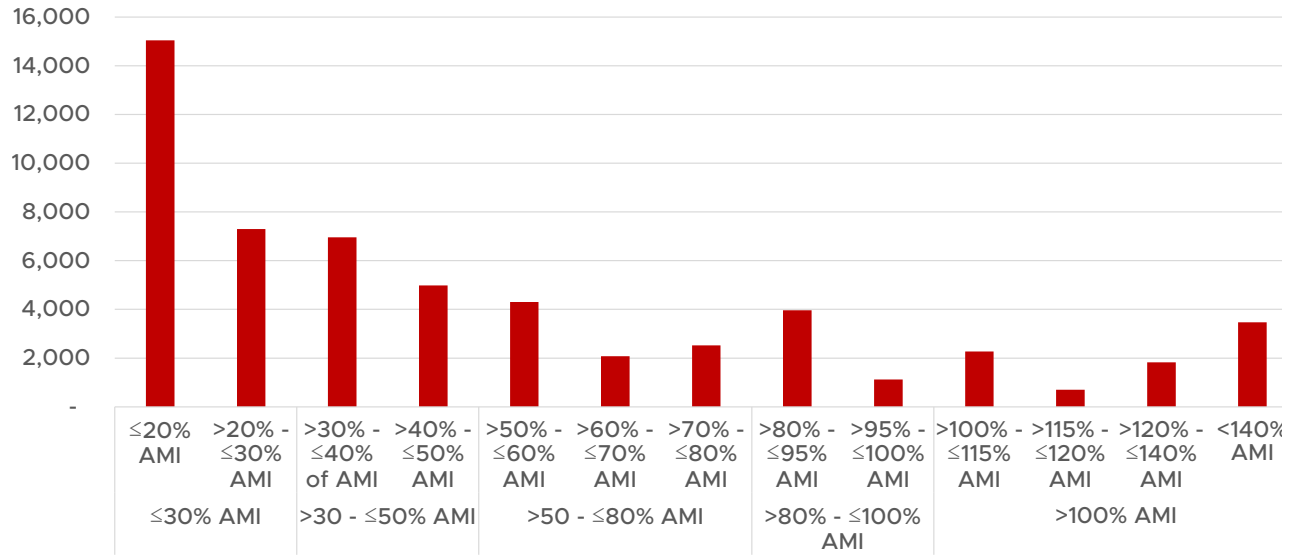


Chart 20: Household Income (Owner)

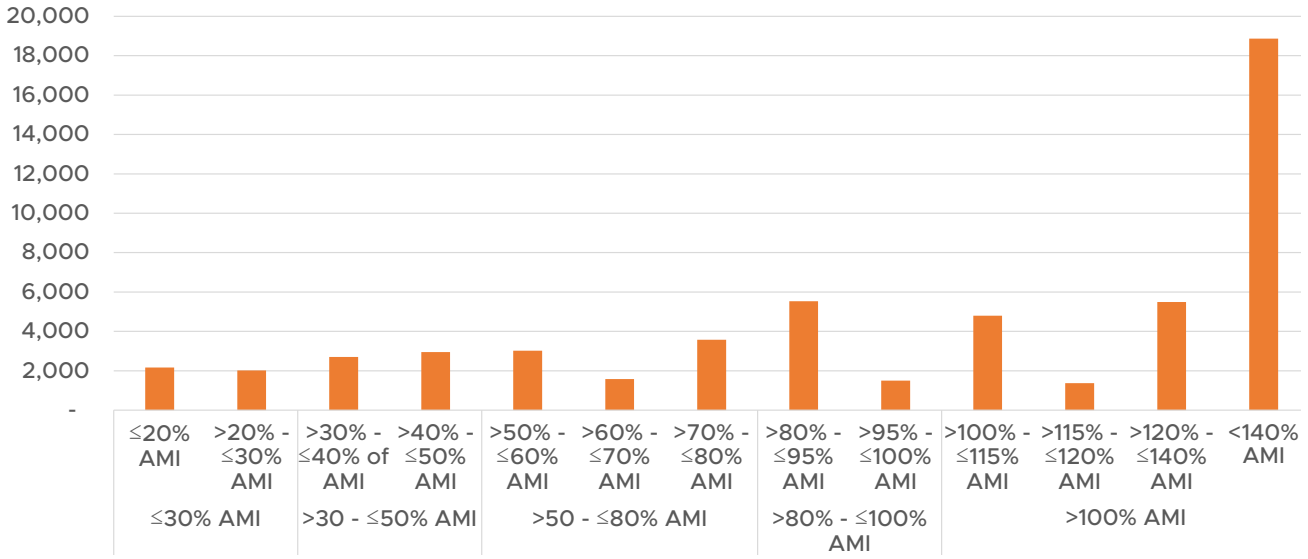


Figure H-8: Number of Cost-burdened, Severely Cost-burdened, and Total Cost-burdened Households at Various Levels of

Level of Cost Burden by Percent of Income at Area Median Income (AMI)	Number of Households			Percent by Household Type			Percent at Income Level			Percent of Total Households		
	Owner	Renter	Total	Owner	Renter	Total	Owner	Renter	Total	Owner	Renter	Total
≤30% of AMI	**4,185**	**22,335**	**26,520**				**16%**	**84%**	**100%**	**4%**	**20%**	**24%**
Cost-burdened (>30% and ≤50%)	690	4,295	4,985	16%	19%	19%	3%	16%	19%	1%	4%	4%
Severely cost-burdened (>50%)	2,700	12,925	15,625	65%	58%	59%	10%	49%	59%	2%	11%	14%
Total cost-burdened (>30%)	3,390	17,220	20,610	81%	77%	78%	13%	65%	78%	3%	15%	18%
>30% and ≤50% of AMI	**5,655**	**11,940**	**17,595**				**32%**	**68%**	**100%**	**5%**	**11%**	**16%**
Cost-burdened (>30% and ≤50%)	1,825	6,065	7,890	32%	51%	45%	10%	34%	45%	2%	5%	7%
Severely cost-burdened (>50%)	1,435	1,815	3,250	25%	15%	18%	8%	10%	18%	1%	2%	3%
Total cost-burdened (>30%)	3,260	7,880	11,140	58%	66%	63%	19%	45%	63%	3%	7%	10%
>50% and ≤80% of AMI	**8,185**	**9,194**	**17,379**				**47%**	**53%**	**100%**	**7%**	**8%**	**15%**
Cost-burdened (>30% and ≤50%)	2,545	2020	4,565	31%	22%	26%	15%	12%	26%	2%	2%	4%
Severely cost-burdened (>50%)	690	245	935	8%	3%	5%	4%	1%	5%	1%	0%	1%
Total cost-burdened (>30%)	3,235	2,265	5,500	40%	25%	32%	19%	13%	32%	3%	2%	5%
>80% and ≤100% of AMI	**7,030**	**5,090**	**12,120**				**58%**	**42%**	**100%**	**6%**	**5%**	**11%**
Cost-burdened (>30% and ≤50%)	1,285	365	1,650	18%	7%	14%	11%	3%	14%	1%	0%	1%
Severely cost-burdened (>50%)	235	10	245	3%	0%	2%	2%	0%	2%	0%	0%	0%
Total cost-burdened (>30%)	1,520	375	1,895	22%	7%	16%	13%	3%	16%	1%	0%	2%
>100% of AMI	**30,520**	**8,270**	**38,790**				**79%**	**21%**	**100%**	**27%**	**7%**	**35%**
Cost-burdened (>30% and ≤50%)	1,890	160	2,050	6%	2%	5%	5%	0%	5%	2%	0%	2%
Severely cost-burdened (>50%)	205	0	205	1%	0%	1%	1%	0%	1%	0%	0%	0%
Total cost-burdened (>30%)	2,095	160	2,255	7%	2%	6%	5%	0%	6%	2%	0%	2%
Total Households	55,575	56,823	112,398	100%	100%	100%				49%	51%	100%
Cost-burdened (>30% and ≤50%)	8,235	12,905	21,140	15%	23%	19%				8%	11%	19%
Severely cost-burdened (>50%)	5,265	14,995	20,260	9%	26%	18%				5%	13%	18%
Total cost-burdened (>30%)	**13,500**	**27,900**	**41,400**	**24%**	**49%**	**37%**				**12%**	**25%**	**37%**

Source: CHAS, 2010-2014

Cost Burden by Race, Age and Household Type

In Saint Paul, there is a racial disparity in homeownership and cost burdened households. Over the last 30 years, homeowners have been less likely to be cost-burdened, typically at about half the rate of renters, and experience it at a lesser degree (cost-burdened versus extremely cost-burdened). White households are more likely than households of color in Saint Paul to own their housing unit. While white households represent 67% of all households in the city, they are 83% of homeowners (CHAS, 2010-2014).

The overall rate of cost burden for homeowners is aligned with that being experienced by white homeowners as they own 85% of these units. Fifteen percent of owners are cost-burdened and 9% percent are severely cost-burdened.

Owner households of color are more likely to be either cost-burdened or severely cost-burdened, compared to that experienced by white households.

As Table 4 shows, 23% of renters were cost-burdened and 26% were severely cost-burdened, according to CHAS, 2010-2014. There was a disparity in the rate in which white renter households experienced burden compared to households of color. White households were less likely to be cost-burdened or severely cost-burdened compared to all households, while all other races, except Asian households, had higher rates of overall cost burden. The "other" category, which is households with multiple races, experiences the highest rates of total cost burden. This is perhaps more attributable to the age of the householder than racial composition of the household as these households may be younger than the typical household. Those that are younger experience higher rates of cost burden.

The following charts compare cost burden by race between the 2005-2009 and 2010-2014 CHAS data sets. Both sets of data reflect the conditions that were taking place during the housing crisis and recession of the late-2000s and early 2010s.

Chart 21: Percent Cost-Burdened By Race (Renter)

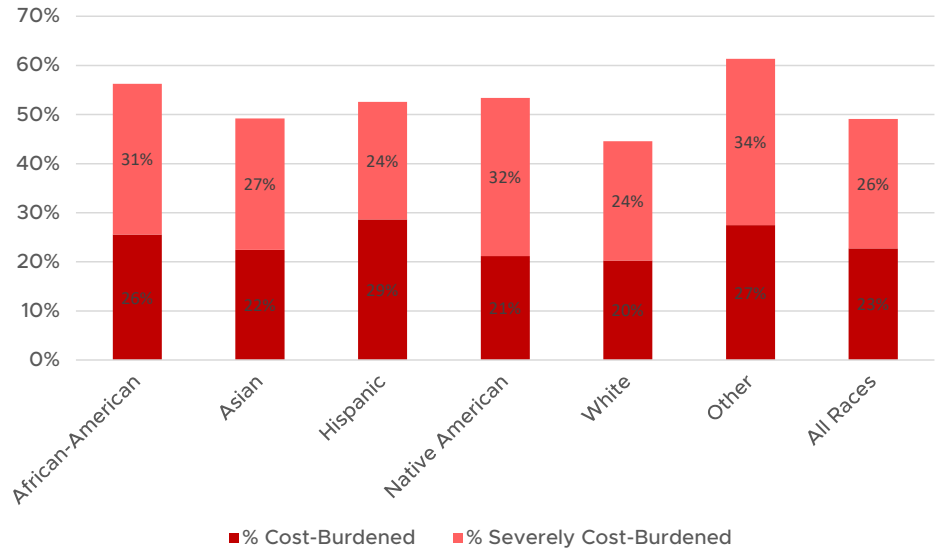
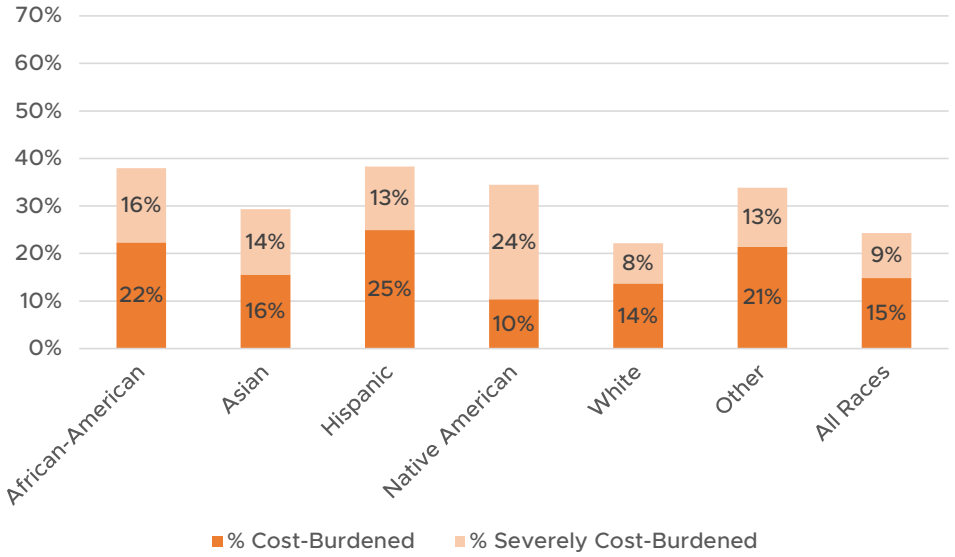


Chart 22: Percent of Cost-Burden by Race (Owner)



Key trends identified include:

- The percent of cost-burdened owner households decreased across all races between the two reporting periods except for Native American households.[1]
- The number of renter households increased across all races except for Native American households.
- The percent of African American and Hispanic renter households experiencing cost burden decreased slightly while the percent of White, Asian and Other households increased slightly.
- The percent of cost-burdened and severely cost-burdened Native American renter households increased.

Chart 23: Cost Burden by Race

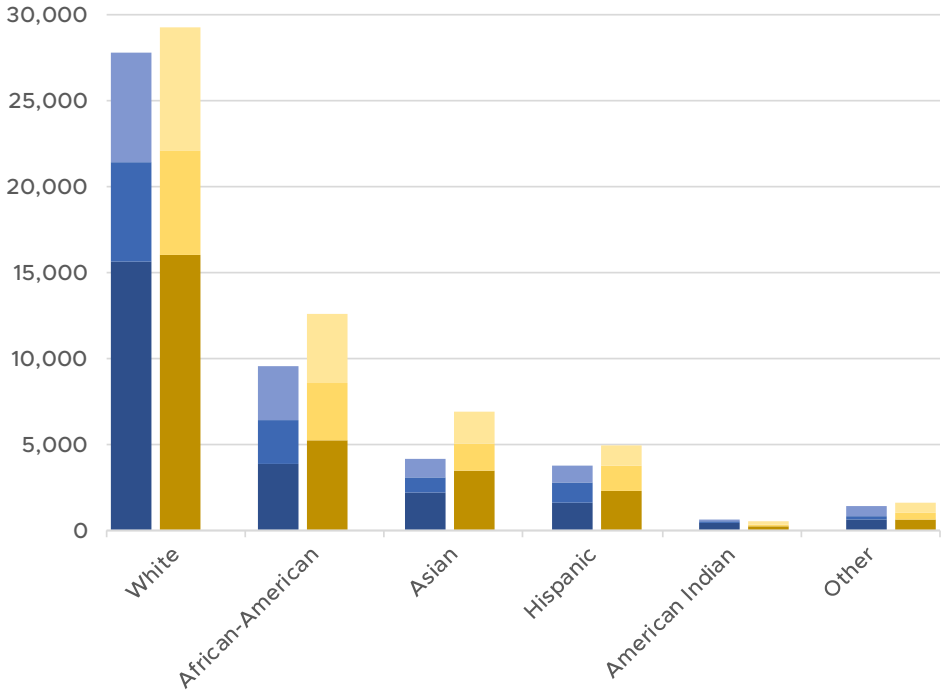
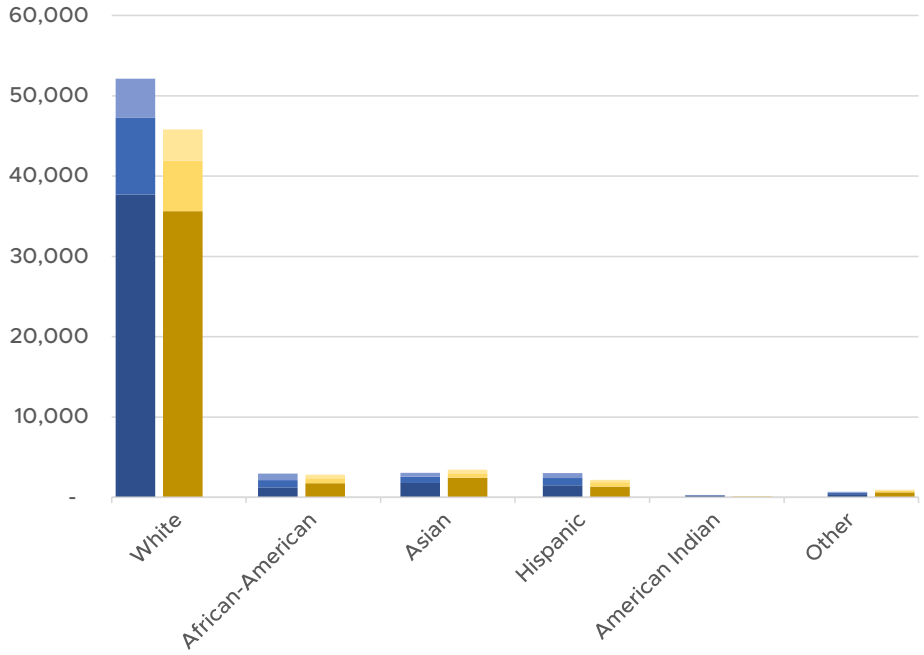


Chart 24: Cost Burden By Race (Owner)



Not Cost-burdened (2005-2009)	Not Cost-burdened (2010-2014)
Cost-burdened (2005-2009)	Cost-burdened (2010-2014)
Severely Cost-burdened (2005-2009)	Severely Cost-burdened (2010-2014)

Source: CHAS, 2005-2009 and CHAS, 2010-2014 (Table 9)

Definitions:

White: White alone, non-Hispanic	Hispanic: Hispanic, any race
African-American: Black or African-American alone, non-Hispanic	American Indian: American Indian alone, non-Hispanic
Asian: Asian alone, non-Hispanic	Other: Includes multiple races, non-Hispanic

1 There were only 300 Native American ownership households in 2005 to 2009, which decreased to 145 households in the 2010-2014 data set. With so few data points, this likely falls within the range of error of this data.

Cost Burden by Age

The following charts illustrate housing cost by age from 2000 to 2014. The impact of the housing crisis on affordability of housing shows up in an approximate 10% increase in total cost burden across tenure type and age. Since then, cost burden has declined, except for young renter households.

Key points from this data include:

- There has been a steady increase in the number of households renting in the 35 to 64 age cohort, while homeownership has declined for that that group between 2008 and 2014.
- Cost burden for home owners is decreasing for all age categories, and has recovered to near pre-recession levels for households in the 25 to 34 and 35 to 64 age cohorts. Cost burden decreased in the 65 and over cohort, but at a slower rate than in the younger age categories.
- Cost burden for renter households is not recovering at the same pace as owner households in any age cohort.
- From 2000 to 2014, cost burden increased for the youngest age cohort (15-24) going from approximately half of these households in 2000 to two-thirds in 2014. It is important to note that this group does include students who live in off-campus housing; however, this increase is not solely attributable to an increased rate in off-campus living.

Chart 25: Householder 25-34 (Owner)

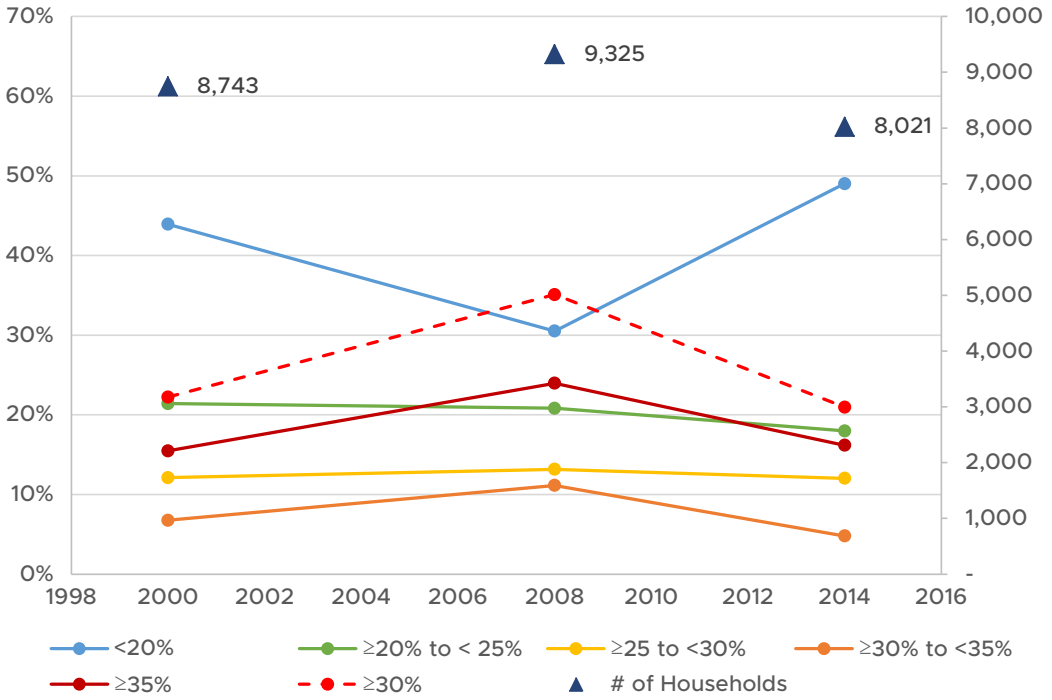


Chart 26: Householder 35-64 (Owner)

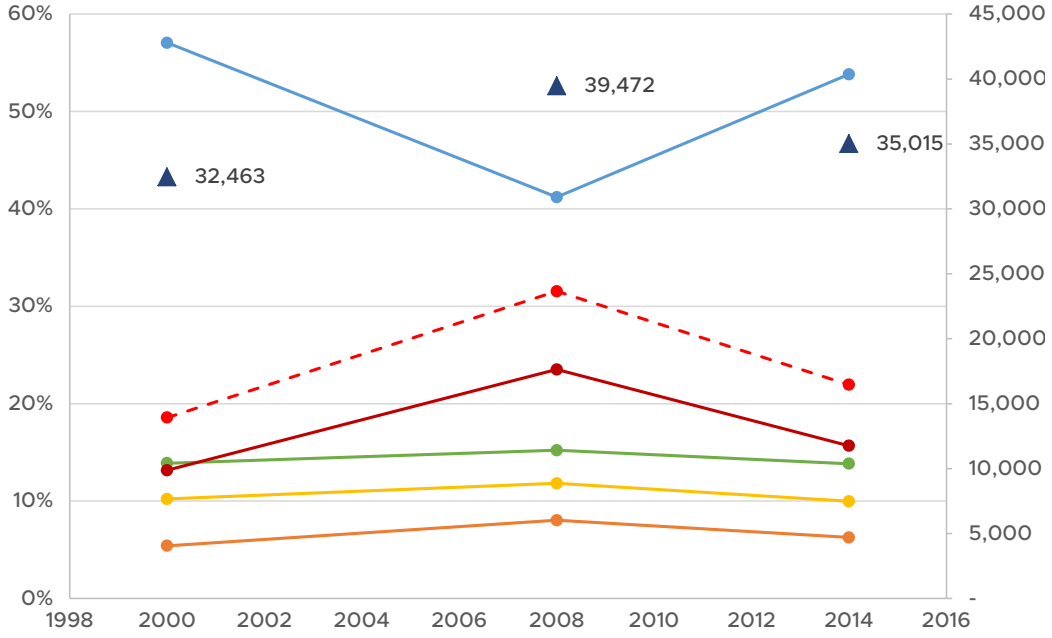


Chart 27: Householder 65 and over (Owner)

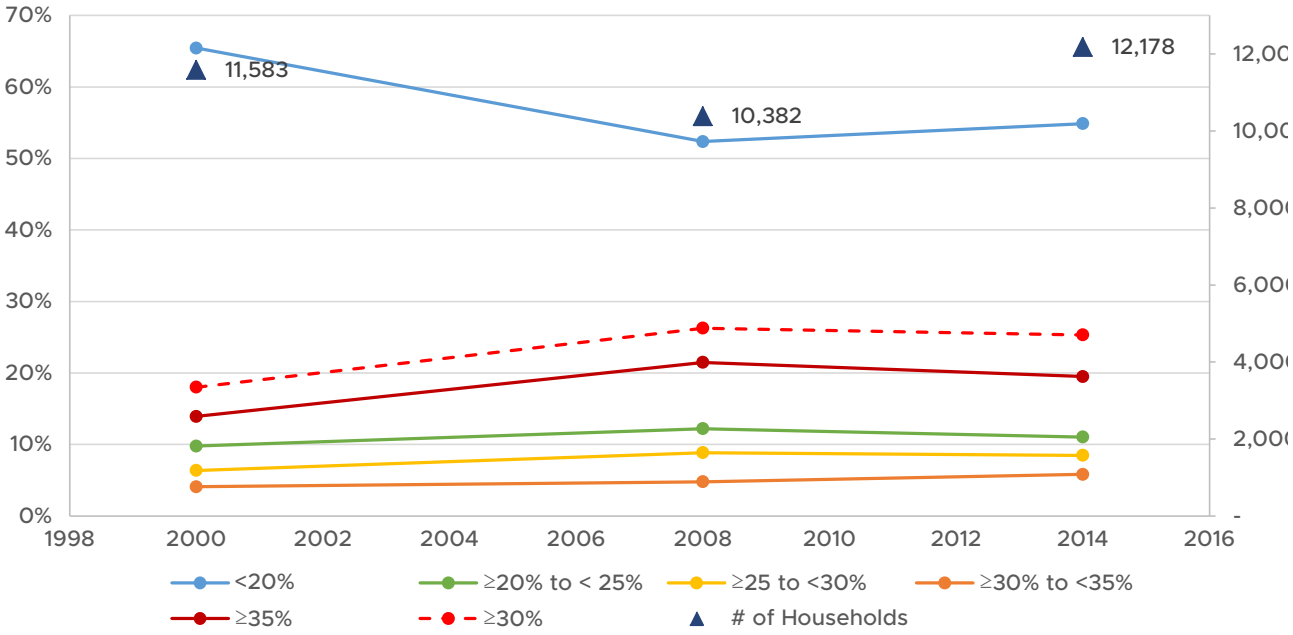


Chart 28: Householder 15 to 24 (Renter)

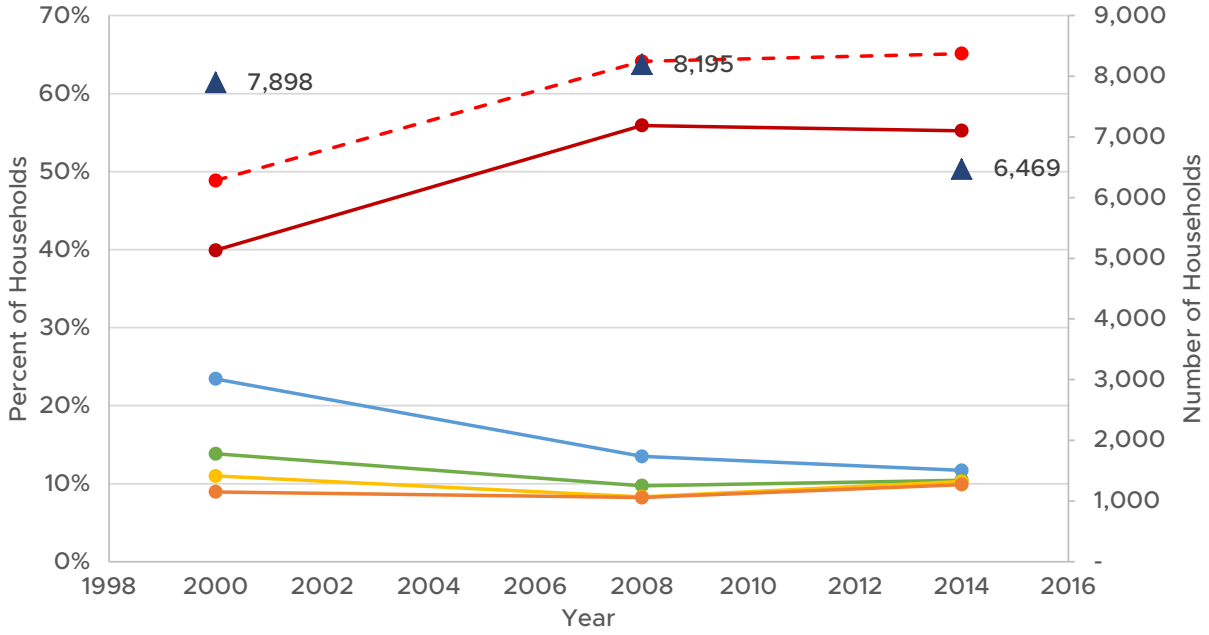


Chart 29: Householder 25 to 34 (Renter)

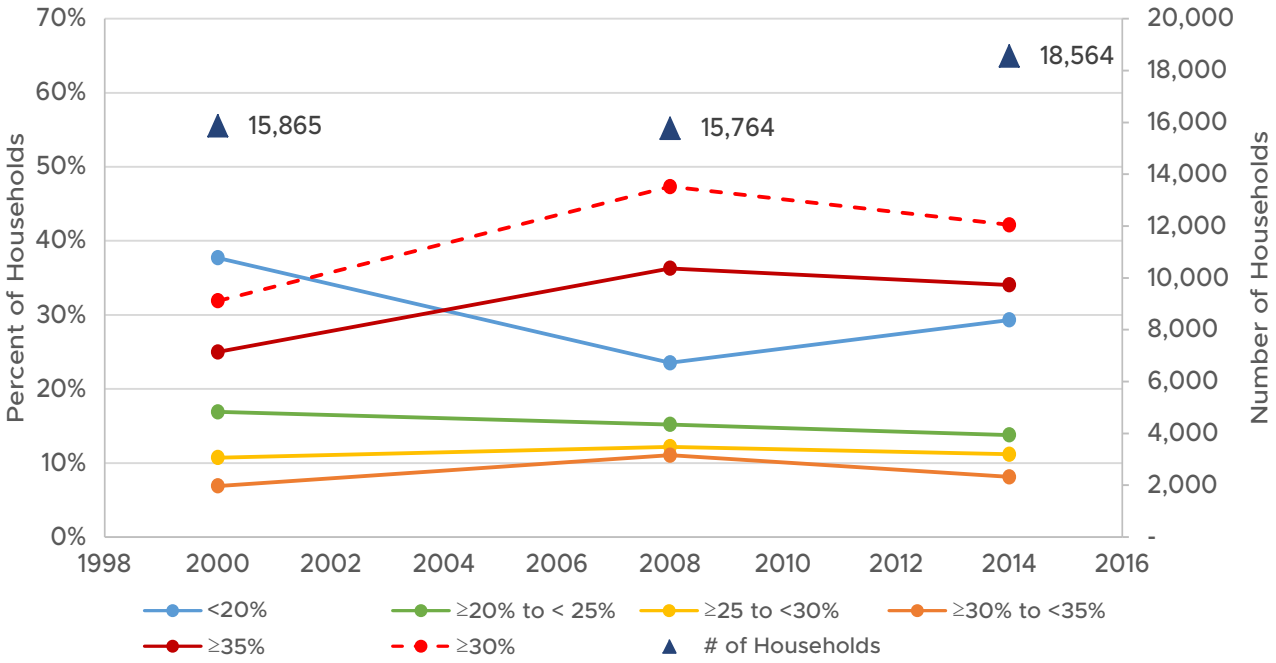


Chart 30: Householder 35 to 64 (Renter)

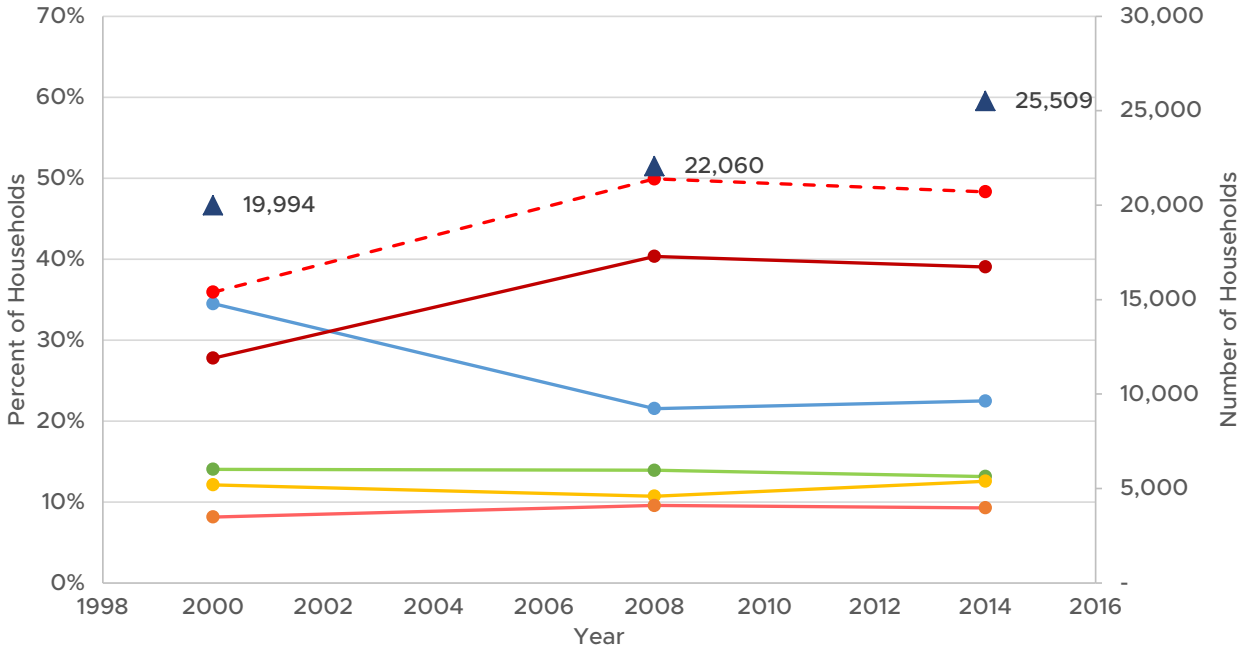
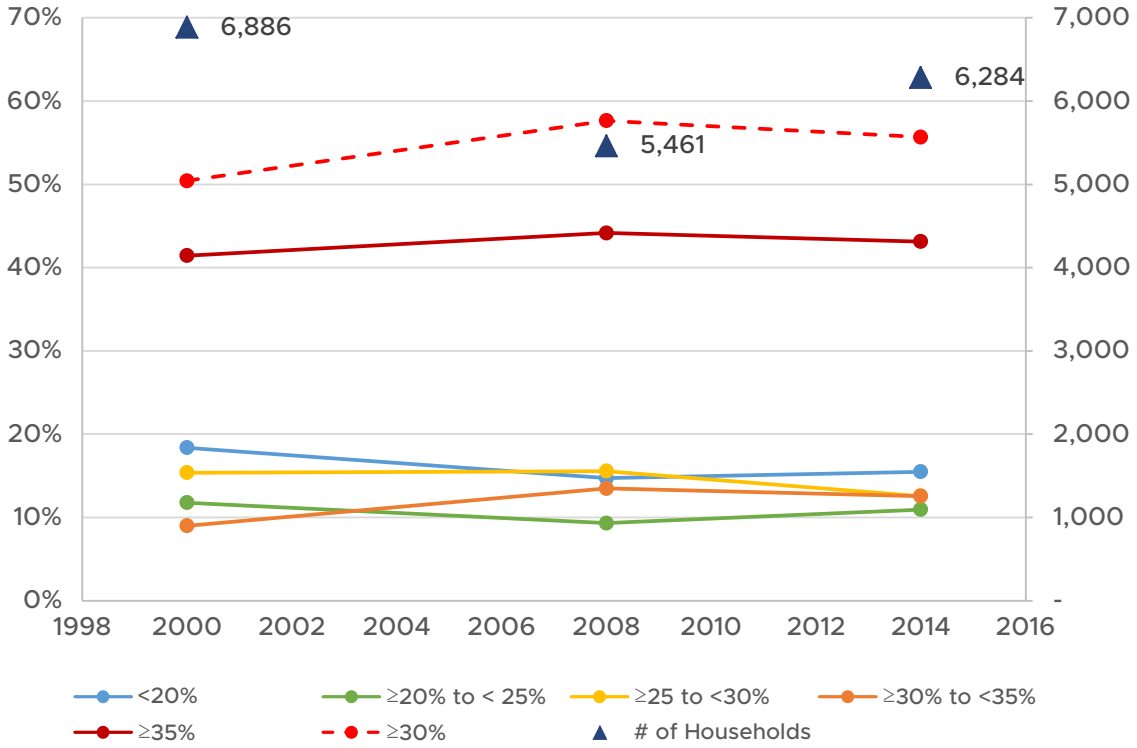


Chart 31: Householder 65+ (Renter)



Source Charts 25-31: Census 2000 and ACS 5-year Estimates, 2006 – 20010 and 2012 - 2016

Cost Burden: Household Type by Income

The following charts compare the number of owner and renter households by type of household—elderly family, elderly non-family, large family, small family, and nonelderly/nonfamily—broken out by income, and identifies if the unit household is not cost-burdened, cost-burdened, or severely cost-burdened.
Key points from this data include:

- Elderly nonfamily owners are 1.8 times more likely than elderly family owners to be cost-burdened; elderly nonfamilies renters experience cost burden at a rate of nearly four times that of elderly families. As Baby Boomers age and elderly families transition into elderly nonfamilies, the number of cost-burdened elderly nonfamilies is expected to increase.
- The non-elderly/nonfamily renters earning 30% of AMI or less represent the most cost-burdened households type (in number) across owners and renters with 7,265 total cost-burdened households and 5,570 severely cost-burdened. It is unknown what percent of these households are college students living in off-campus apartments.
- There has been a significant decrease between the reporting periods of small family and nonelderly, nonfamily household types owning their housing unit particularly at the 50% – 80% of AMI income level, a 46% and 33% decrease respectively. The percent of cost-burdened households at those income levels has decreased from 56% to 47% for small families and from 64% to 51% for nonelderly, nonfamily households, increasing the total cost-burdened households at that income level.
- Large families, small families, and nonelderly/nonfamilies renter households have increased at the extremely low-income categories. The number of total cost-burdened households in these cohorts have increased by 4,786 households (20%).
- The number of large families in rental housing is increasing as is the number of cost-burdened households within that household type.

Chart 32: Cost Burden by Household Type (Renter) Income ≤ 30% AMI

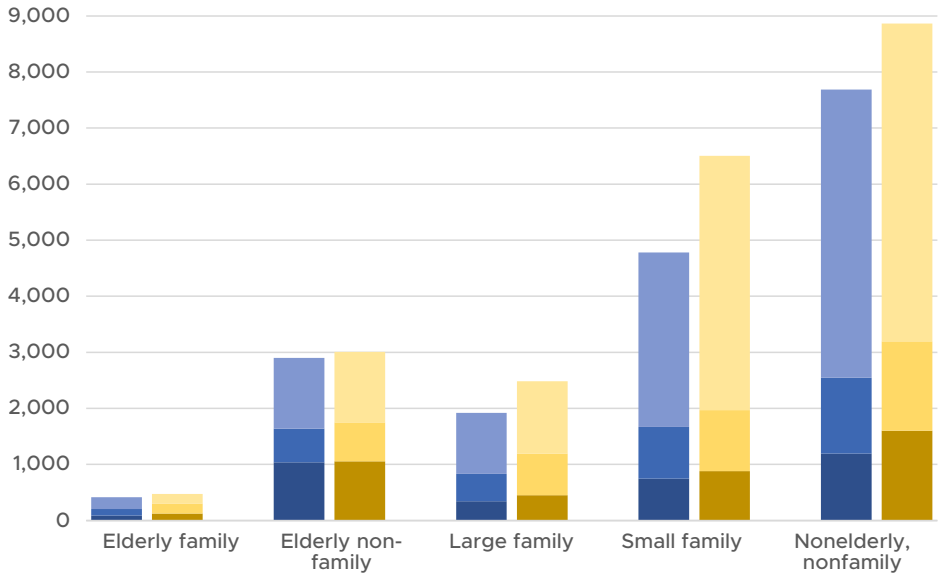


Chart 33: Cost Burden by Household Type (Renter) Income >30% - ≤50% AMI

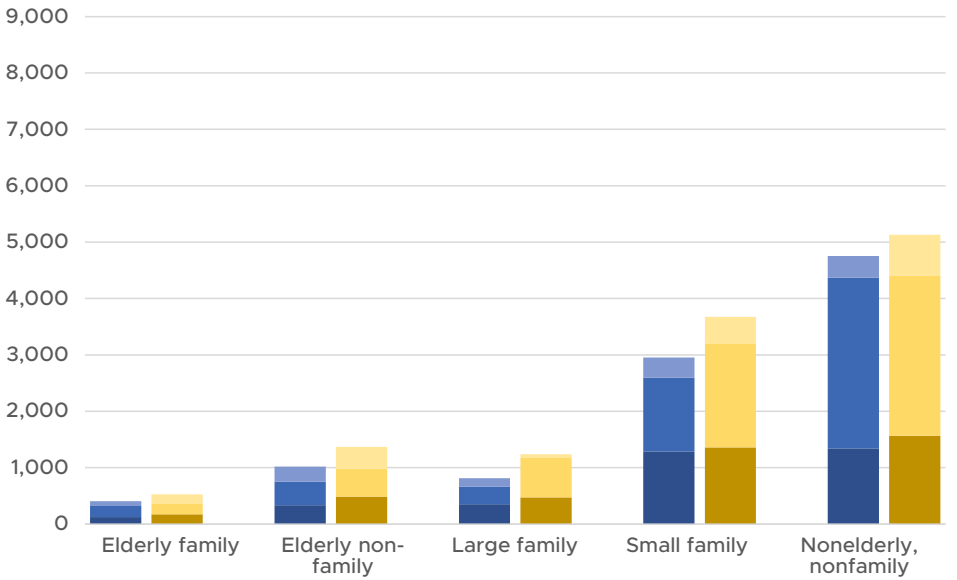


Chart 34: Cost Burden by Household Type (Renter) Income >50% -≤80% AMI

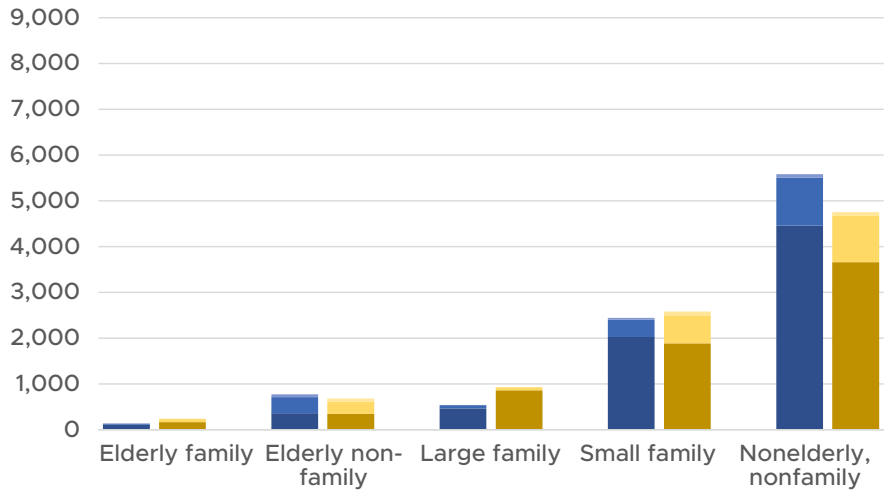


Chart 35: Cost Burden by Household Type (Owner) Income ≤30% AMI

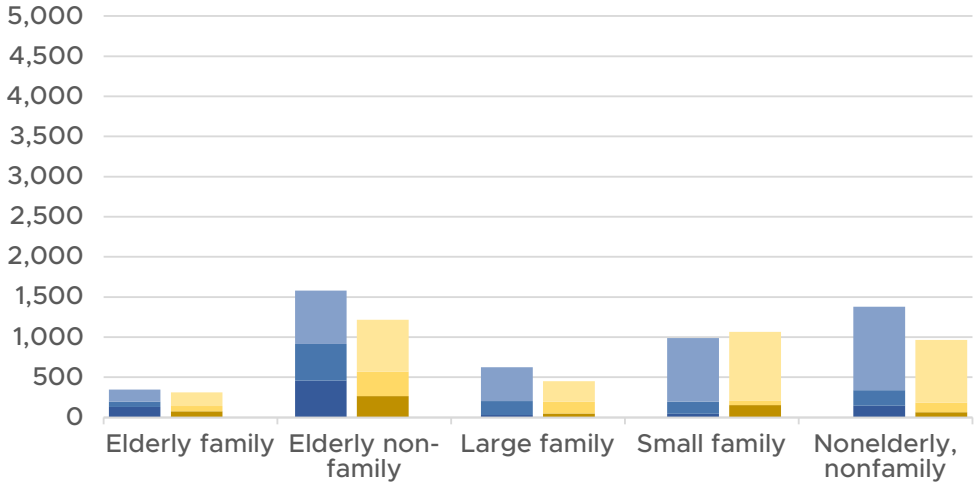


Chart 36: Cost Burden by Household Type (Owner) Income <30% - ≤50% AMI

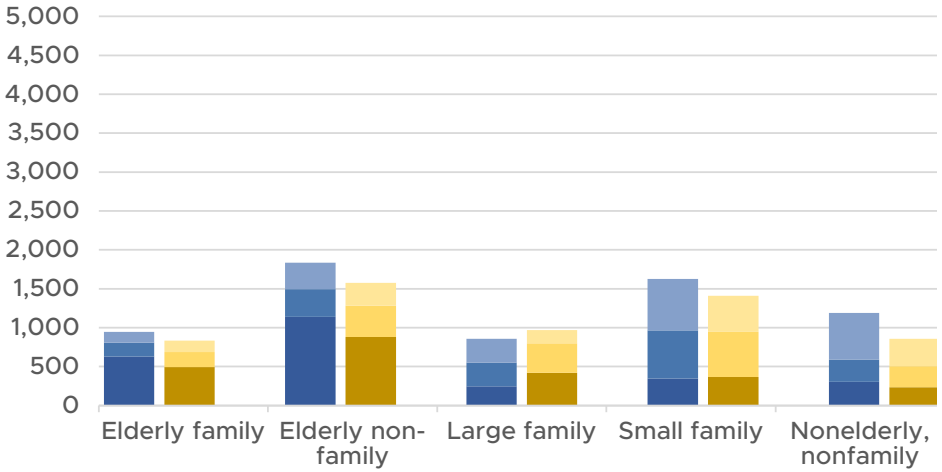


Chart 37: Cost Burden by Household Type (Owner) Income <50% - ≤80% AMI

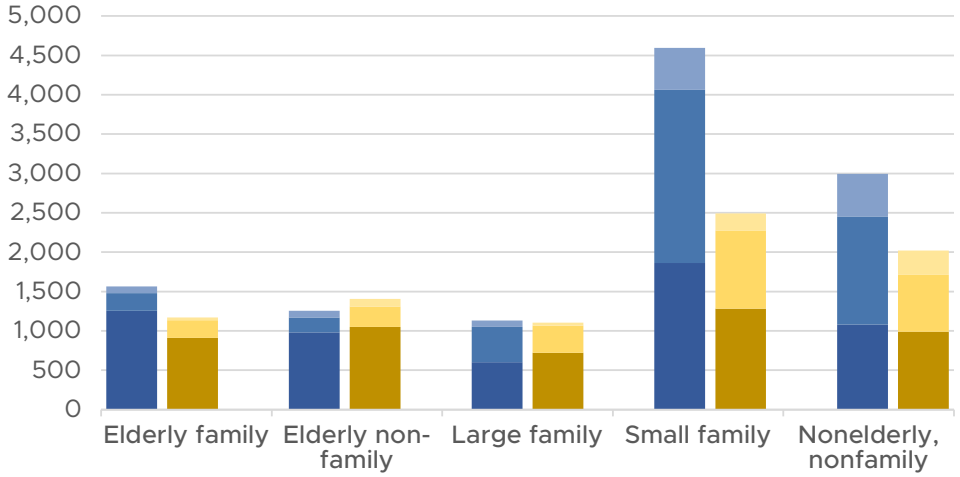


Chart 38: Cost Burden by Household Type (Owner) Income >80% AMI

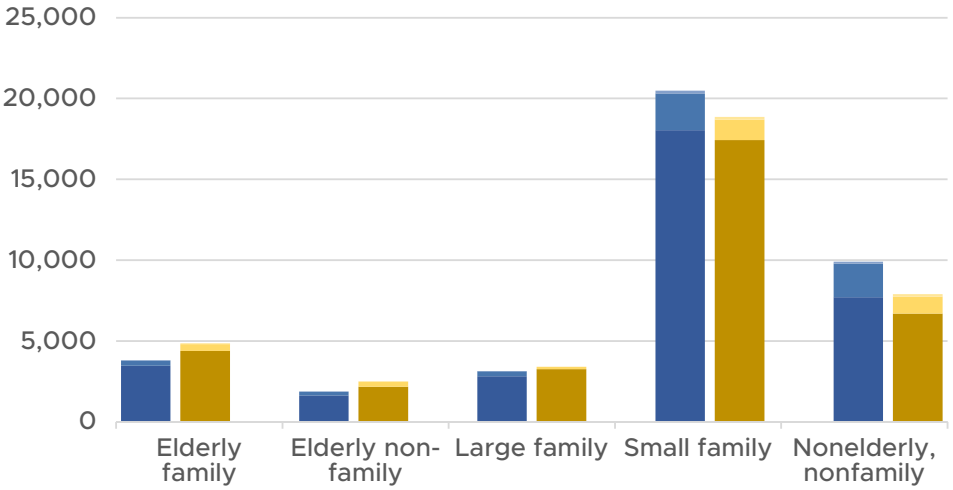
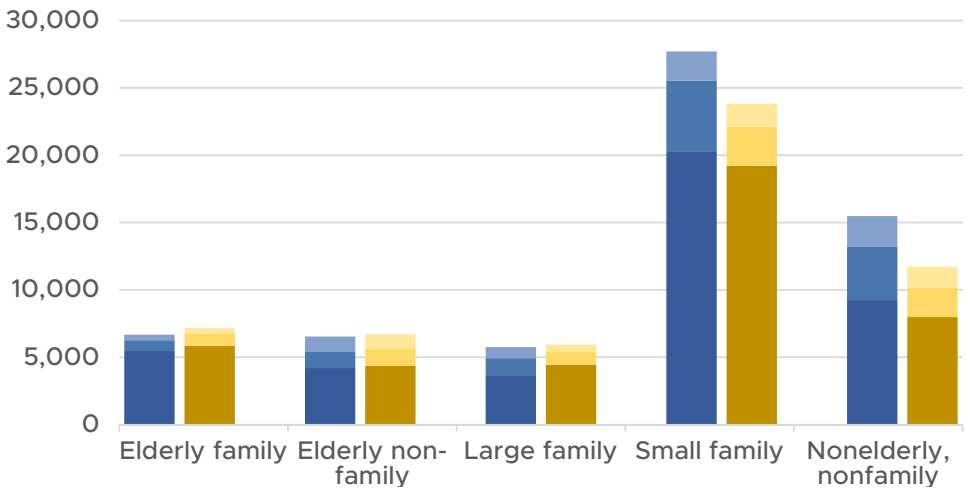


Chart 39: Cost Burden by Household Type (Owner) All



Not Cost-burdened (2005-2009)	Not Cost-burdened (2010-2014)
Cost-burdened (2005-2009)	Cost-burdened (2010-2014)
Severely Cost-burdened (2005-2009)	Severely Cost-burdened (2010-2014)
Source: CHAS, 2005-2009 and CHAS, 2010-2014 (Table 7)	
Definitions:	
Elderly family: Two persons, with either or both age 62 or over	Small family: Two persons, neither person 62 years or over, or 3 or 4 persons
Elderly nonfamily: Single householder or unrelated householders	Nonelderly, nonfamily: Single householder or unrelated householders
Large family: Five or more persons	

4. Homelessness

The City/HRA, in conjunction with Ramsey County and nonprofit partners, works to provide emergency shelter, temporary housing and permanent housing for those experiencing homelessness.

Information on homelessness is maintained by Ramsey County. Each January, as a Federal Continuum of Care (COC), the County completes a HUD-mandated survey to quantify the number of people experiencing homelessness. This count is intended to capture the total number of persons experiencing homelessness on a single night, and is conducted during the last 10 days of every January.

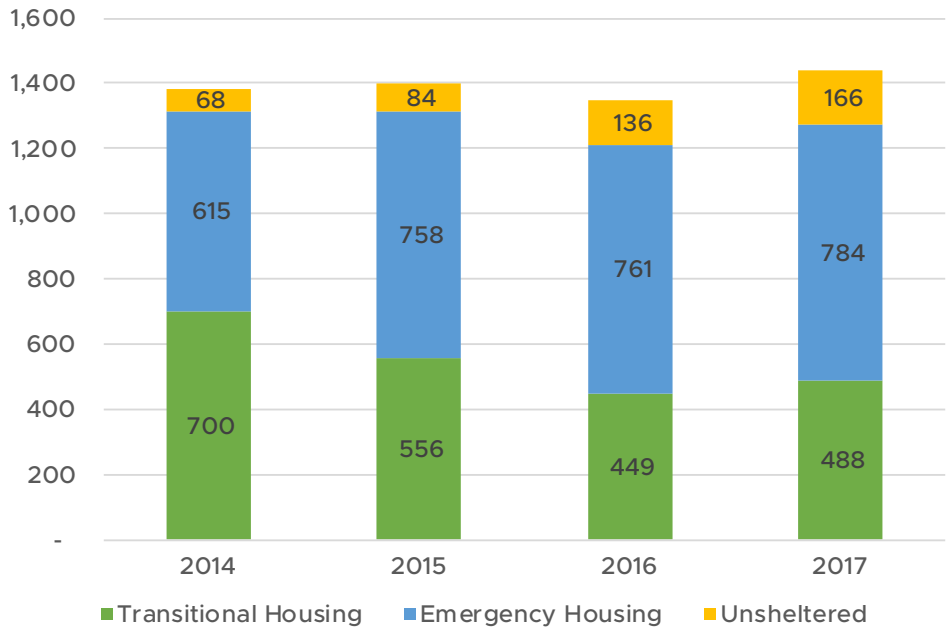
Ramsey County, with assistance from the Institute for Community Alliances, completed surveys for every emergency shelter and transitional housing program, regardless of funding source, for the night of January 26, 2017. At the same time, community and government partners surveyed as many unsheltered persons as feasible over a several-day period.

The surveys of emergency shelters and transitional housing primarily reflect capacity for serving homeless, not necessarily the demand. Many shelters regularly meet or even exceed capacity, which can be short of the total need.

Total Count

- Not including doubled-up population (those without permanent housing staying with a series of friends or family), the total number of homeless persons increased 6.8% from January 2016 to January 2017 (1,346 to 1,438).
- Since 2013 the total number of homeless persons counted has remained nearly the same, however, there has been an increase in the number of total homeless households since 2014. This indicates an increase in the proportion of smaller households or singles experiencing homelessness over that time.

Chart 40: Persons in Point-in-Time Count, 2014-2017



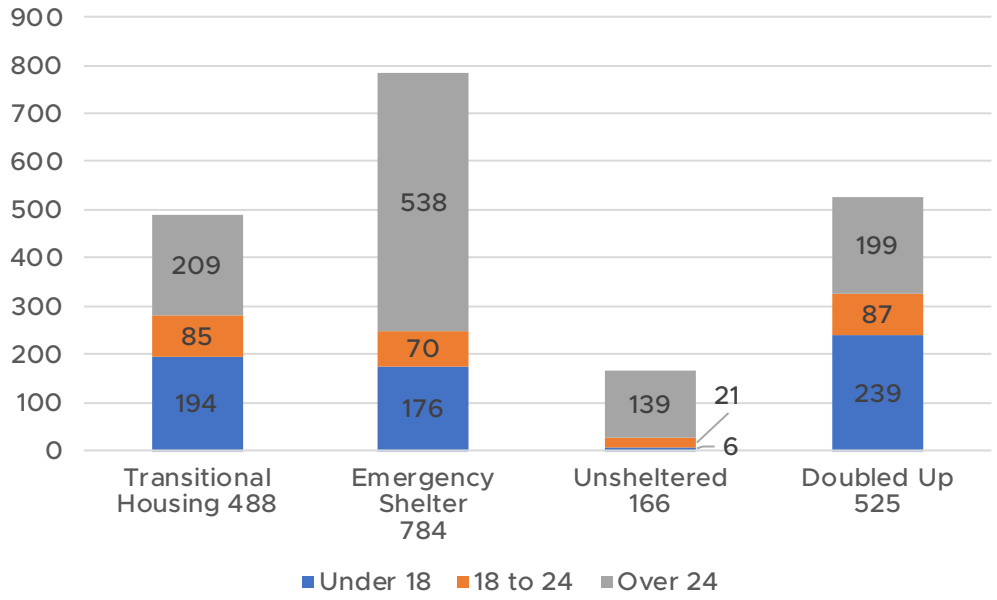
Age

- Of the 784 in emergency shelters in 2017, 69% were age 25 and older and over one-fifth (22%) were children under 18 years of age.
- The number of homeless persons over age 24 increased from 2016-2017. In emergency shelters, the number went from 500 to 538; those unsheltered from 112 to 139, and those in transitional housing from 169 to 209.

Unsheltered/Doubled Up

- The unsheltered count increased by 22% from 2016 to 2017 (136 to 166 persons), due to more participation, training, and identification of locations where homeless frequently congregate, such as food shelves, public transit, and skyways. Of the unsheltered, 4% were children and 84% were over age 24.
- Ramsey County's first survey of doubled-up populations reached 525 persons. Of those, 239 (46%) were under age 18 and 87 (17%) were from the ages 18 – 24; however, the full-extent of doubled-up homeless is likely larger, given the limitations of surveying the entire county over a few days of the year.

Chart 41: Ramsey County Homeless Person by Age
Total Homeless Persons: 1,963



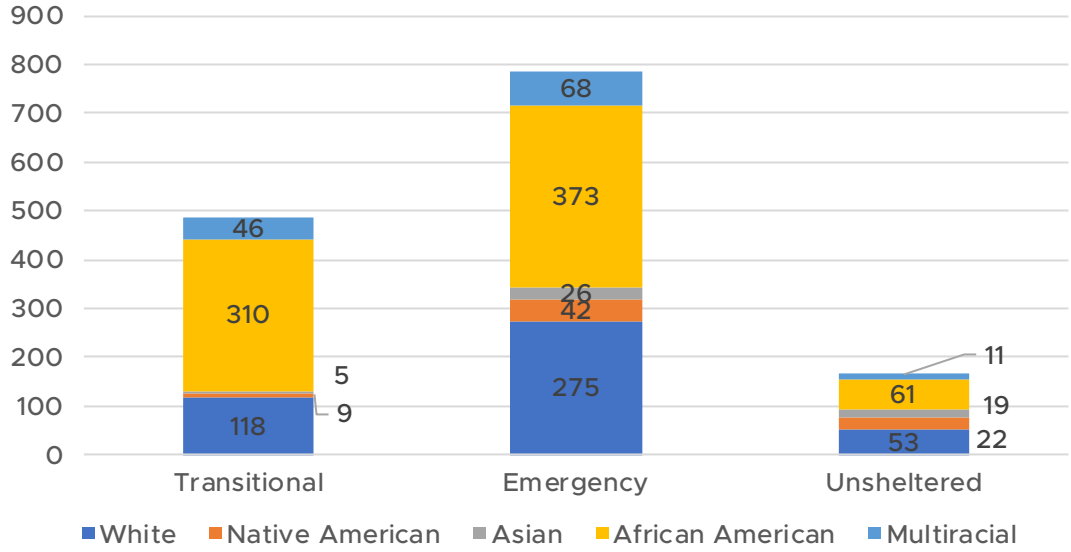
Race

- African Americans were 48% of total emergency shelter population, 64% of transitional housing population, and 37% of the unsheltered population. Whites were about 35% of emergency shelter population and 24% of transitional housing population.
- In contrast, government projections estimate that, in 2016, African Americans were 12% of the county's total population and whites 69%. In other words, African Americans are four times as predominant in emergency shelters compared to the general population.

Sheltered Count (emergency shelter/transitional housing)

- Unlike the time-limited emergency shelter facilities, transitional housing programs provide housing and support services for homeless persons for up to two years. From 2014 to 2016 the county experienced a decline from 700 to 449 persons in temporary programs, with a slight increase to 488 in 2017.
- Similar to emergency shelter, the counts primarily measure capacity and reflect policy changes in how many can be sheltered. The counts also rise or fall due to some projects changing their service type year-to-year, such as from emergency shelter into transitional housing or converting from transitional housing to more permanent housing like rapid re-housing.

Chart 42: Homeless Persons by Race and Ethnicity



Identification of Housing Need

The City of Saint Paul has identified the following housing needs. They are not presented in any order of priority.

- maintenance and upkeep of aging housing infrastructure;
- homeownership opportunities;
- affordable rental housing;
- decrease homelessness;
- market-rate housing development; and
- affirmatively further fair housing.

On-going Maintenance and Upkeep of Aging Housing Infrastructure

As described in the previous housing inventory, Saint Paul has an aging housing stock, with nearly 50% of the units being built prior to 1940 and 90% built prior to 1980. Maintaining this housing infrastructure is critical to the long-term health and stability of Saint Paul's neighborhoods.

The City/HRA will need to continue its four-pronged approach to maintenance and upkeep, which includes:

- monitoring and tracking housing conditions for both owner and rental housing through the Truth in Sale in Housing and Certificate of Occupancy Program.;
- directing its loan programs to property owners;
- referring property owners to other potential resources; and
- enforcing property maintenance and other health and safety codes.

Homeownership Opportunities

Homeownership in Saint Paul has been declining since 2000. This trend accelerated during the housing crisis, when many single-family homes converted to rental properties due to the inability to sell them; many of these properties remain rentals today. In addition, younger potential buyers are living in rental units longer than previous generations due a combination of factors, such as lower real wages, existing debt burden and lifestyle choice.

The production of new multi-family ownership housing has been constrained, in part, because of changes to construction liability requirements in State law. While development of multi-family rental rebounds, new development of multi-family ownership continues to lag.

Beyond the overall decrease in homeownership, a significant disparity exists in who owns homes in Saint Paul. While white households constitute 67% of all households in the city, they comprise 82% of home-owning households. The City/HRA will need to expand its efforts to foster homeownership in historically underserved communities. These efforts will need to include addressing challenges in access to capital for the City's cultural communities.

Support of homeownership is one way in which the City and HRA can contribute to building community wealth within Saint Paul. Through strategic efforts, the City wants to create a supportive environment for homeownership for those who would like to invest where they live.

Affordable Rental Housing

Renter cost burden is expanding in the city, and preservation and development of affordable rental housing continues to be a critical housing need. In 2000, approximately 40% of renter households (Census 2000) experienced cost burden, which has grown to 51% by the most recent estimates (ACS 5-year Estimates, 2012-2016) of which just over half are severely cost burdened. This is an increase of over 7,500 households over the 16-year period. Cost burden is not equally distributed within the renter household population with those households at the lowest income levels experiencing it most acutely.

Figure H-9: Cost-burdened Households

Household Income	>30%	>50%
≤30% AMI	77%	58%
>30%-≤50% AMI	66%	15%
>50%-≤80% AMI	25%	3%
>80%-≤100% AMI	7%	0%
>100%	2%	0%

ACS 5-year estimates, 2011-2014

Contributing to this excessive cost burden for the City's extremely low-income households is the significant gap between the number of units affordable to these households, with 22,329 renter households and only 11,560 units affordable to households earning 30% of AMI or less. This gap is compounded by the fact that approximately 25% of those units affordable to these households are rented by households earning more than 30% of AMI (CHAS, 2010-2014).

The City of Saint Paul and Saint Paul HRA have a long history of preservation and production of affordable housing throughout the city. The City/HRA will continue this work, but their ability to do so is limited by the monetary resources available. Without additional resources available for this important work, the preservation and production of affordable units will continue to lag behind the need.

The greatest need for affordable housing is for renter households earning 30% or less of AMI. However, the largest program that supports affordable housing, Low Income Housing Tax Credits, (LIHTC) leaves deep financial gaps for these projects, as this tool is targeted to units affordable to households at 50% and 60% of AMI. To make real progress towards reducing this need, the City, Saint Paul HRA, other governmental entities and the housing advocacy community must come together to provide additional resources, lobby the State and Federal governments for additional resources to help offset housing costs for extremely low-income households, and find innovative solutions to providing affordable housing for the working poor.

Decrease Homelessness

Reducing the number of people and families experiencing homelessness, and linking them to transitional and permanent housing resources is a critical issue for the City/HRA. The City/HRA cannot do this work on its own, but can partner with Ramsey County and social service and affordable housing providers to:

- reduce housing insecurity for those households that may have difficulty in renting apartments due to credit history, past evictions, and criminal convictions;
- provide overnight sheltering for those experiencing homelessness;
- build projects with ongoing services, such as path out of homelessness;
- support projects for underserved populations; and
- explore additional funding options.

New Market-Rate Housing Development

The Metropolitan Council projects over 26,000 new households in Saint Paul by 2040. Vacancy rates are already exceptionally low due to population dynamics and renewed interest in city living. Through this planning process, the City has identified areas where increased density is appropriate and set policy to expand housing choice within existing neighborhoods.

Work to advance this issue is not focused on funding market-rate projects (beyond support of pass-through grants), but rather creating a planning and regulatory framework that supports the private market constructing new units to meet existing and future housing demand.

Affirmatively Further Fair Housing

The City has an obligation to affirmatively further fair housing. As discussed in the 2017 Addendum to the 2014 Analysis of Impediments, this means taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities (i.e. free from barriers that restrict access to opportunity based on protected characteristics). Specifically, this means actions that:

- address disparities in housing need and access to opportunity;
- replace segregated living patterns with integrated and balanced living patterns;
- improve access to opportunity in areas of concentrated poverty where a majority of residents are people of color; and
- foster and maintain compliance with civil rights and fair housing laws.

Many actions the City/HRA take impact elements of fair housing both indirectly, such as determining where City/HRA dollars are invested in infrastructure and parks, or directly, such as those that are housing related. As such, in 2017, the HRA initiated an interdepartmental Fair Housing Working Group to develop a multi-faceted strategic plan that identifies short- and long-term steps to reduce impediments to fair housing in Saint Paul.

Appendix **B**

Housing Need Implementation Strategy

The following tables identify City and HRA actions to address the City's housing need, including (not in priority order):

- ongoing maintenance and upkeep of aging housing stock;
- homeownership opportunities;
- affordable rental housing;
- decrease homelessness;
- new market-rate housing development; and
- affirmatively furthering fair housing.

City actions are broken out into the following categories by direct City/HRA actions.

Financial Resources/Strategy: Actions the City/HRA may undertake that bring financial capital to an individual, project, or program.

Regulations/Agreements/Plans: Regulations, agreements, or plans that support or could better support the identified need.

Strategic Partnerships: Work done in collaboration with external entities.

Education/Information: Educational activities or information dissemination.

The strategy provides further guidance on the programs, tools, existing and potential partnerships and educational materials; and identifies City/HRA funding and potential outside funding resources.

Need: Ongoing Maintenance and Upkeep of Aging Housing Stock

- Provide financial programs for and refer residents to other resources to assist low-to-moderate income households with maintenance and upkeep.
- Monitor housing conditions.
- Ensure health and safety in ownership and rental housing.
- Connect residents to city resources and information on resources.

Financial Resources/Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information
• Provide City loans to finance housing improvements, upkeep, and emergency maintenance of owner-occupied structures. • Provide City loans to finance improvements to non-owner-occupied small-scale rental properties. • Investigate ways to develop culturally-appropriate lending products for City housing improvement loans. • Encourage nonprofits and neighborhood organizations to apply for housing fix up grants through Neighborhood STAR and the CIP process.	• Continue to ensure minimum health and safety in rental housing under the Fire Certificate of Occupancy Program. • Continue to require code inspections of for-sale properties under the Truth-in-Sale of Housing program. • Continue to enforce property maintenance codes	• Continue to work with Ramsey County Public Health on lead paint abatement. • Refer homeowners to Minnesota Homeownership Center. • Refer owners of historic resources to organizations that can help them with potential State and Federal resources	• Maintain up-to-date information on the City's website on City loan resources. • Supply information to non-code compliant properties on City loan programs with a violation letter. • Continue to make Truth-in-Sale of Housing reports available on the City's website. • Continue to maintain access to Fire Certificate of Occupancy information on the City's website.
City Funding Programs	**Plans/Official Controls/Programs**	**Existing and Potential Partners**	**Materials**
• Citywide Deferred Rehabilitation Loan • Citywide Low-Interest Rehabilitation Loan • Emergency Loan Fund • Rental Rehab Program	• Fire Certificate of Occupancy • Truth-in-Sale of Housing	• Minnesota Housing • Ramsey County • Historic Saint Paul • Preserve Frogtown	• Provide information in consistent format. • Develop handout/brochure with information and contact numbers.
Potential City Funding Sources:		**Potential Outside Funding Sources**	
CDBG HRA resources Loan Returns Sales Tax Revitalization Fund (STAR)		Neighborhood loan programs Bank financing	

Need: Homeownership Opportunities

- Increase neighborhood stability and community wealth through homeownership.
- Foster home ownership in historically underserved communities.
- Improve access to affordable homeownership for low-to moderate-income households (target income levels: ≤80% of AMI).

Financial Resources/Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information

• Facilitate access to capital for all residents by working with the lender community and advocating for culturally appropriate mortgage products.
• Continue to sell existing HRA-owned properties and provide gap financing for affordable ownership housing.
• Support grant applications to offset extraordinary costs (e.g. environmental cleanup, enhanced design) for ownership housing.
	• Decrease land costs for new ownership development by considering the following changes to the Zoning Code:
	  • Reduction of minimum lot size and per unit area requirements.
	  • Increase ability to build small units or cluster developments.
	  • Minimum lot area requirements for one-family dwellings in residential districts.
		• Refer potential buyers to the Minnesota Homeownership Center and local nonprofit resources.
		• Encourage developers to build a range of ownership housing types, including single-family, townhomes, and condominiums.
			• Support homebuyer pre- and post-purchase counseling.
			• Continue to provide foreclose counseling to homeowners.
			• Raise awareness within buyer community and developers of shared-equity models (land trusts and housing cooperatives) that can help to make ownership more affordable.
			• Support translation of homeownership education materials for non-English speakers.
			• Raise awareness that existing small “lots of record” are buildable lots.

City Funding Programs	**Plans/Official Controls/Programs**	**Existing and Potential Partners**	**Materials**
• Inspiring Communities	• Zoning Code	• Minnesota Housing • Minnesota Home Ownership Center • Daytons’ Bluff Neighborhood Housing Services • Neighborhood Development Alliance • NeighborWorks Home Partners • Fair Housing Implementation Council • Habitat for Humanity • Rondo Community Land Trust • Twin Cities Land Trust	• Provide links to translated homeownership materials on City website. • Develop a small lot development information sheet.

Potential City Funding Sources:	Potential Outside Funding Sources
CDBG HRA resources HOME Land write down Sales Tax Revitalization fund	Minnesota Housing Consolidated RFP DEED, Metropolitan Council, and Ramsey County Brownfields Grants Metropolitan Council LCDA/LCDA-TOD grants

Need: Affordable Rental Housing (1 of 2)

- Preserve project-based Section 8, income-restricted and naturally occurring affordable housing (target incomes: ≤60% of AMI).
- Develop new affordable housing units (target incomes: ≤60% of AMI).
- Advocate for increased Federal, State and local funding for affordable housing (target incomes: ≤60% of AMI, with focus on ≤30% of AMI).

Financial Resources/Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information
• Modify, as needed, the Qualified Allocation Plan to respond to changing affordability needs within Saint Paul. • Explore ways to preserve naturally-occurring affordable housing. • Finance building improvements to maintain affordable real estate assets. • Continue to support LIHTC project development throughout the city. • Support grant applications to offset extraordinary costs (e.g. environmental cleanup, enhanced design) for affordable housing. • Support increased Federal funding for the Section 8 program and development programs. • Seek State funding for supportive and extremely-low income housing. • Explore ways to get deeper affordability for extremely low-income households that may not need support services.	• Guide land at sufficient densities to accommodate the City's allocation of the regional affordable housing need. (See Future Land Use Map in this document.) • Require all neighborhood, station area and small area plans to include goals, policies and/or recommendations as to how affordable housing will be accommodated in the study area. • Proactively work with affordable housing owners to extend affordability terms when nearing end of obligation. • Encourage extensions of project-based Section 8 terms. • Consider requiring acceptance of Section 8 Housing Choice Vouchers in all projects with City/HRA assistance, including market-rate projects. • Negotiate provision of units affordable at lower income levels through the funding request to meet the City's/HRA's 10-10-10 affordability policy.	• Work with Saint Paul Public Housing and affordable housing providers to maintain affordability in scattered site housing if sold. • Work with HUD, Minnesota Housing and affordable housing providers to preserve project-based Section 8 units at risk of non-renewal or being transferred out of Saint Paul. • Continue participation in Interagency Stabilization Group. • Participate in the Fair Housing Implementation Council.	• Provide information on Housing Choice Vouchers in the City's Landlord 101 program. • Provide clear expectations to district councils and planning committees on affordable housing planning requirement; update Area Plan Guidelines. • Raise awareness in the affordable housing development community about the City's affordable housing production policy (10-10-10). • Track affordability term expiration of project-based Section 8 and income-restricted units. • Report annual affordable rental housing preservation and production, including progress on the 10-10-10 policy, using the Livable Communities Program goal period as the policy's time period.

Need: Affordable Rental Housing (2 of 2)

Financial Resources/Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information
	• Analyze market conditions to determine if regulatory tools can support the development of affordable housing. • Reduce land costs for development of affordable rental housing by considering Zoning Code amendments that reduce or eliminate minimum lot area per unit requirements in residential districts.		

City Funding Programs	Plans/Official Controls/Programs	Existing and Potential Partners	Materials
• 9% Tax Credit RFP • Rental Rehab Loan Program	• Comprehensive Plan Future Land Use Map • Neighborhood, station area, and small area plans • Zoning code • Development agreements	• Saint Paul Public Housing • Minnesota Housing • Other public housing providers • Affordable housing providers • Affordable housing advocates • HUD • MN Department of Employment and Economic Development • Metropolitan Council • District Councils • Land Trusts • LISC • Family Housing Fund	• Updated Area Plan Guidelines • Yearly affordable housing production report

Potential City Funding Sources:	Potential Outside Funding Sources
9% LIHTC 4% LIHTC and bonds Affordable Housing Trust Fund HOME CDBG HRA resources Neighborhood STAR Tax Increment Financing Land write down	Super RFP – Minnesota Housing and Metropolitan Council DEED and Metropolitan Council Brownfields Grants Metropolitan Council LCDA/LCDA-TOD grants

Need: Decrease Homelessness

- Reduce housing insecurity for households vulnerable to homelessness.
- Provide overnight sheltering for those experiencing homelessness.
- Construct projects with ongoing services (e.g. path out of homelessness).
- Support projects for underserved populations.
- Explore additional funding options.

Financial Resources/Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information
• Lobby for additional State and Federal resources directed towards reducing homelessness. • Encourage non-City funding sources to continue to provide resources for supportive and homeless housing. • Create and capitalize an emergency repair fund to remedy rental property life-safety defects to prevent tenant displacement.	• Develop and implement an Emergency Housing Plan to support tenants who are displaced due to non-code compliance. • Study and complete legal analysis around tenant protections, such as advance notice of sale, right to counsel, just-cause evictions and condemnation assessment.	• Support Saint Paul Public Housing Agency's commitment to provide more project-based vouchers to supportive housing projects, if matched City/HRA, County and/or State resources. • Continue City/HRA involvement in the Saint Paul/ Ramsey County Funders Council and the Heading Home Advisory Board. • Participate with Ramsey County Committee regarding State-funded Family Homelessness Prevention Assistance Program. • Participate on Minnesota Housing Stewardship Committee.	• Advocate for use of best practices for tenant screening to reduce housing insecurity for those with low credit scores, past evictions or criminal convictions. • Work with Ramsey County Continuum of Care Governing Board to continually raise community awareness about issues around homelessness.

City Funding Programs	Plans/Official Controls/Programs	Existing and Potential Partners	Materials
• HUD Emergency Solutions Grant • 9% Tax Credit RFP • Emergency Repair Fund		• Saint Paul Public Housing Agency • Minnesota Housing • Ramsey County	• To be determined

Potential City Funding Sources:	Potential Outside Funding Sources
9% LIHTC 4% LIHTC and bonds HOME CDBG Tax Increment Financing HRA resources Neighborhood STAR Land write down Emergency Service Grant Affordable Housing Trust Fund	Ramsey County – Group Home/Supportive Services State Infrastructure Bonds Philanthropic community Metropolitan Council LCA program

Need: New Market-Rate Housing Development

- Development of new housing to meet current need and future housing growth projections.
- Expanded housing choice for existing and future residents.

Financial Resources/ Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information

• Support grant applications to offset extraordinary costs (e.g. environmental cleanup, enhanced design) for new housing.	• Guide land at sufficient densities to accommodate the City's allocation of regional housing growth. (See Future Land Use Map in this document.)
	• Require all neighborhood, station area, and small area plans to include goals, policies and/or recommendations to accommodate new housing in the study area.
	• Ease regulatory requirements that unduly burden development of smaller units by considering amendments to:
	  • Lot area per unit requirement for multi-family
	  • Minimum dimensional requirements for one-family dwellings
	• Expand opportunities for additional units in areas guided Urban Neighborhood by considering zoning amendments to permit duplexes, small multi-family and small house clusters in zoning districts that exclusively permit one-family dwelling types.
		• Work with Mayor's Advisory Committee on Aging and other stakeholders to identify ways to expand housing choice to promote aging in community.	• Raise awareness in the housing development community around alternative housing types, such as intentional communities and co-housing.
			• Review Minneapolis' Developer 101 course outcomes and evaluate need for similar training in Saint Paul
			• Continue to monitor and report housing trends.

City Funding Programs	Plans/Official Controls/Programs	Existing and Potential Partners	Materials
	• Comprehensive Plan Future Land Use Map • Neighborhood, station area, and small area plans. • Zoning code	• Housing developers • District Councils • Advisory Committee on Aging	• MarketWatch

Potential City Funding Sources:	Potential Outside Funding Sources
City/HRA funds on a case-by-case basis.	DEED, Metropolitan Council Brownfields Grants Metropolitan Council LCDA/LCDA-TOD grants

Need: Affirmatively Further Fair Housing

- Meet Federal requirements.
- Address relevant disparities identified in the Analysis of Impediments.

Financial Resources/Strategy	Regulations/Agreements/Plans	Strategic Partnerships	Education/Information
• Continue use of the Project and Program Evaluation Tool when allocating City/HRA resources for housing projects.	• Work to address demonstrated disparities identified in the Addendum to the Analysis of Impediments by implementing recommendations of that Fair Housing Working Group's strategic plan.	• Continue to participate in the Fair Housing Implementation Council to coordinate efforts to affirmatively further fair housing throughout the metropolitan area housing market.	• Expand the Fair Housing Training program for property managers and landlords as part of the City's Landlord 101 program. • Maintain and update the citywide Fair Housing webpage. • Develop a Fair Housing dashboard to track and report outcomes.
City Funding Programs	**Plans/Official Controls/Programs**	**Existing and Potential Partners**	**Materials**
	• Fair Housing Strategic Plan	• Fair Housing Implementation Council	• City's Fair Housing web page • Fair Housing dash board
Potential City Funding Sources:		**Potential Outside Funding Sources**	
• City levy • HRA levy • CDBG			

Appendix C

Housing Implementation Toolkit

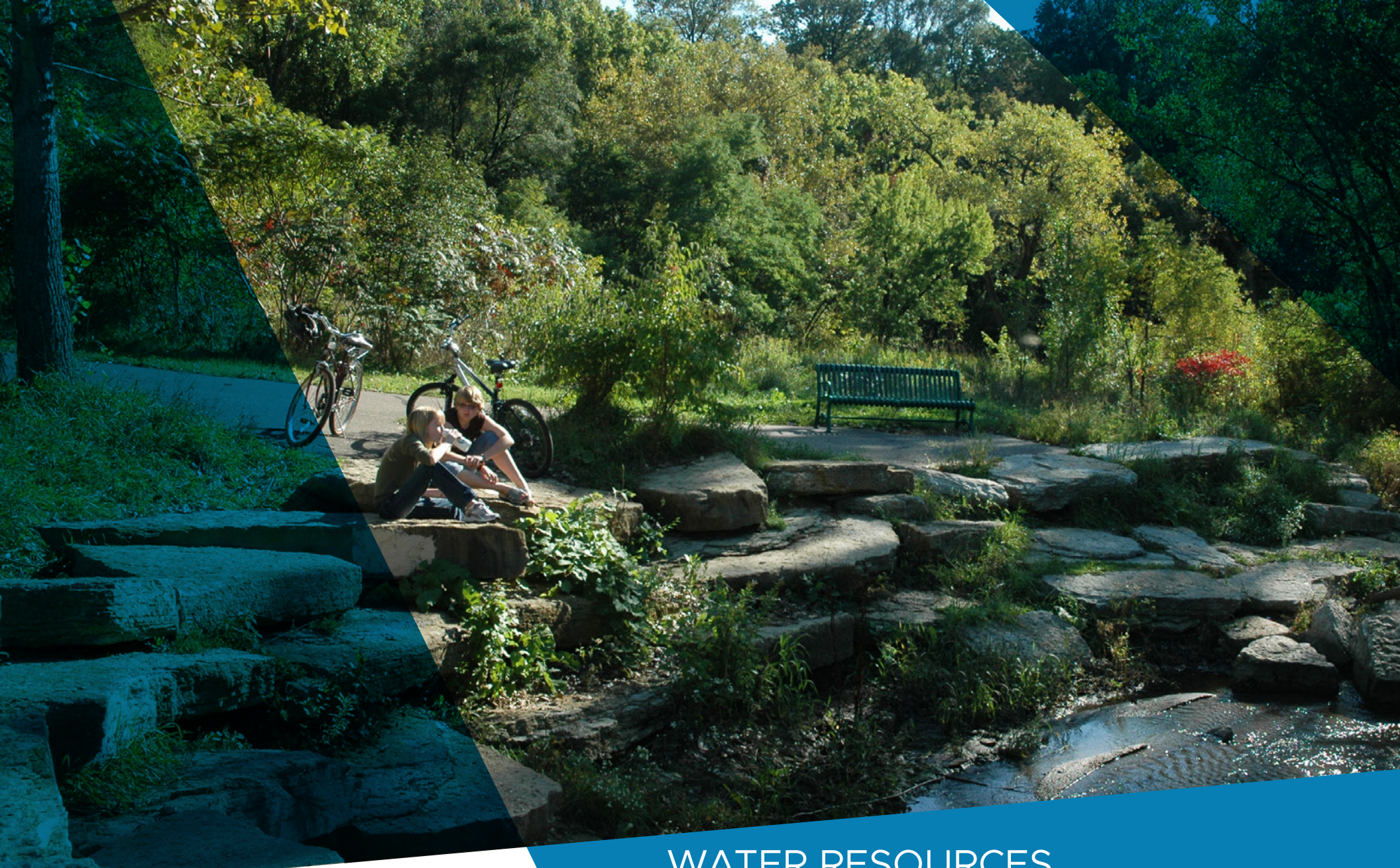
The following table provides an overview of the housing implementation tools available to the City of Saint Paul.

Type of Tool	Specific Tool
City Financial Resources Supported Uses: • Production of affordable rental housing • Preservation of affordable rental housing, including income-restricted and NOAH • Production and preservation of affordable ownership housing • Housing for the homeless • Home maintenance and improvement programs	Housing and Redevelopment Authority (HRA) Resources: HRA resources include levied funds and property sale proceeds. These resources can be used for specific development projects, rehabilitation and maintenance programs, and other housing opportunities as determined by the HRA Board in accord with City goals and polices.
	Tax Increment Financing: Cities may elect to create a tax increment financing (TIF) district as a means of supporting affordable housing and redevelopment projects. Under TIF, the City allocates future property tax gains to fund current development. By legislative definition, TIF created specifically for housing projects must provide affordability to those at 60% of AMI or less for rental projects and 115% of AMI for owner-occupied housing projects, while other types of districts do not have this requirement TIF is a tool that may be considered for gap financing of housing projects that would not occur "but for" this type of assistance.
	Tax Abatement: Tax abatement is a financing tool that reduces taxes or tax increases for owners of specific properties. Local governments offer the tax reduction to provide a financial incentive for a public benefit, such as creation of housing affordable to low- and moderate-income households. The City/HRA has not used tax abatement for affordable housing projects in the past.
	9% Low-Income Housing Tax Credits (LIHTC): The LIHTC program is administered by the Internal Revenue Service (IRS) where tax credits are granted for eligible costs over a period of ten years. Often these tax credits are syndicated to be used as equity in the project to leverage additional financial resources. Annually the IRS allocates tax credits to each of the states based on population. The states are then responsible for distributing the tax credits to eligible projects. In Minnesota, the state sub-allocates a portion of its allotment of tax credits to five other entities, one of which is the Saint Paul HRA. Under federal law, a project must either provide 20% of the units to households earning 50% of AMI or less or 40% of the units must be affordable to households earning 60% of AMI or less to be eligible for a tax credit award for a minimum term of 15 years; A tax credit allocator must develop a Qualified Allocation Plan (QAP) detailing selection criteria The HRA will continue to award affordable housing projects this resource based on the objectives set forward in its QAP.
	4% LIHTC/Conduit Revenue Bonds: HRAs can issue tax-exempt housing revenue bonds that help to finance affordable housing development, such as new construction, acquisition and rehabilitation or refinancing. In addition to the tax credit requirements described above, bond-financed projects support affordable housing in which at least 20% of the units meet HUD's fair market rents, which reflect Section 8 HCVs rent limits. The City/HRA considers issuing bonds for housing developments through an application process.
	Community Development Block Grant (CDBG): The City receives an annual allocation of CDGB from the U.S. Department of Housing and Urban Development. Uses of the funds need to meet one of three national objectives, which include benefit to low- and moderate-income persons; aid in the prevention or elimination of slums or blight; and meet a need having a particular urgency. Housing-related eligible uses include real property acquisition, disposition of property acquired with CDBG funds, clearance, public services, relocation, loss of rental income, privately owned utilities, rehabilitation, and construction (only allowed with the participation of a community based development organization), and code enforcement. Saint Paul has not identified code enforcement and loss of rental income as uses of these funds in its most recent Consolidated Plan, which sets forth how the City intends to use funds for a five-year period. The City of Saint Paul allocates these resources through the City's Capital Improvement Plan process, and allows for community organizations to apply for these resources. Past uses for housing have included capitalizing neighborhood housing rehab programs, City rehab and emergency loan programs, and rehab of affordable housing.

Type of Tool	Specific Tool
City Financial Resources (Continued)	HOME Investment Partnership: The City receives an annual allocation of HOME funds from HUD designed exclusively to create affordable housing for very low-income households earning 50% or less of AMI.
	Land Write Down: The HRA owns properties throughout the city, and at times the HRA will consider writing down the price of these properties to support the development of affordable housing projects.
	Inspiring Communities: This local program is designed to address the physical after effects of the foreclosure crisis. Funds are used for rehab or new construction of single-family and small-scale rental projects.
	Emergency Shelter Grants: The City receives an allocation of Emergency Shelter Grants from HUD, which it re-grants to sheltering service providers.
	Neighborhood STAR: The Neighborhood STAR Program awards loans and grants for capital improvement projects in Saint Paul Neighborhoods, and is funded with 50% of the City's half-cent sales tax proceeds. Eligible uses of these funds include the capitalization of housing fix-up programs.
	Housing Trust Fund: A housing trust fund is a local set-aside of City/HRA resources to assist with the funding of housing-related issues through three key strategies production, preservation, and protection. The City will consider creating and capitalizing a housing trust fund to address housing needs through production of new affordable housing, preservation of existing affordable housing, and protection by ensuring residents have access to safe, affordable homes.
Partner Organization Financial Resources Supported Uses: • Property rehabilitation • Affordable rental and ownership housing • Housing for the homeless • New market-rate housing	Federal Historic Preservation Tax Credits and Minnesota Historic Structure Rehabilitation Tax Credit: These Federal and State financial tax credits are available to assist costs associated with the preservation and rehabilitation of historic structures. The City encourages use of these resources by private developers to construct or preserve housing units.
	Livable Communities Program: The City participates in the Metropolitan Council's Livable Communities program, which provides several grant opportunities for development projects, including those with housing elements. The City will continue to support applications to the Livable Communities Demonstration Account, the Tax Base Revitalization Account, and transit-oriented development funding for various types of housing development, including market-rate and affordable ownership and rental projects.
	DEED Contamination and Cleanup/Redevelopment Grants: The City will continue to support applications to the DEED Contamination Cleanup and Investigation and/or Redevelopment grant programs for various types of housing development, including market-rate and affordable rental and ownership projects.
	Minnesota Housing Consolidated Request for Proposal: This annual funding request from Minnesota Housing supports affordable housing developments across the region, and is very competitive. The City will continue to work with developers in coordination with Minnesota Housing to support RFP submissions for projects that will create new affordable units.
	Other grants as available: The City will seek opportunities for other governmental and philanthropic grants to assist with the development of affordable housing.

Type of Tool	Specific Tool
Direct Assistance Programs Supported Uses: • Home maintenance/ rehabilitation • Homeownership and foreclosure counseling • Referrals	Citywide Homeowner Rehab Program/MHFA Fix Up Loans: Assists low- and moderate-income homeowners with code issues, repairs, and emergencies, such as a broken furnace.
	Rental Rehabilitation Program: This City program provides financial assistance to owners of small-scale rental buildings (up to four units) with resources to remedy maintenance issues with the property. Rents can only increase by 3% per year and must remain below HUD fair market rents during the duration of the loan term.
	Foreclosure Counseling: Foreclosure counseling assists homeowners with loan modifications and other referrals to community partners for services such as financial counseling, bankruptcy and legal services.
	Referrals: The City refers homeowners and potential homeowners to the Minnesota Homeownership Center to help to connect to the appropriate set of resources to meet their needs.
Regulatory Tools and Policy Supported Uses: • Housing choice • Reduction of housing cost • Housing safety	Inclusionary Zoning: This tool supports the development of affordable housing units in either a regulatory (mandatory) or incentive-based methods (e.g. density bonus). The City will complete an analysis of market conditions that could support the development of affordable housing in Saint Paul using inclusionary zoning.
	Zoning Regulation Changes: The zoning code regulates the overall use and intensity of use of land. The City will consider amendments to the Zoning Code to allow for increased housing choice and potential reduction of costs through studies examining the definition of family, housing-related uses, zoning district standards, and rezoning of property.
	Truth in Sale of Housing: The City will continue to require pre-sale inspections of housing units.
	Certificate of Occupancy Program: The City will continue to require all non-owner occupied housing, excluding accessory dwelling units within the principal structure and owner-occupied duplexes, to be certificated through this program to ensure the health and safety of the City's renter community.
	4D Property Tax Classification: The 4D low income rental housing property tax classification provides an approximate 40% reduction in property taxes for qualifying affordable units within a building. To qualify, a property must include Project-based Section 8, awarded LIHTC, and/or have rental restrictions at or below 60% of AMI placed on the units by a federal, state, or local unit of government that is recorded against the property. Property owners must apply to Minnesota Housing for certification to the local assessor that the property qualifies for the reduced rate. The City/HRA will implement a 4D pilot program to analyze whether this is an effective tool for preservation of naturally-occuring affordable housing (NOAH).

Type of Tool	Specific Tool
Other Supported Uses: • Affordable rental and ownership housing • Fair housing • Education • Housing Improvement Areas	Land Trusts: Land trusts provide permanent affordability for income-eligible households. Typically, a land trust is structured where a homeowner owns the building and the land trust leases the land to the homeowner. Households that make at or below 80% of AMI typically qualify for these homes. The City/HRA is interested assisting land trusts operating within the city to increase internal capacity to expand opportunity for affordable ownership opportunities.
	Publicly-Subsidized Housing and Project-Based Rental Assistance: The City/HRA will continue to partner with Saint Paul Public Housing Authority to provide decent housing for Saint Paul's senior, disabled and extremely low-income residents.
	Fair Housing Policies: Beyond existing requirements from HUD that the City must affirmatively further fair housing as a recipient of HUD funds, the Fair Housing Working Group is an interdepartmental team that works to coordinate around and address fair housing related issues.
	Participation in Housing-Related Organizations, Partnerships, and Initiatives: City staff or elected officials will consider increased involvement in partnerships, collaborations or programs that support furthering fair and affordable housing. Staying proactively involved in affordable housing discussions with other jurisdictions and agencies will allow Saint Paul to stay appraised of current practices and new opportunities.
	Housing Improvement Areas are city-funded loans that enable condominium and townhome (ownership) associations to complete needed improvements to common areas of their development that they are otherwise unable to finance through association fund balances, commercial loans, or individual private owner loans. The City will consider use of the tool if the evolving housing needs of the city, at any time in the future, warrant prioritization of financial resources for this type of housing. The City is planning to invest in targeted naturally occurring affordable housing and will continue to evaluate where the most pressing needs are for prioritization of NOAH preservation and the best financing tools to meet the evolving needs as they emerge.



WATER RESOURCES MANAGEMENT

Introduction

The Water Resources chapter provides guidance and a comprehensive policy framework for the use and integrated management of water resources and related infrastructure. These resources include surface water, ground water, water supply and the potable water distribution system, stormwater and stormwater management infrastructure, and the wastewater conveyance system. The chapter also provides a high-level summary of the policy guidance found in the City's adopted Local Surface Water Management Plan (LSWMP) and Water Supply Plan (WSP), and describes City policy related to the management of inflow and infiltration (I & I) in the City's wastewater conveyance system.

Water is vital to everything—human life and the natural ecosystems that support us, our economy, and the things we use and consume every day. While water is abundant, it is finite; it is estimated that less than 1% of the Earth's water is freshwater available for human use. Saint Paul's drinking water system is connected to abundant supplies of both treatable surface water and abundant, clean ground water. Protecting that supply, using water sensibly, and maintaining the infrastructure that treats and distributes clean water are all key to maintaining a safe, reliable and sustainable water supply.

The City of Saint Paul and partner agencies such as the Capital Region Watershed District (CRWD) and Ramsey-Washington Metro Watershed District (RWMWD) have made great progress in the last 10 years in improving stormwater management practices in Saint Paul. The goals and policies in this plan are aimed at maximizing and balancing the occasionally competing goals of achieving excellent surface water quality and maintaining right-sized gray stormwater infrastructure to prevent localized flooding during storm events.

The proper treatment of wastewater is vital to both public health, and continued surface water and groundwater quality. In an older, built-up city like Saint Paul, maintenance of and improvements to aging metropolitan, municipal and privately-owned wastewater conveyance and treatment infrastructure are critical to meeting the needs of current citizens and accommodating new demand as the city grows. Additional supporting materials for Water Resources Chapter policies can be found in the appendices beginning of page 204.

The following goals guide the Water Resources chapter:

1. Integrated water resource management.
2. A safe, reliable and sustainable water supply.
3. Excellent surface water quality.
4. Rehabilitated and upgraded gray stormwater infrastructure.
5. Sustainable wastewater conveyance and treatment infrastructure.

Goal 1: Integrated water resource management.

Policy WR-1. Utilize rain as a resource to achieve multiple benefits when managing stormwater, such as harvesting water for irrigation or flushing toilets.

Policy WR-2. Work with development partners to support district green stormwater approaches.

Policy WR-3. Promote visible green infrastructure landscape features, such as rain gardens, constructed wetlands and tree trenches, that contribute to placemaking and welcoming public spaces.

Policy WR-4. Advance municipal policy and financing solutions to support district green stormwater infrastructure.

Policy WR-5. Advocate for expanded water reuse capacity, including code and policy changes to make water reuse cheaper and easier.

Policy WR-6. Support a healthy urban forest and urban forestry initiatives to capture stormwater through canopy interception, evapotranspiration and increased infiltration.

Policy WR-7. Continue to explore and support the implementation of green infrastructure practices to increase resiliency to flooding, drought and climate change.

Policy WR-8. Support regional efforts to address groundwater usage and recharge.

Water is All around Us

Water is all around us—in lakes and rivers, trapped in snow and glaciers, underground, even in the air. Water moves constantly and freely between these states in a single continuous cycle.

Surface water

Surface water refers to oceans, lakes, rivers, streams and wetlands. Subsurface exchanges between groundwater and surface water are common; surface waters are also fed by atmospheric water vapor via precipitation and stormwater. In turn, large bodies of surface water evaporate into the atmosphere as water vapor.

Groundwater

Groundwater is water beneath the surface of the ground. It includes everything from the soil moisture you might find digging in a garden to deep bedrock aquifers. Generally, groundwater levels fluctuate where water is close to the surface, and can rise in times of more frequent or intense precipitation, like in springtime. Shallow groundwater is typically impacted by infiltration of stormwater, and can cause problems with infiltration into pipes and basements. In these areas, groundwater contamination can be a problem. Deep bedrock aquifers are hundreds of feet underground. An individual water molecule entering a bedrock aquifer at a recharge zone (where surface or other groundwater enters the aquifer, typically close to the surface) may remain in the aquifer for thousands of years. Four levels of bedrock aquifers—separated from each other by layers of less-permeable rock—underlay Saint Paul.

Stormwater

Stormwater is water that falls as rain. The amount of stormwater absorbed by permeable surfaces—those areas not covered by roads, buildings or other constructed surfaces – depends on a number of factors, including rate of rainfall, soil types, and amount and type of vegetation. Water that cannot be immediately absorbed by permeable surfaces or that falls on impervious surfaces becomes stormwater runoff. In urban environments, stormwater runoff has traditionally been directed away from structures and roads by curb and gutter, and conveyed to receiving surface waters by the storm sewer system. However, contemporary "green infrastructure," such as rainwater gardens or tree trench systems, is increasingly being used to capture and infiltrate stormwater into the ground. This is important to both reduce the volume of stormwater discharged to receiving surface waters, and to help capture pollutants and sediment picked up from impervious surfaces that would otherwise end up in lakes and streams.

Best Management Practices

When dealing with stormwater, a Best Managemetnt Practice (BMP) is used to describe structural or nonstructural approaches to intercepting, infiltrating and/or treating stormwater runoff, with a focus on green infrastructure. Common examples include rainwater gardens, tree trenches, bioswales and sand filtration. Different development and redevelopment sites and different types of projects present very different challenges to addressing stormwater runoff, and therefore require different approaches; the term BMPs is a catch-all to describe the diverse sets of tools and practices for managing stormwater. BMP tools and practices continue to evolve and grow through research, innovation and use.

Minimal Impact Design Standards

At the direction of the Minnesota Legislature, the Minimal Impact Design Standards (MIDS) system was created in 2013 by a diverse group of stakeholders with experience designing, building and regulating stormwater BMPs. The overall goal of MIDS is to promote - especially in dense urban areas - Low Impact Development, which focuses on keeping rain where it falls to the maximum extent practical. MIDS include performance goals for managing stormwater volumes, credit calculations for a range of structural stormwater techniques, design specifications for green infrastructure BMPs and an ordinance guidance package to help communities (and developers) implement MIDS.

Goal 2: A safe, reliable and sustainable water supply.

Policy WR-9. Apply an equity lens to policy and funding decisions relating to providing assistance to or coordinating with owners to improve private water connections to the public distribution system.

Policy WR-10. Continue education and conservation measures identified in the 2016 Water Supply Plan to increase efficiency and reduce water demand.

Policy WR-11. Work with partners to update and implement Saint Paul's Wellhead Protection and Source Water Protection plans.

Policy WR-12. Fund the strategic capital projects outlined in the 2016 Water Supply Plan and 2016-2018 Saint Paul Regional Water Services Strategic Plan.

Policy WR-13. Maintain response readiness for emergencies related to water supply contamination or interruption, and for damage to treatment and distribution infrastructure.

Goal 3: Excellent surface water quality.

Policy WR-14. Collaborate with partner agencies on water quality improvement efforts, including capital projects and programming.

Policy WR-15. Educate the public on urban water quality issues and stormwater best management practices.

Policy WR-16. Work with partners to address known surface water quality impairments outlined in the Saint Paul Local Surface Water Management Plan (LSWMP). (The LSWMP is a required plan developed in accordance with the requirements of the Metropolitan Surface Water Management Act and Minnesota Rules Section 8410. The plan includes an inventory of water resources and management concerns, outlines water resource management goals and policy, and sets water resource management implementation priorities.)

Policy WR-17. Utilize best management practices for "good housekeeping," including salt application, street sweeping and facility maintenance.

Policy WR-18. Encourage the use of Minimal Impact Design Standards (MIDS) for new development.

Policy WR-19. Apply an equity lens to policy and funding decisions relating to surface water quality and flooding/climate resiliency.

Goal 4: Rehabilitated and upgraded gray stormwater infrastructure.

Policy WR-20. Continue to maintain the serviceability of existing gray stormwater infrastructure, and incorporate or upgrade Best Management Practices to reduce pollution and respond to stormwater management regulations.

Policy WR-21. Rehabilitate existing gray stormwater infrastructure to protect the previous significant public investment.

Policy WR-22. Respond to changing precipitation patterns and ensure the adequacy of existing gray stormwater infrastructure and stormwater management regulations.

Shared, Stacked Green Infrastructure (SSGI)

The term "shared, stacked green infrastructure" (SSGI) describes an approach to handling stormwater that leverages funds spent on stormwater management to achieve multiple benefits. "Shared" means that stormwater from both public rights-of-way and private development sites is treated in the same system. "Stacked" means that the stormwater facility has two functions: treatment of stormwater and provision of passive green space. "Green infrastructure" refers to the use of plants and soil to filter stormwater and promote infiltration of water into the ground. These elements are in contrast to the more traditional approach to stormwater management, which treats parcels individually, and relies on curbs, gutters, and underground tanks and pipes to collect and rapidly convey stormwater away. A common example of green infrastructure is a rainwater garden. Generally, green infrastructure practices attempt to mimic natural "hydrology," or the ways in which water moves across and through the landscape in undisturbed natural systems. With SSGI, green infrastructure practices are scaled up to create district-wide systems that not only treat stormwater from the public right-of-way and multiple surrounding properties, but also provide open space and other amenities in urban areas.

An existing example is the tree trench providing stormwater treatment along most of University Avenue. The City of Saint Paul is currently working to incorporate SSGI into the redevelopment of multiple sites, including Snelling-Midway, Ford and the West Side Flats.

Goal 5: Sustainable wastewater conveyance and treatment infrastructure.

Policy WR-23. Continue to reinvest in critical sanitary collection and conveyance infrastructure by rehabilitating the existing system.

Policy WR-24. Continue I&I identification and correction efforts for municipal sanitary conveyance systems and connecting private infrastructure.

Policy WR-25. Encourage the Metropolitan Council to identify and correct I&I on Metropolitan Council Environmental Services (MCES)-owned facilities in Saint Paul and those in surrounding communities that impact MCES infrastructure serving Saint Paul.

Policy WR-26. Reduce reliance on individual sewage treatment systems where financially feasible.

Policy WR-27. Continue to reduce non-compliant Individual Sewage Treatment Systems (ISTS) and ensure maintenance of compliant systems.

Policy WR-28. Discourage new ISTSs where public sanitary conveyance infrastructure is available.

Policy WR-29. Prohibit new community treatment systems where public sanitary conveyance infrastructure is available.

Policy WR-30. Plan for adequate municipal conveyance infrastructure and support adequate metropolitan system capacity to serve more intensive redevelopment in appropriate locations.

Inflow and Infiltration

Conveyance and treatment of wastewater is energy-intensive, and extra water in the system means extra expense. Extra water in the sanitary sewer system can also reduce system capacity for treating wastewater, and in extreme cases will overload treatment plants and cause bypass events where untreated sewage is discharged into surface waters. Yuck!

Inflow and Infiltration (I&I) is a term used to describe the pathways by which extra water enters the sanitary sewer system.

Inflow occurs where groundwater or stormwater, which does not require treatment in a wastewater treatment plant, discharges to the sanitary sewer system. Although direct connections between groundwater/stormwater and the sanitary sewer system are not allowed in new construction, and many pre-existing connections have been eliminated, some still exist.

Infiltration occurs where stormwater runoff or groundwater enters the sanitary system through pipe joints, cracks in aging pipes, manholes, etc. These infiltration pathways can be identified through techniques such as "smoke testing." In smoke testing, smoke is pumped into sanitary sewers; where visible smoke emerges, it suggests an infiltration pathway. Once problems have been identified, maintenance crews can perform repairs, including sewer lining, to seal the infiltration pathways.

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Appendix **A**

Appendix **B**

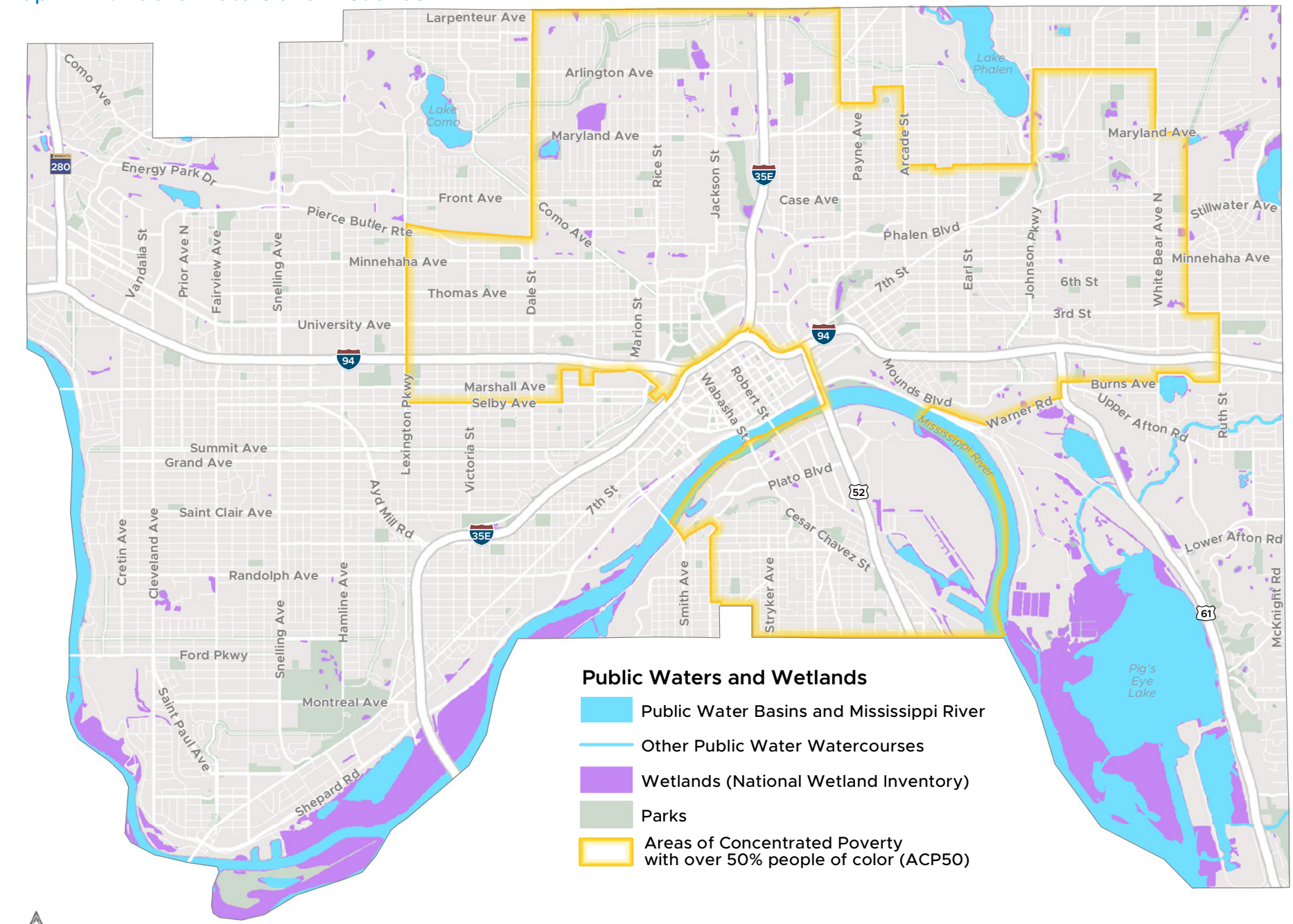
Appendix **C**

Appendix **D**

Appendix **E**

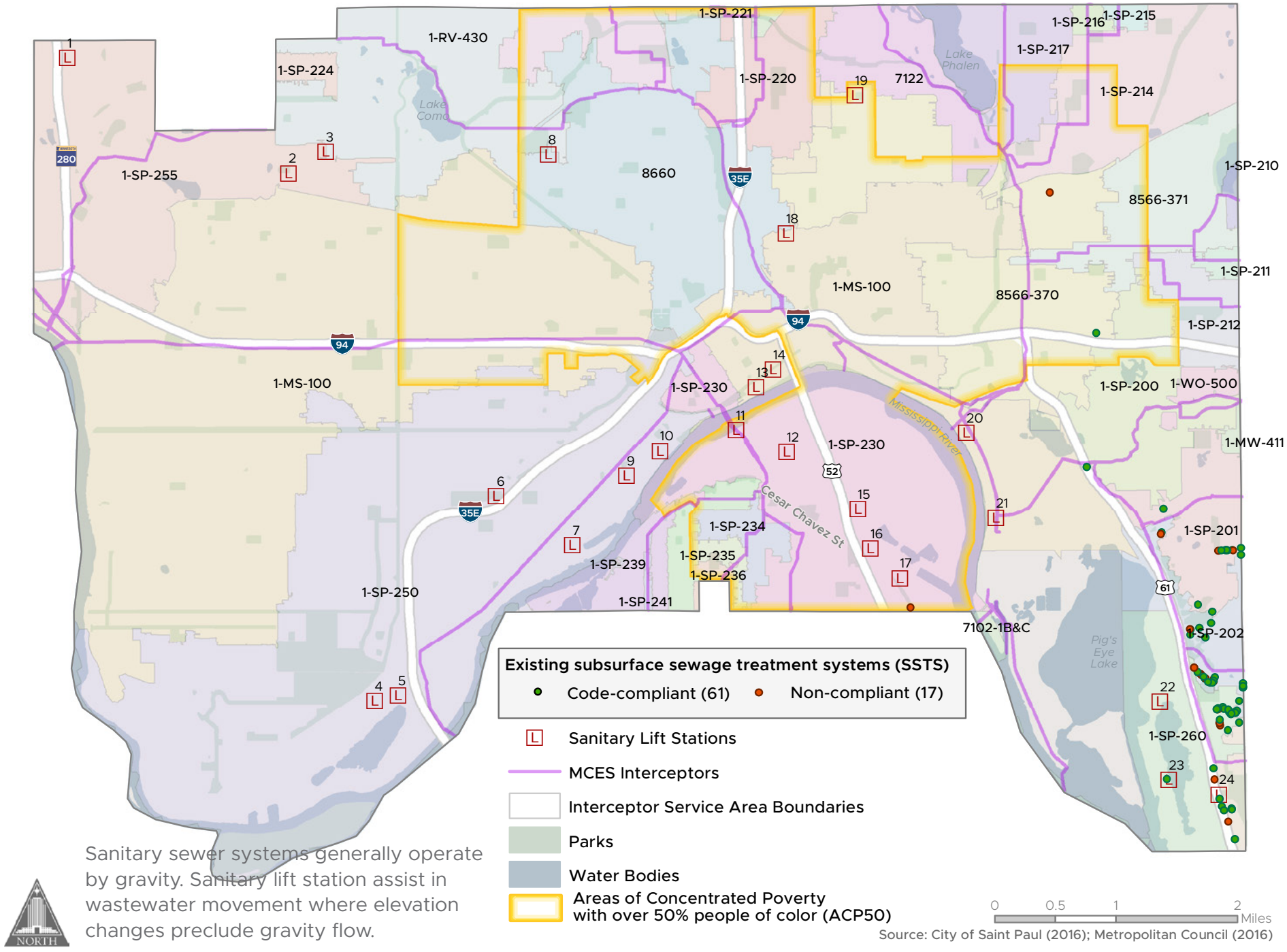
Notes: These appendices provide supporting content for water resources-related policies and satisfy associated Metropolitan Council requirements..
ACP50 data for all from Metropolitan Council via MN Geospatial Commons, from annual release (2/5/2018). Other data as noted.

Map WR-1: Public Waters and Wetlands



Source: City of Saint Paul (2016); Metropolitan Council (2016)

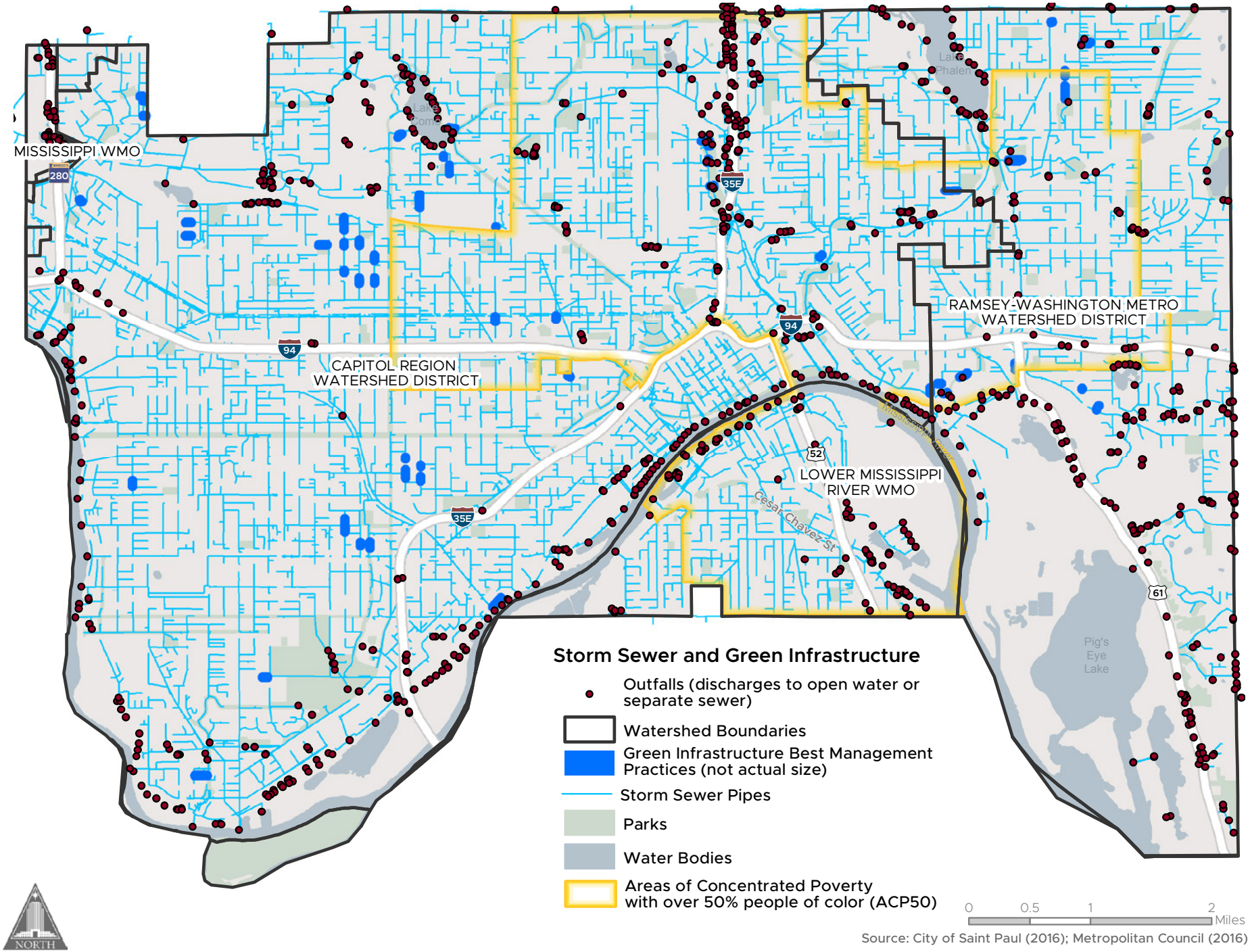
Map WR-2: Interceptors, Service Basins, Lift Sations and Subsurface Sewage Treatment Systems



Source: City of Saint Paul (2016); Metropolitan Council (2016)

Sanitary sewer systems generally operate by gravity. Sanitary lift station assist in wastewater movement where elevation changes preclude gravity flow.

Map WR-3: Storm Sewer and Green Infrastructure



Source: City of Saint Paul (2016); Metropolitan Council (2016)

Appendix B

Local Surface Water Management Plan

All Twin Cities Metropolitan area communities and required to have a Local Surface Water Management Plan (LSWMP). The plans must be updated every 10 years, and, additionally, in response to any changes to watershed district (WD) or watershed management organization (WMO) plans with overlapping jurisdiction. In addition, they are a required component of all Twin Cities Metropolitan Area community comprehensive plans.

Updates to the Saint Paul LSWMP were completed in 2017. The plan is consistent with content and purpose requirements of Minn. Statutes 103B.235 and 103B.201, as well as with Minn. Rules 8410, promulgated by the Board of Water and Soil Resources. The LSWMP consists of the following six sections:

- Executive Summary
- Land and Water Resources Inventory
- Agency Cooperation
- Assessment of Problems and Issues
- Goals and Policies
- Implementation Program

The Saint Paul Local Surface Water Management Plan is hereby adopted by reference as part of the Saint Paul 2040 Comprehensive Plan and as Appendix B to the Water Resources Chapter thereof.

Appendix C

Water Supply Plan

Under Minn. Statute 103G.291, a Water Supply Plan (WSP) is required for all public water suppliers serving more than 1,000 persons. Twin Cities Metropolitan Area communities. In addition, they are a required component of all Twin Cities Metropolitan Area community comprehensive plans.

Saint Paul Regional Water Services (SPRWS) provides water for almost all Saint Paul residents, businesses, and institutions, as well those of several neighboring communities.

An update to the SPRWS Water Supply Plan was completed in 2016, and is hereby adopted by reference as part of the Saint Paul 2040 Comprehensive Plan and as Appendix C to the Water Resources Chapter thereof.

Wastewater Component

This Appendix addresses the required Comprehensive Plan wastewater system plan elements. The majority of Saint Paul's residents and businesses are served by the municipal sanitary sewer system, which conveys wastewater to the Metropolitan Wastewater Treatment Plant, located in Saint Paul along the Mississippi River and just west of Pig's Eye Lake. Seventy-nine households, primarily clustered in the Highwood area, rely on privately-owned and -maintained septic or other type of individual treatment systems, collectively known as subsurface sewage treatment systems, or SSTSs. There are no private communal wastewater treatment systems in Saint Paul. The Saint Paul Legislative Code does not provide for new private communal wastewater treatment systems.

SSTSs

As of the finalization of the Saint Paul 2030 Comprehensive Plan, there were approximately 120 individual SSTSs remaining in operation in Saint Paul. As of late 2018, this number has been reduced to 79. Of those 79 systems, 20 are older systems of a type and design that is not adequate to protect groundwater. The City of Saint Paul has an ongoing monitoring, inspection, and enforcement program for the purpose of ensuring that all SSTSs are sufficiently maintained to protect public health and water quality. The standards and specifications for SSTS placement, maintenance and monitoring are codified in Chapter 50 of the Saint Paul Legislative Code.

The City is currently considering changes to Chapter 50 to bring it into compliance with State policy. Shallow bedrock, high groundwater, and steep slopes makes the siting of new or replacement systems in the Highwood Area of Saint Paul, where most remaining SSTSs are located, challenging or, in some cases, impossible on a given lot. Similarly, the relatively low-density, generally large lots and shallow bedrock in the area make the extension of the public wastewater conveyance system (i.e. sanitary sewer), as well as connection to that system, very expensive. This unusual expense presents a practical hardship both for the City of Saint Paul and residents of the Highwood Area.

Forecasts for population, households, and employment in 10-year increments through 2040 in the unsewered portion of the city are shown in Figure WR-1.

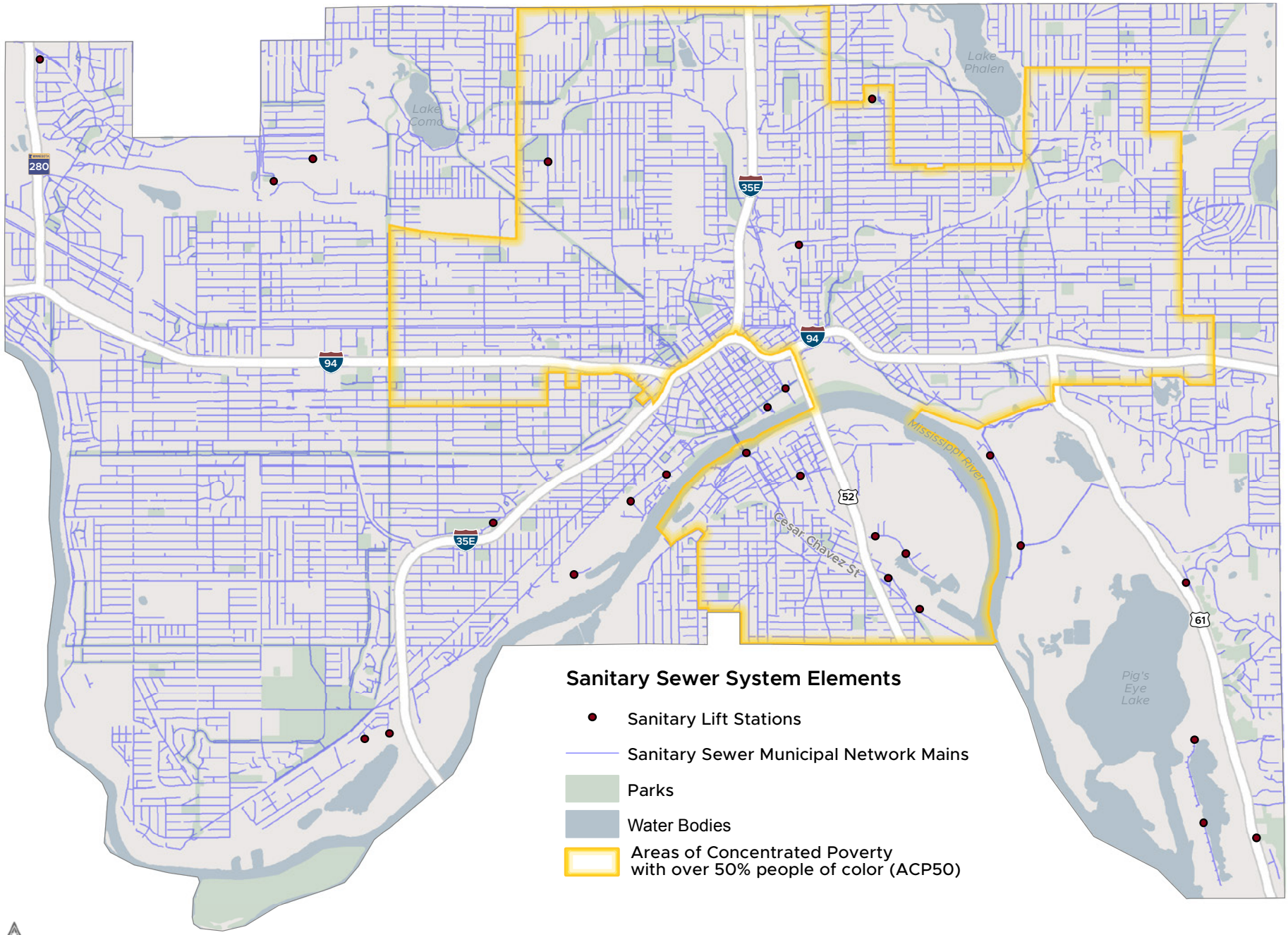
Figure WR-1: Forecasted Population, Households, and Employment for Unsewered Portion of Saint Paul

	Decade		
	2020	2030	2040
Pop	199	0	0
HH	79	0	0
Emp	0	0	0

Figure WR-2: Forecasted Population, Households, and Employment for Portion of Saint Paul Served by Metropolitan System

Interceptor Service Area	2019-2020			2021-2030			2031-2040		
	POP	HH	EMP	POP	HH	EMP	POP	HH	EMP
1-MS-100	103,062	39,352	69,510	108,369	42,488	73,790	114,056	45,586	76,718
1-SP-200	6,146	2,438	1,347	6,659	2,595	1,234	7,164	2,717	1,129
1-SP-201	3,744	1,368	132	3,793	1,383	92	3,832	1,386	45
1-SP-202	712	255	40	785	279	30	842	297	20
1-SP-212	3,847	1,684	682	4,012	1,748	716	4,191	1,797	755
1-SP-214	13,363	5,013	1,276	14,682	5,670	1,247	16,015	6,315	2,240
1-SP-215	307	119	38	315	122	38	325	125	39
1-SP-216	614	239	76	630	244	77	650	248	78
1-SP-217	4,186	1,603	243	4,471	1,696	242	4,783	1,778	242
1-SP-220	7,137	2,697	1,572	7,590	2,861	1,507	8,100	3,028	1,460
1-SP-224	15,460	6,249	3,379	15,254	6,215	3,632	15,268	6,190	3,873
1-SP-230	12,727	4,920	37,888	13,186	5,208	38,327	12,960	5,405	38,715
1-SP-234	2,589	952	311	2,632	955	344	2,707	957	375
1-SP-235	1,002	386	62	1,015	387	73	1,041	387	84
1-SP-236	475	183	30	480	183	35	490	182	41
1-SP-237	2,486	913	293	2,522	911	325	2,583	910	354
1-SP-239	1,478	565	106	1,505	577	100	1,555	586	94
1-SP-241	114	44	1	115	44	9	118	44	10
1-SP-250	57,662	25,917	34,056	58,028	26,164	37,128	58,697	25,949	40,337
1-SP-255	10,511	4,771	21,923	12,294	5,445	23,962	14,551	6,229	26,004
1-SP-260	832	269	401	1,294	417	298	1,644	528	199
8566-370	28,960	10,507	5,843	29,992	10,932	5,797	31,193	11,317	5,795
8566-371	7,344	2,800	630	7,920	2,976	602	8,602	3,150	580
8660	19,550	7,200	12,869	20,388	7,544	12,584	21,270	7,868	12,461
8851	4,874	1,948	1,106	4,955	1,935	953	5,082	1,924	819
7122	4,174	1,579	752	4,359	1,651	828	4,558	1,713	896
7402	238	77	19	370	119	19	470	151	20
1-WO-500	1,404	660	109	1,389	655	114	1,356	641	120

Map WR-4: Sanitary Sewer System



Source: City of Saint Paul (2016); Metropolitan Council (2016)

Area Served by the Regional Sanitary Sewer System

City of Saint Paul

The vast majority of the City of Saint Paul is served by the municipal wastewater conveyance system and the Metropolitan Wastewater Treatment Plant at Pig's Eye. Figure WR-2 shows forecasted growth in population, households, and employment in 10-year increments through 2040, allocated by metropolitan interceptor.

At this time, the City of Saint Paul is not proposing any new trunk sewers connecting to the metropolitan system. New service connections in the 2040 planning horizon will be allocated across the sanitary sewer basins serving Saint Paul as shown in Figure WR-2 (sanitary sewer basins forecasts are consistent with the TAZ forecasts for the TAZs corresponding to respective sanitary sewer basins).

Inflow and Infiltration

Inflow and Infiltration (I&I) is the term for stormwater runoff, ground water, and other clear water that ends up in the sanitary sewer system when it shouldn't. Conveying and treating wastewater is expensive, and any extra water in the system means both reduced capacity for treating actual wastewater and additional costs for everyone.

Metropolitan Council Environmental Services (MCES) operates the Metropolitan Wastewater Treatment Plant (also known as the "Metro Plant), which is located in Saint Paul and serves our city as well as much of the rest of the Twin Cities. While some level of I&I is inevitable, MCES and municipal sanitary system owners are continually working to reduce I&I to maximize system capacity and reduce costs.
For communities' 2040 Comprehensive Plans, MCES requires each municipality that is part of the MCES service area to define goals and strategies for eliminating I&I. These are paired with annual work plans, developed by the municipalities in conjunction with MCES and based on MCES monitoring of flows in the system.

Sources

Sources of Inflow and Infiltration (I&I) in Saint Paul include defective private service laterals, compromised manhole frames, manhole cover pick holes, connected rainleaders and groundwater infiltration. The City of Saint Paul completed separation of the previously-combined sanitary and storm sewer systems between 1985 and 1996, at a cost of approximately $400 million. This included a property-by-property identification and disconnection of rainleaders. The Metropolitan Council adopted an I&I Surcharge Program in 2006. The City of Saint Paul conducted an I&I pilot study in the Highland Park neighborhood in 2007, consisting of flow monitoring and smoke testing. The City has been making annual investments to address I&I in both the public and private components of the Saint Paul sanitary sewer conveyance system since 2008, with an average annual investment of approximately $5 million. In 2014, the City conducted a system-wide capacity analysis, which helped identify areas of higher wet-weather flow, an indicator of I&I, which has also informed investigation priorities and metering activities.

Goal

The overarching I&I goal for the City of Saint Paul is to reduce the current observed levels of I&I, and to reach sustained annual compliance with MCES-assigned targets for I&I by the end of the current implementation period. Adjusted Average Flow, and associated I&I goals, for future years will be determined by MCES.

This goal will be achieved through a "whole system" approach that prioritizes:

- continuous/cyclical inspection and evaluation of the public system to inform investment needs and priorities;
- maintenance, repair and rehabilitation of the public system based on identified needs and priorities; and
- support of private infrastructure repair, rehabilitation, and replacement as opportunities arise.

The City of Saint Paul will use the strategies and financial mechanisms described below to reach the stated targets, working with MCES through at least the current implementation period (ending 2022) and making annual investment consistent with MCES-approved annual work plans.

Strategy
Saint Paul uses ongoing investigative tools (smoke testing, flow monitoring, programmed CCTV inspection) I&I reduction strategies to guide private (rainleader disconnect, private service lateral replacement) and public (cured-in-place pipe lining, manhole sealing and mainline pipe replacement) system investments to abate I&I. More information on the City's private and municipal sewer inspection, cleaning and maintenance/replacement programs, including those related to I&I, is provided below. Progress in implementing these strategies is documented annually through the I&I Work Plan Documentation Form administered by Metropolitan Council Environmental Services.

Schedule
Many of the I&I strategies above are implemented on an annual basis, depending on what specific I&I defects are detected during investigative procedures. Repair/replacement of private service laterals is partially dependent on the number of street reconstruction projects (City, County, State) occurring within the city limits each year.

Financial Mechanisms
Financial mechanisms to mitigate I&I in Saint Paul primarily come from the Sewer Service Fund. Funding for the repair/replacement of private service laterals comes from individual property owners. Saint Paul has been successful in obtaining grant funding from the Metropolitan Council for the repair/replacement of private service laterals and for rehabilitation of the public sanitary system.

Sewer System Inspection

Programmed Sewer Cleaning and Inspection Program
Implemented in 2004, this program entails the systematic cleaning and televised inspection of the City-owned sanitary sewer network on a ten-year cycle. The Program divides the City-owned sanitary sewer system into ten subareas, with one area being addressed per year. Upon completion of the cleaning and inspection in a subarea, the televised inspection videos are reviewed for sewer deficiencies, and deficient pipe sanitary segments are prioritized for repair, replacement or rehabilitation. The City of Saint Paul has completed one ten-year cycle; the current cycle is from 2014-2023.

Roadway Reconstruction Sewer Inspection Program
Similar to the Programmed Sewer Cleaning and Inspection Program, this program is focused on inspecting the sewer system as part of street improvement projects. These projects can be initiated by the City of Saint Paul, Ramsey County and/or MnDOT. Depending on the observed deficiency, the sewers are prioritized for repair, replacement or rehabilitation.

Manhole Inspection
In addition to manholes inspected as part of the Programmed Sewer Cleaning and Inspection or Roadway Reconstruction Inspection programs, the City of Saint Paul also has a program to inspect brick manholes on arterial streets constructed with either concrete base layers or concrete pavement. This program was implemented to assess the condition of brick manholes that do not exhibit traditional failure indicators (cracking, settlement, etc.) on the street surface. Depending on the observed deficiency, the sewers are prioritized for repair, replacement or rehabilitation

Tunnel Inspection
Various locations within Saint Paul are served by a tunnel system, mined through geologic formations. Tunnel inspections occur on a two-to-four year cycle, and are completed via a walk-through inspection. Depending on the observed deficiency, the sewers are prioritized for repair, replacement or rehabilitation.

Inflow and Infiltration Detection and Abatement

Flow Monitoring
Implemented in 2008, this program entails the systematic installation of flow meters to determine excessive contributions of rainfall derived from inflow and infiltration. The program includes delineation of the sanitary system into various sub-sewersheds, meter installation to obtain dry weather and wet weather flow data, rainfall data acquisition, and analysis.

Sanitary Capacity Modeling
This model applies current census block data to ensure that adequate capacity exists, allowing for allocation of metered flows upstream in the sub-sewersheds. Also incorporated into the model are multiple years' worth of observed flow metering data from Saint Paul.

Smoke Testing
The City is engaged in smoke testing in various areas in Saint Paul. The program includes the delineation of the sanitary system into various sub-sewersheds, isolation of the sewer system to test specific segments, application of simulated smoke, and visual inspection and documentation of smoke exit points. In addition, significant effort is dedicated to public education on I&I at neighborhood meetings, on the City's website and via door hangers. Once an area is tested, the deficient element (manhole cover, rain leader, rathole, etc.) is identified, and appropriate parties are notified.

Animal Control
Saint Paul Animal Control investigates ratholes and performs baiting within the sanitary sewer system. Upon receiving a complaint of ratholes, Animal Control representatives will perform smoke testing of the rathole, and observe smoke exit points on private soil stacks or in the public sanitary system. Additionally, Animal Control performs baiting within the sanitary sewer system in an effort to remove vermin that are compromising sewer integrity.

Public System Repair, Rehabilitation, and Replacement
The City of Saint Paul prepares a comprehensive Capital Improvement Plan on an annual basis.Sanitary system improvements are included within the plan and are detailed as follows:

Sewer Lining
Implemented in 1991 on a situational basis and expanded to a regular rehabilitative measure in 1997, Cured-In-Place Pipe Lining is a rehabilitative measure to extend the useful life of an in-place sanitary sewer, and to combat inflow and infiltration. The pipe liner itself is a structural repair classified as a "pipe within a pipe," and seals sources of inflow and infiltration such as leaking pipe joints, unused services to vacated homes or businesses, and cracks.

Manhole Sealing
Cementitious manhole sealing is a rehabilitative measure to extend the useful life of the infrastructure and combat I&I, manhole collapse, etc. The cementitious manhole sealant is a structural repair, typically utilized on brick manholes; however, it can be used on other materials and construction types as well.

Major Sewer Repair
Major sewer repair is done when other less-intrusive measures are inadequate to correct deficiencies. Major sewer repairs typically occur either as a stand-alone project, or are integrated into another project (such as street reconstruction) where entire sewer mains and/or manholes necessitate replacement. On street reconstruction projects where other public entities (Metropolitan Council, MnDOT, Ramsey County, Watershed Districts, etc.) own sewer infrastructure, coordination is critical to upgrade their facilities at the same time.

Tunnel Rehabilitation
Depending on the original construction parameters, geologic conditions and inspection, tunnel rehabilitation measures vary. Rehabilitative measures have included grouting, wall repair and invert replacement.

Private Sanitary System Repair, Rehabilitation and Replacement

Private Sewer Assessment Program

Addressing I&I originating from private sanitary system components is an important part of Saint Paul's overall approach. There are approximately 129,700 dwelling units in Saint Paul, of which 100,304 were built prior to 1970. The Private Sewer Assessment Program assists property owners with financing the repair or replacement of their sanitary sewer service. The program allows a property owner to hire a contractor to repair or replace their sanitary sewer service, with the City of Saint Paul paying for the initial work. The cost of the repair or replacement, plus a fixed interest rate, is then assessed back to the property owner as a special assessment on real estate taxes over a period of up to 20 years.

Street Reconstruction Sewer Assessment Program

Similar to the Private Sewer Assessment Program, this program allows for the repair or replacement of private sanitary sewer service in conjunction with a street reconstruction project. The assessment process is similar to the above program. An incentive for this program is that the City's Sewer Utility subsidizes the cost of the repair/replacement. All property owners on a project will pay the same price per foot of pipe repaired or replaced, regardless of unique property issues (depth of excavation, traffic control, etc.). As a further incentive, the repair or replacement is not done under an emergency situation, and the contractor is selected by the City for the street project. This results in a more positive experience for the property owner.

Emergency Deferred Payment Loan

Administered by the City of Saint Paul Department of Planning and Economic Development, this program allows for a forgivable loan, at 0% interest, of up to $25,000 (with conditions). The program also has allowances for other eligible improvements, such as heating and electrical systems.

Municipal Separate Storm Water Systems (MS4)

Separation of storm drainage and sanitary sewers in regulated under Saint Paul Legislative Code, Chapter 41.

Chapter 41

Chapter 41 of the Saint Paul Legislative Code pertains to the separation of the storm drainage from the sanitary sewer system. It requires separate stormwater drainage and sanitary sewer connections for all buildings constructed, and requires the disconnect of existing rain leaders and other stormwater or clearwater connections from the sanitary sewer system.

2040 Projected Interceptor Flow and Pipe Capacity

The City of Saint Paul has allocated forecasted growth through 2040 throughout the City, with greater likelihood of redevelopment related growth concentrated along transit corridors, in neighborhood nodes, and at several larger redevelopment opportunity sites.

2040 flow projections are provided by in Figure WR-3 by interceptor, with allocated growth in population and employment through 2040 used to calculate percentage growth in flows based on 2019 aggregate flow.

Based on existing pipe capacity, the City of Saint Paul does not expect projected volumes to require increase size of municipal mains at points of connection to the MCES interceptors, with the following notes:

- In the West Side Flats area of Saint Paul, eventual redevelopment of areas to the east of Robert Street will require upgrades to and direct connection of the existing Plato lift station. However, that redevelopment is not presently expected in the 2040 planning horizon.
- Expected redevelopment of the Luther Seminary campus will likely require upgrades to the existing Como municipal lift station. However, if is not expected to require an increase in capacity of the existing pressure and gravity mains to which the lift station discharges.

Figure WR-3: 2040 Flow Projections by Interceptor Basin

Interceptor Basin	Flow (Millions of Gallons Annually)
MS-100	3,287,549
SP-200	149,333
SP-201	79,474
SP-202	15,362
SP-212	90,782
SP-214	297,095
SP-215	6,970
SP-216	13,941
SP-217	90,449
SP-220	173,542
SP-224	375,485
SP-230	895,228
SP-234	58,625
SP-235	21,715
SP-236	10,304
SP-237	56,199
SP-239	32,273
SP-241	2,369
SP-250	1,758,638
SP-255	582,948
SP-260	23,866
8566-370	695,241
8566-371	162,087
8660	618,337
8851	119,057
7122	98,700
7402	5,229
1-WO-500	30,796
TOTAL	**9,751,596**

Figure WR-4: Sanitary Sewer Pump Station Capacity

Pump Station	Location No. (Map WR-2)	Nominal Design Discharge (gpm)
Como & Eustis	1	900
Energy Park	2	700
Brewster	3	230
Glen Terrace	4	210
Elway South	5	320
Pleasant Arena	6	140
James**	7	800
Jessamine & Mackubin	8	210
High Bridge*	9	250
Sherman	10	1980
Riverview	11	4000
Plato	12	1450
Sibley*	13	360
Broadway	14	2150
Airport*	15	430
Robie	16	1350
Southport	17	100
Bush & Desoto	18	670
Phalen Arena*	19	190
Childs Road North*	20	240
Childs Road South*	21	650
Red Rock North*	22	1000
Red Rock South*	23	200
Peller	24	100

* No or minimal upstream users

** Design capacity unknown; expected discharge based on pump curve

Exhibit WR-1: Inflow & Infiltration Goal Letter

October 31, 2018

Bruce Elder
Sewer Utility Manager
City of Saint Paul
700 City Hall Annex, 25 West Fourth Street
Saint Paul, MN 55102

RE: Ongoing Inflow/Infiltration (I/I) Program
Peak Hourly Discharge Goals

Dear Mr. Elder:

This letter provides information specific to your community for the Metropolitan Council Environmental Services (MCES) Ongoing Inflow and Infiltration (I/I) Program. The I/I Goal is the maximum allowable peak hourly discharge from each metershed to the regional wastewater system. Wastewater flows for 2019 will be compared to the I/I Goal(s) below to determine if your community discharges excessive I/I.

Using community-specific wastewater flow and population growth data, the average adjusted daily flow (AAF) and peak hourly flow factor (PHF) are calculated for each metershed. The I/I Goal is equal to the AAF multiplied by the PHF, as shown below in million gallons per day (mgd):

Monitoring Period: **Jan 1 – Dec 31, 2019**			
Metershed	**I/I Goal (mgd)**	Adjusted Average Daily Flow (AAF, mgd)	Peak Hourly Flow Factor (PHF)
M001	**57.05**	27.168	2.1

All communities that discharge wastewater to MCES will be notified if measured peak wastewater flows are greater than 80% of an I/I Goal. Wastewater flow discharged from a metershed that exceeds 100% of an I/I Goal may result in a work plan assignment, which is the estimated investment to mitigate excessive I/I. Please see the table below for key dates of the Ongoing I/I Program related to the I/I Goal(s) above:

MCES communicates work plan assignments, **if applicable**	**Communities submit work plans**	MCES responds to work plan submittals	Communities implement **mitigation projects**
03/01/20	**09/30/20**	11/30/20	**2021 – 2024**

Thank you and your community for continued efforts to mitigate excessive I/I. More information on the Ongoing I/I Program is located at www.metroccouncil.org/iandi. Please email I.I@metc.state.mn.us or contact me at 651-602-1166 with your questions or comments.

Sincerely,

Marcus Bush, PE
Principal Engineer, Engineering Programs

cc: Kathy Lantry, Public Works Director, City of Saint Paul
Todd P. Hurley, Finance Director, City of Saint Paul
Richard Kramer, Metropolitan Council Member, District 13
Jon Commers, Metropolitan Council Member, District 14
Jeannine Clancy, Assistant General Manager, Technical Services

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METROPOLITAN COUNCIL

Figure WR-5: Estimated Annual I/I*

Year	ADF	BSF	Year II	Peak	Peak II
2011	27.703	23.790	14%	34.56	31%
2012	24.817	22.506	9%	30.50	26%
2013	26.739	22.035	18%	35.26	38%
2014	29.379	22.894	22%	47.55	52%
2015	25.915	23.161	11%	30.16	23%
2016	27.554	26.179	5%	30.61	14%
2017	26.107	24.507	6%	34.04	28%

*The estimates below were derived using EPA guidance for estimating I/I and based on monthly metered flows in MGs for Saint Paul.

Figure WR-6: Monthly Peak I/I*

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	737.50	715.40	931.00	1036.80	995.70	912.30	1001.60	914.10	775.40	719.40	679.10	693.20
2012	697.70	646.80	726.80	732.60	945.40	837.00	860.10	795.20	720.50	708.30	693.90	693.80
2013	683.10	619.00	715.50	889.70	1042.50	1057.80	960.40	852.40	746.80	757.00	712.30	723.30
2014	709.70	660.20	793.10	978.40	1136.50	1426.60	1079.60	879.40	805.40	794.70	730.90	729.00
2015	732.60	663.10	718.00	722.10	774.40	798.00	871.10	801.80	808.70	767.40	904.70	897.10
2016	812.10	733.00	820.30	835.30	875.80	813.50	811.30	948.80	896.10	881.50	795.80	833.80
2017	808.60	686.20	760.60	785.00	1055.30	840.80	782.30	849.00	762.60	818.40	696.00	684.40

*The estimates below were derived using EPA guidance for estimating I/I and based on monthly metered flows in MGs for Saint Paul.

Appendix E

Intercommunity Sanitary Connections

Connections to from other communitys to the Saint Paul sanitary sewer system are regulated under Chapters 79 and 80 of the Saint Paul Legislative Code.

Figure WR-7 shows existing Saint Paul properties with connections to the sanitary sewer systems of adjacent communities, along with known information regarding property type and permit numbers.

Map WR-5 and Map WR-6 shows locations of existing unmetered connections to the Saint Paul sanitary sewer system from adjacent communities.

Chapter 79
Chapter 79 of the Saint Paul Legislative Code prohibits connections to the Saint Paul sanitary sewer system to serve property outside the City of Saint Paul except as authorized by the City Council. The ordinance requires the owner of any such property to pay all charges related to the installation and usage of any such connection, including any service charges for the City of Saint Paul or Metropolitan systems.

Chapter 80
Chapter 80 of the Saint Paul Legislative Code allows the Saint Paul City Council to enter into agreements with neighboring communities or other governmental entities to allow connection to the Saint Paul sanitary sewer system.
Maps included in this appendix show locations of existing unmetered connections to the Saint Paul sanitary sewer system from adjacent communities.

Figure WR-7: Intercommunity Connections

Address	City	Permit Number	Bldg Type*	#of Multifamily Units
2530 Kasota Ave	Minneapolis	A-96674	Ind	n/a
2565 Kasota Ave	Minneapolis	A-97183	Ind	n/a
2578 Kasota Ave	Minneapolis	A-101381	Com	n/a
2564 como Ave	Minneapolis	A-66517	Ind	n/a
1677 Fernwood St	Roseville	A-93316	SFD	n/a
1673 Fernwood St	Roseville	A-93311	SFD	n/a
1671 Fernwood St	Roseville	A-89174	SFD	n/a
1659 Fernwood St	Roseville	A-89376	SFD	n/a
1655 Fernwood St	Roseville	A-90556	SFD	n/a
1649 Fernwood St	Roseville	A-91131	SFD	n/a
1656 Fernwood St	Roseville	A-89177	SFD	n/a
1660 Fernwood St	Roseville	A-89176	SFD	n/a
1664 Fernwood St	Roseville	A-89096	SFD	n/a
1670 Fernwood St	Roseville	A-89499	MFD	17
118 Larpenteur Ave W	Maplewood	A-85702	SFD	n/a
112 Larpenteur Ave W	Maplewood	A-88628	MFD	12
104 Larpenteur Ave W	Maplewood	A-85749	SFD	n/a
94 Larpenteur Ave W	Maplewood	A-86943	SFD	n/a
8 Larpenteur Ave E	Maplewood	A-91419	SFD	n/a
16 Larpenteur Ave E	Maplewood	A-85495	SFD	n/a
20 Larpenteur Ave E	Maplewood	A-85496	SFD	n/a
1661 Gurney St	Maplewood	A-97447	SFD	n/a
1657 Gurney St	Maplewood	A-90522	SFD	n/a
1652 Gurney St	Maplewood	A-89977	SFD	n/a
1656 Gurney St	Maplewood	A-90440	SFD	n/a
1660 Gurney St.	Maplewood	A-88213	SFD	n/a
1666 Gurney St	Maplewood	A-88214	SFD	n/a
1676 Gurney St	Maplewood	A-88898	SFD	n/a
366 Larpenteur Ave E	Maplewood	A-88881	SFD	n/a
372 Larpenteur Ave E	Maplewood	Ordinance	SFD	n/a
*Notes: SFD = Single family dwelling; MFD = Multifamily dwelling				

Figure WR-7: Intercommunity Connections - Continued

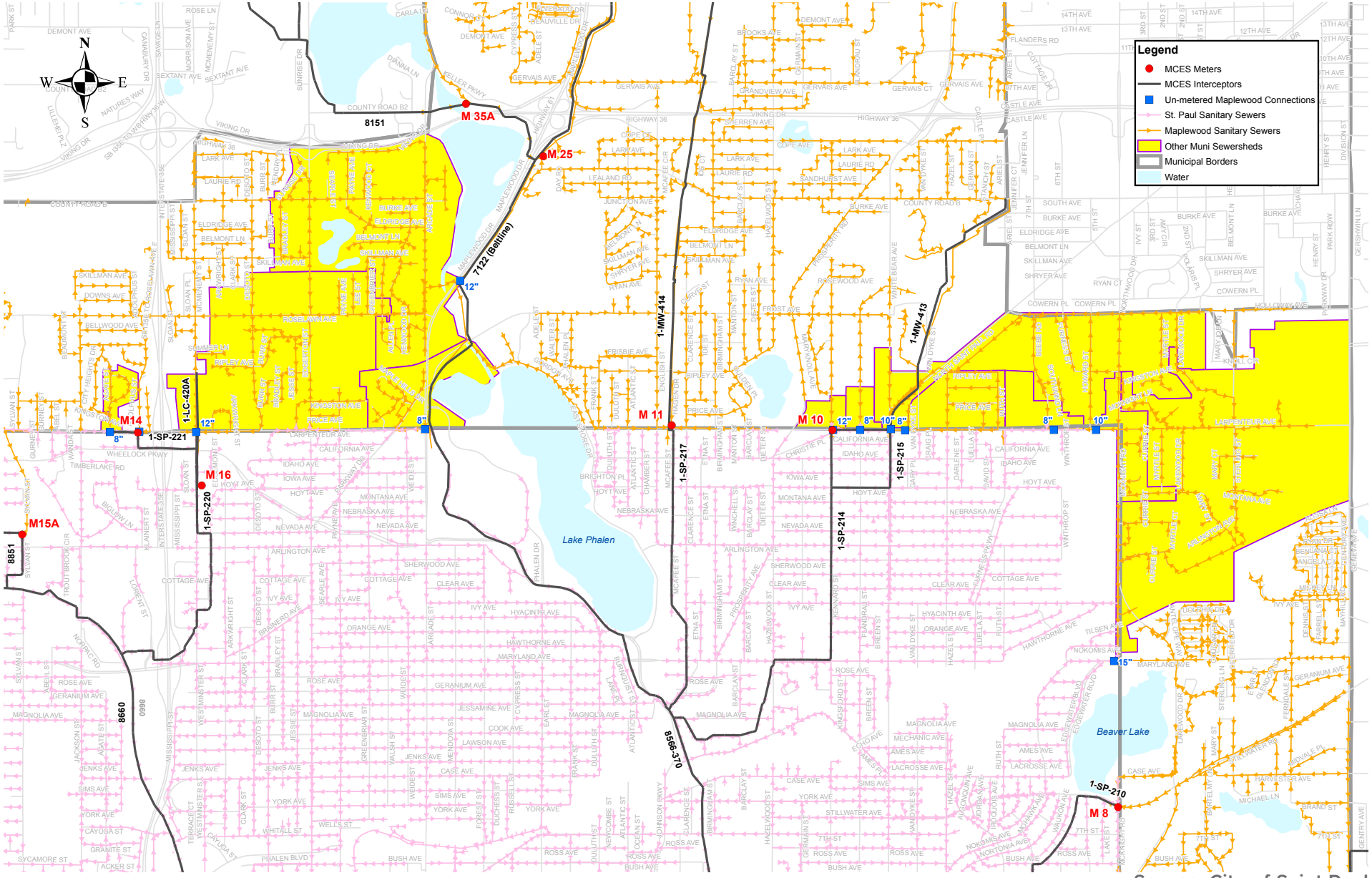
Address	City	Permit Number	Bldg Type*	#of Multifamily Units
380 Larpenteur Ave E	Maplewood	A-90810	MFD	2
390 Larpenteur Ave E	Maplewood	No record	SFD	n/a
396 Larpenteur Ave E	Maplewood	R-5515	SFD	n/a
1659 Clark St	Maplewood	A-99782	SFD	n/a
480 Larpernteur Ave E	Maplewood	A-97207	MFD	8
1649 DeSoto St	Maplewood	A-98540	SFD	n/a
488 Larpenteur Ave E	Maplewood	A-97205	MFD	8
500 Larpenteur Ave E	Maplewood	A-97206	MFD	8
516 Larpenteur Ave E	Maplewood	A-89533	SFD	n/a
522 Larpenteur Ave E	Maplewood	A-90262	SFD	n/a
528 Larpenteur Ave E	Maplewood	A-90023	SFD	n/a
534 Larpenteur Ave E	Maplewood	A-88904	SFD	n/a
540 Larpenteur Ave E	Maplewood	No record	SFD	n/a
546 Larpenteur Ave E	Maplewood	A-85655	SFD	n/a
552 Larpenteur Ave E	Maplewood	A-85218	SFD	n/a
558 Larpenteur Ave E	Maplewood	A-87254	SFD	n/a
564 Larpenteur Ave E	Maplewood	A-86749	SFD	n/a
610 Larpenteur Ave E	Maplewood	A-88745	MFD	2
620 Larpenteur Ave E	Maplewood	A-86231	SFD	n/a
624 Larpenteur Ave E	Maplewood	A-86232	SFD	n/a
1520 Larpenteur Ave E	Maplewood	A-87233	SFD	n/a
1970 Larpenteur Ave E	Maplewood	A-88622	SFD	n/a
1976 Larpenteur Ave E	Maplewood	Ordinance	SFD	n/a
2000 Larpenteur Ave E	Maplewood	A-84731	SFD	n/a
2200 Larpenteur Ave E	Maplewood	A-102564	Golf course utility building	n/a
1045 McKnight Rd S	Maplewood	A-102356	SFD	n/a
2247 Ogden Ct	Maplewood	A-100386	SFD	n/a
1085 Mcknight Rd S	Maplewood	A-100672	SFD	n/a
1101 Mcknight Rd S	Maplewood	A-100734	SFD	n/a
750 Concord St S	South St. Paul	No record	SFD	n/a
*Notes: SFD = Single family dwelling; MFD = Multifamily dwelling				

Figure WR-7: Intercommunity Connections - Continued

Address	City	Permit Number	Bldg Type*	#of Multifamily Units
754 Concord St S	South St. Paul	No record	SFD	n/a
585 Annapolis St E	South St. Paul	No record	SFD	n/a
577 Annapolis St E	South St. Paul	No record	SFD	n/a
573 Annapolis St E	South St. Paul	No record	SFD	n/a
566 Annapolis St E	South St. Paul	No record	SFD	n/a
556 Wyoming St E	South St. Paul	No record	SFD	n/a
549 Annapolis St E	South St. Paul	A-89448	SFD	n/a
539 Annapolis St E	South St. Paul	No record	SFD	n/a
535 Annapolis St E	South St. Paul	A-91936	SFD	n/a
435 Wyoming St E	West St. Paul	A-83572	MFD	2
423 Wyoming St E	West St. Paul	A-91725	SFD	n/a
411 Wyoming St E	West St. Paul	A-95664	SFD	n/a
403 Wyoming St E	West St. Paul	A-91917	SFD	n/a
395 Wyoming St E	West St. Paul	A-97009	SFD	n/a
43 Annapolis St E	West St. Paul	A-39238	MFD	2
39 Annapolis St E	West St. Paul	A-39256	MFD	3
253 Annapolis St W	West St. Paul	No record	SFD	n/a
261 Annapolis St W	West St. Paul	R-7072	SFD	n/a
267 Annapolis St W	West St. Paul	A-88566	Vacant	n/a
299 Annapolis St W	West St. Paul	A-70258	SFD	n/a
301 Annapolis St W	West St. Paul	A-75576	SFD	n/a
313 Annapolis St W	West St. Paul	A-54537	MFD	2
315 Annapolis St W	West St. Paul	No record	SFD	n/a
323 Annapolis St W	West St. Paul	No record	SFD	n/a
327 Annapolis St W	West St. Paul	A-60390	SFD	n/a
337 Annapolis St W	West St. Paul	A-96064	SFD	n/a
379 Annapolis St W	West St. Paul	A-53068	Church	n/a

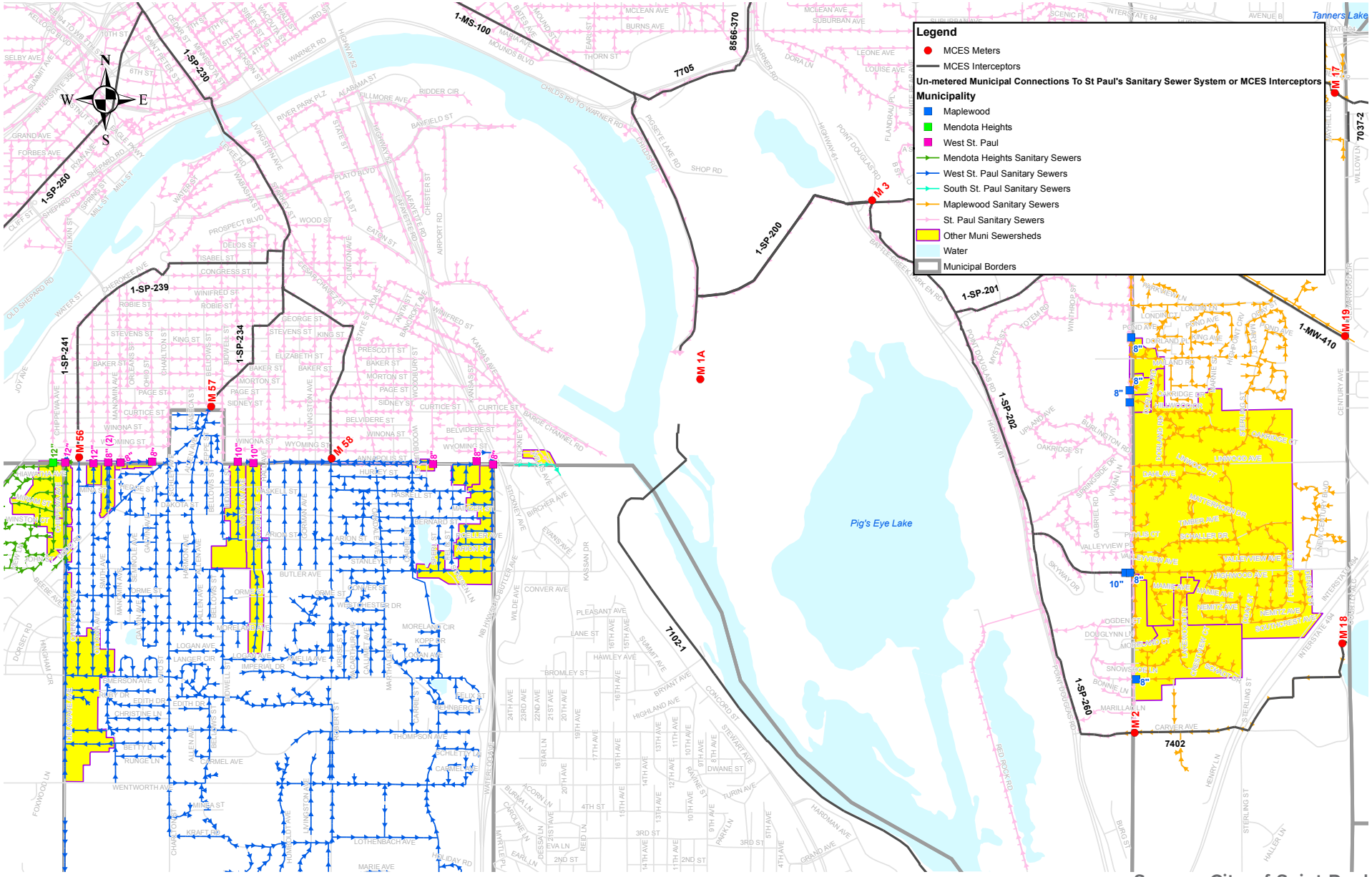
*Notes: SFD = Single family dwelling; MFD = Multifamily dwelling

Map WR-5: Intercommunity Connections - Northeast Section



Source: City of Saint Paul

Map WR-6: Intercommunity Connections - Southeast Section



Source: City of Saint Paul

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HERITAGE AND CULTURAL PRESERVATION

Introduction

The Heritage and Cultural Preservation Chapter sets policy for the identification, preservation and celebration of architecturally, culturally and historically significant buildings, districts, sites and views in Saint Paul. It also sets a policy direction for the Heritage Preservation Commission (HPC). The City's activities associated with the preservation, rehabilitation, restoration, and reconstruction of historic and cultural resources should be sustainable and equitable; improve the quality of life for all residents and visitors; guide public and private investment; express a sense of place and pride; celebrate the racial, ethnic and cultural diversity of the community; and be embraced in all facets of the City's work. The cultural, educational, aesthetic, inspirational, economic and energy benefits of heritage preservation should be celebrated as a living part of our community life and development.

Existing structures are important components of sustainable economic development, and the cultural landscapes that are integral to the city inherently connect this chapter with each chapter of the Comprehensive Plan. Through this chapter, Saint Paul strives to be a leader in preserving historic and cultural resources; engaging all stakeholders in education and evaluation activities that are inclusive, responsive, practical and respectful; and integrating preservation and related activities into the work of all City departments. This work must be mindful of demographic, climate, investment and technological changes that impact Saint Paul's built and natural environments. Additional supporting materials for Heritage and Cultural Preservation Chapter policies can be found in the appendices beginning of page 230.

The following goals guide the Heritage and Cultural Preservation chapter:

1. Saint Paul as a leader in the use of best practices towards an equitable and sustainable approach to the preservation, conservation, rehabilitation, restoration and reconstruction of publicly-owned historic and cultural resources.
2. The preservation of built, cultural and natural environments that express the identity and sense of place of Saint Paul.
3. The consideration of heritage and cultural preservation goals and priorities in all City departments, initiatives, policies, practices and processes.
4. City investments in built, cultural and natural environments and in historic and cultural resources that reflect broader City priorities.
5. Broad stakeholder understanding and application of heritage and cultural preservation planning tools and resources.

Goal 1: Saint Paul as a leader in the use of best practices towards an equitable and sustainable approach to the conservation, preservation, rehabilitation, restoration and reconstruction of publicly-owned historic and cultural resources.

Policy HP-1. Prioritize publicly-owned facilities – particularly those owned, maintained or supported by the City and related development authorities – for evaluation, designation and preservation.

Policy HP-2. Preserve, rehabilitate and maintain City-owned historic resources through recognized preservation standards, including the Secretary of Interior's Standards for the Treatment of Historic Properties.

Policy HP-3. Pursue funding to evaluate, maintain, renovate and preserve City-owned eligible and potentially eligible property, and assist private owners to do the same.

Policy HP-4. Ensure City codes are progressive and responsive to changes in technology, best practices, Federal guidance and community need in order to advance and support preservation activities.

Policy HP-5. Incorporate historic and cultural resources into cultural tourism efforts.

Heritage Preservation Declaration of Public Policy and Purpose

Chapter 73 of the City's Legislative Code governs the heritage preservation function. It reads:

> The council of the City of Saint Paul hereby declares as a matter of public policy that the preservation, protection, perpetuation and use of areas, places, buildings, structures, landscapes and other objects having historical, cultural, architectural, archaeological or engineering significance is a public necessity and is required in the interest of the health, prosperity, safety and welfare of the people. The purposes of this chapter are to:
>
> 1. Safeguard the heritage of the City of Saint Paul by preserving properties which reflect elements of the city's cultural, social, economic, political, architectural, archaeological or engineering history;
> 2. Protect and enhance the City of Saint Paul's attractiveness to residents, tourists and visitors, and promote preservation as a support and stimulus to business and industry;
> 3. Enhance the visual and aesthetic character, diversity and interest of the City of Saint Paul;
> 4. Foster civic pride in the beauty and notable accomplishments of the past and increase awareness of Saint Paul's place in history through outreach and education;
> 5. Enhance and reinforce the City of Saint Paul's sustainability goals of the Comprehensive Plan of 2040 through preservation, rehabilitation and reuse; and
> 6. Promote the recognition, protection, rehabilitation, reuse and preservation of heritage preservation sites and districts and historic resources for the education and general welfare of the people of the City of Saint Paul.

Secretary of the Interior's Standards for the Treatment of Historic Properties

The Standards are a series of concepts about maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. The Guidelines offer general design and technical recommendations to assist in applying the Standards to a specific property. Together, they provide a framework and guidance for decision-making about work or changes to a historic property. These Standards and Guidelines were developed by the National Park Service (NPS) and can be found on the NPS Technical Preservation Services webpages.

Goal 2: The preservation of built, cultural and natural environments that express the identity and sense of place of Saint Paul.

Policy HP-6. Maintain and preserve designated and determined eligible historic and cultural resources.

Policy HP-7. Be proactive in the identification, evaluation, survey and designation of historic and cultural resources to ensure a consistent and equitable approach to preservation that is time-sensitive and responsive to community needs.

Policy HP-8. Develop new and expand existing historic themes and contexts to allow for the continual identification of historic and cultural resources that is time-sensitive and responsive to community needs.

Policy HP-9. Prioritize the preservation of properties and districts designated for heritage preservation from destruction or alteration that would compromise the integrity of their character-defining features.

Goal 3: The consideration of heritage and cultural preservation goals and priorities in all City departments, initiatives, policies, practices and processes.

Policy HP-10. Incorporate City heritage and cultural preservation goals when updating ordinances, policies and other regulations, including the Saint Paul Administrative and Legislative Codes, and as part of planning, development and design processes.

Policy HP-11. Ensure that City officials and staff at all levels have a working understanding and consider the importance of designation, preservation, and stewardship of historic and cultural resources, focusing on recognized heritage and cultural preservation principles; collaborate across departments to jointly accomplish City preservation goals.

Goal 4: City investments in built, cultural and natural environments and in historic and cultural resources that reflect broader City priorities.

Policy HP-12. Prioritize the retention of locally-designated/listed historic and cultural resources or those determined eligible for designation over demolition when evaluating projects that require or request City action, involvement or funding, or those of related development authorities.

Policy HP-13. Use recognized preservation standards, including the Secretary of Interior's Standards for the Treatment of Historic Properties, when City or other development authority action, involvement or funding is requested or required.

Policy HP-14. Include preservation-related funding programs as part of the resource allocation process for funding requests for preservation-related projects.

Policy HP-15. Utilize historic and cultural resources to:

- improve pedestrian safety, mobility and visibility;
- foster economic development;
- support neighborhood revitalization and reinvestment, focusing increased density along transit corridors;
- prevent or minimize displacement of area residents and businesses;
- provide affordable housing; and
- celebrate Saint Paul's rich and diverse cultures and heritage.

Policy HP-16. Balance the preservation of a historic and/or cultural resource and new development by considering the:

- significance of the resource;
- impact of a proposed development action on the character-defining features of the resource and the area context;
- potential for displacement of area residents and businesses;
- evolution of the neighborhood and how neighborhood change is occurring;
- long-term benefit-cost analysis and impact; and
- appropriateness of mitigation activities should the resource be compromised or lost.

Goal 5: Broad stakeholder understanding and application of heritage and cultural preservation planning tools and resources.

Policy HP-17. Ensure that property owners, real estate professionals and community members have a working understanding of heritage and cultural preservation regulations, principles and related available resources.

Policy HP-18. Consult with, include and educate communities regarding heritage and cultural preservation activities, benefits, funding and resources.

Policy HP-19. Prioritize the recognition of historically underrepresented communities and their histories in:

- the designation of significant buildings, sites and districts;
- funding that supports the preservation and retention of designated historic and cultural resources; and
- community engagement so that those whose histories are being celebrated are involved in creating the narrative.

Definitions

Cultural Resources: Physical evidence or place of past human activity: site, object, landscape, structure; or a site, structure, landscape, object or natural feature of significance to a group of people traditionally associated with it.

Eligible: Building, site or structure which possesses the necessary qualities for fulfilling the conditions to be listed as a local, state or federal historic contributing building, site or structure.

Historic Themes and Contexts: a unit created for planning purposes that groups information about historic properties based on a shared theme, specific time period and/or geographical area.

Heritage Preservation Commission (HPC): A public commission consisting of thirteen (13) voting members who are residents of Saint Paul and are appointed by the mayor, with the advice and consent of the city council.

Rehabilitation: The process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.

Restoration: Accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

Reconstruction: Depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

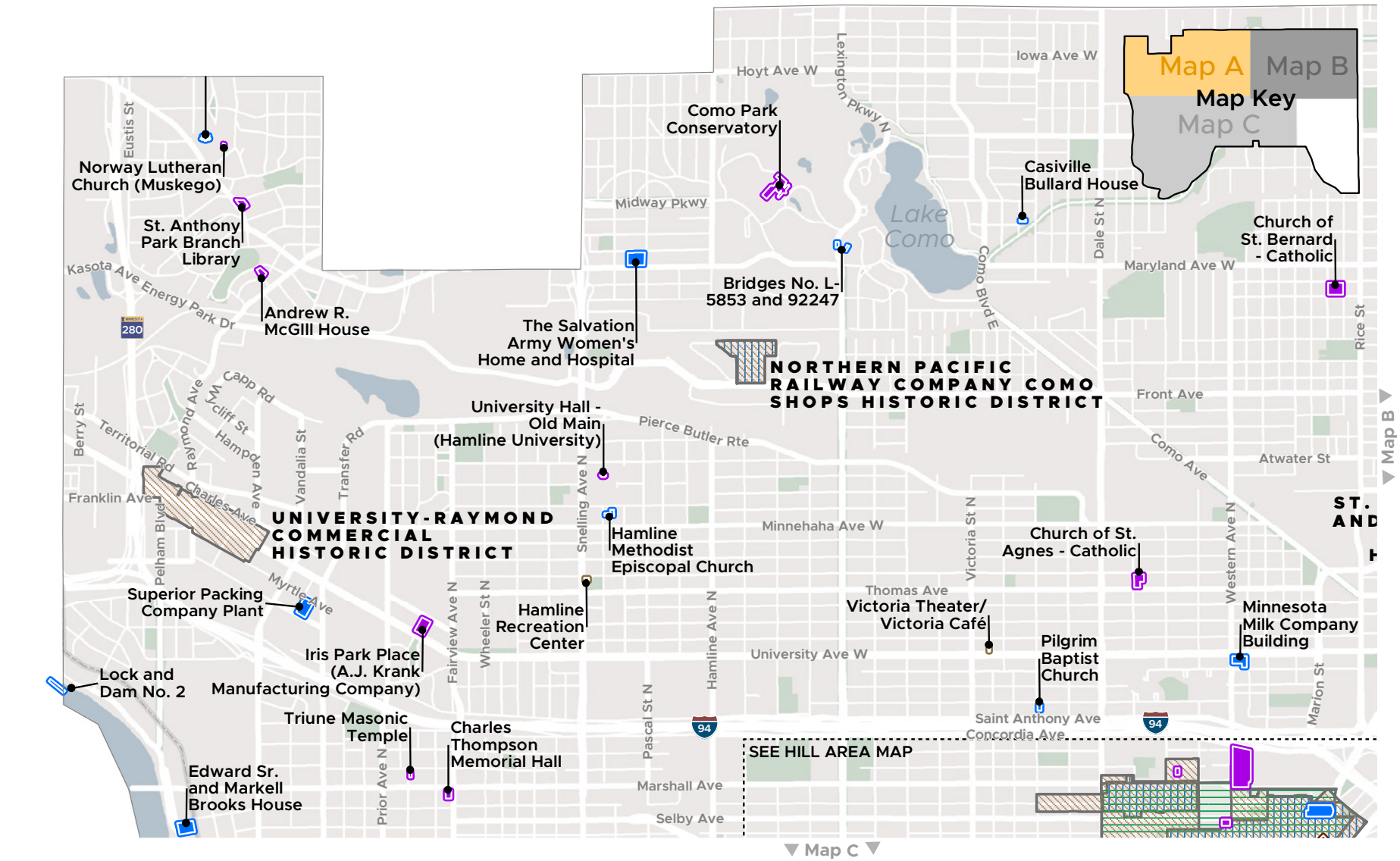
Sense of Place: A shared understanding of the physical, social, cultural, environmental and historic characteristics of a place.

Appendix **A**

Maps of Historic Districts and Sites

Note: This appendix provides supporting content for heritage and cultural preservation-related policies and satisfies associated Metropolitan Council requirements.

Map HP-1: Historic Districts and Sites - Map A - Northwest Saint Paul



Historic Districts

- Local
- State
- National

Historic Sites

- Locally Listed
- State Listed
- Nationally Listed
- Locally and State Listed
- Locally and Nationally Listed
- State and Nationally Listed
- Local, State, and Nationally Listed

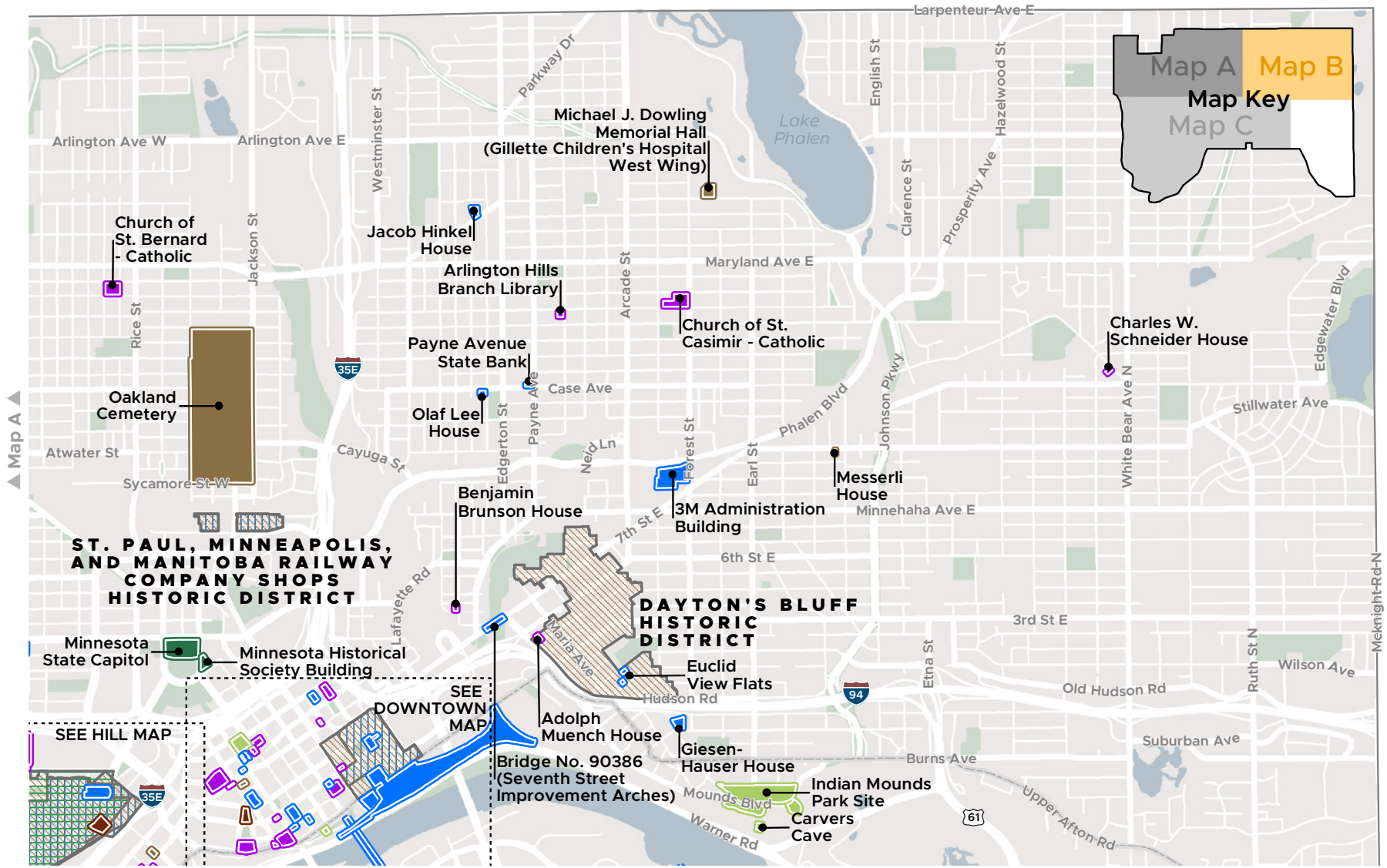
Mississippi River Corridor Critical Area Boundary

This map is intended to be used for reference and illustrative purposes only. Information found on this map is believed accurate as of July 2018.

0 0.25 0.5 1 Miles

Source: City of Saint Paul

Map HP-2: Historic Districts and Sites - Map B - Northeast Saint Paul



Historic Districts

- Local
- State
- National

Historic Sites

- Locally Listed
- State Listed
- Nationally Listed

- Locally and State Listed
- Locally and Nationally Listed
- State and Nationally Listed
- Local, State, and Nationally Listed

- Mississippi River Corridor Critical Area Boundary

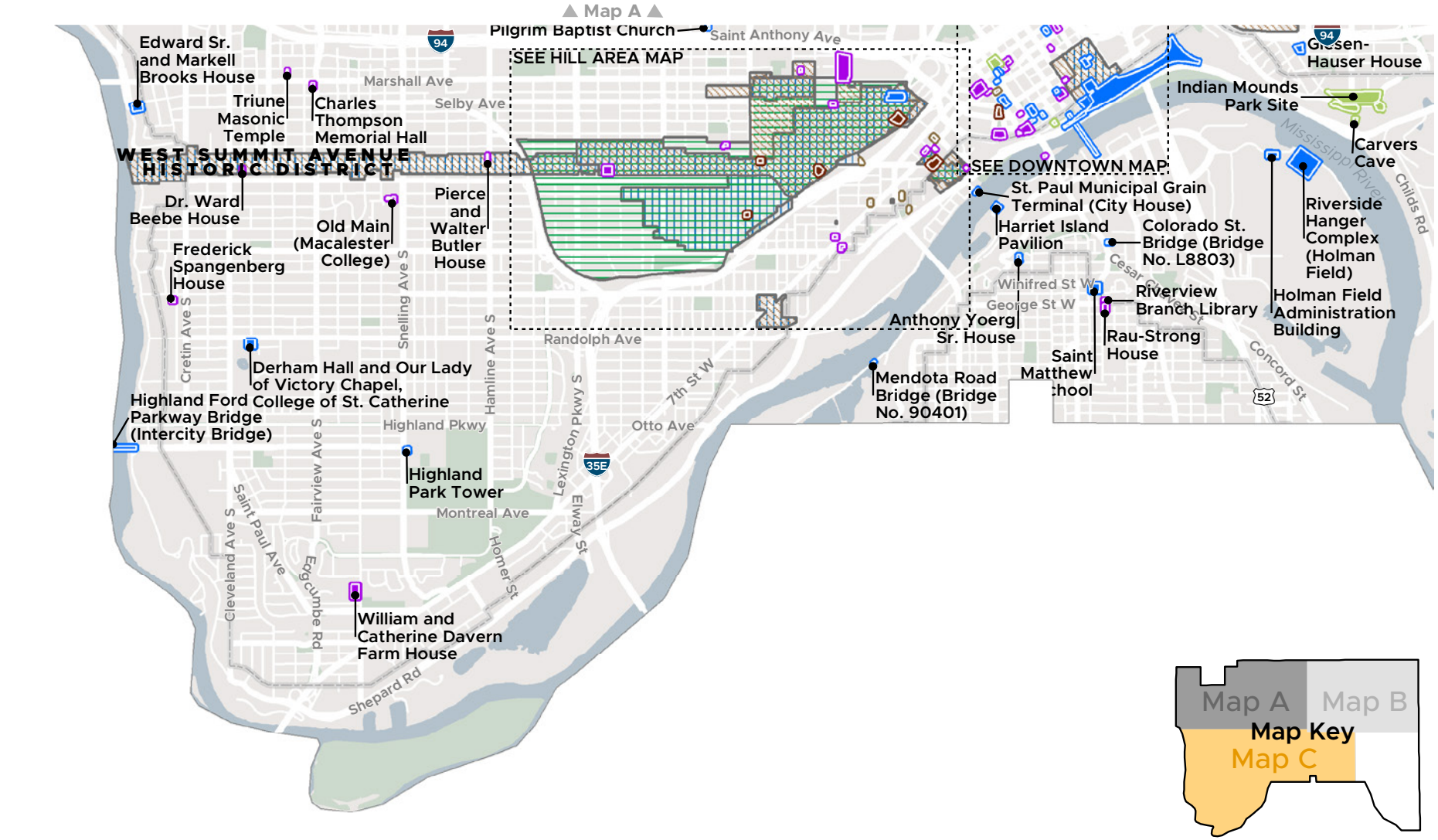
NORTH

This map is intended to be used for reference and illustrative purposes only. Information found on this map is believed accurate as of July 2018.

0 0.25 0.5 1 Miles

Source: City of Saint Paul

Map HP-3: Historic Districts and Sites - Map C - Southwest Saint Paul



Historic Districts

- Local
- State
- National

Historic Sites

- Locally Listed
- State Listed
- Nationally Listed
- Locally and State Listed
- Locally and Nationally Listed
- State and Nationally Listed
- Local, State, and Nationally Listed

Mississippi River Corridor Critical Area Boundary

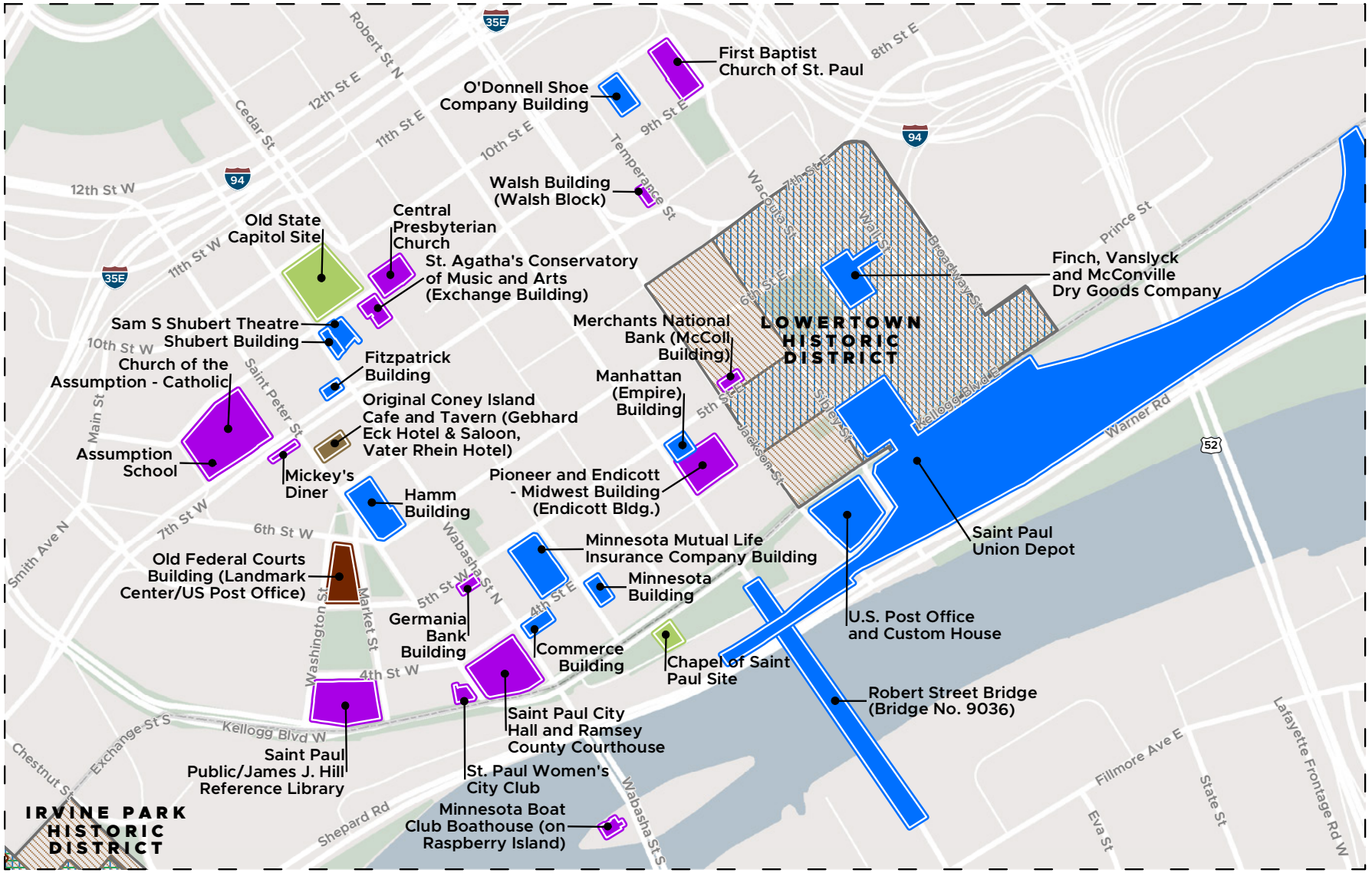
NORTH

This map is intended to be used for reference and illustrative purposes only. Information found on this map is believed accurate as of July 2018.

0 0.375 0.75 1.5 Miles

Source: City of Saint Paul

Map HP-4: Historic Districts and Sites - Downtown



Historic Districts

- Local
- State
- National

Historic Sites

- Locally Listed
- State Listed
- Nationally Listed

- Locally and State Listed
- Locally and Nationally Listed
- State and Nationally Listed
- Local, State, and Nationally Listed

- Mississippi River Corridor Critical Area Boundary

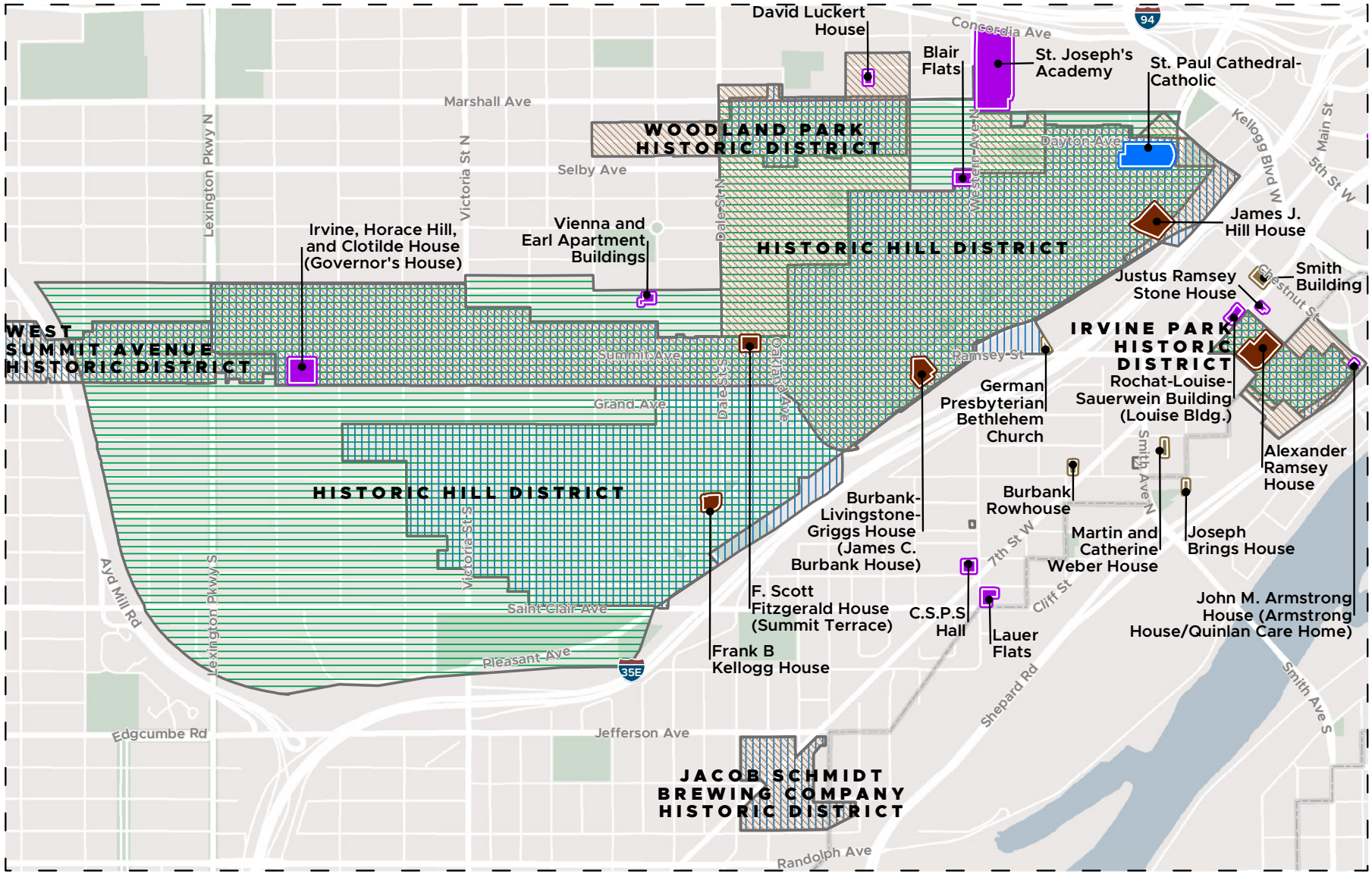
NORTH

This map is intended to be used for reference and illustrative purposes only. Information found on this map is believed accurate as of July 2018.

0 0.05 0.1 0.2 Miles

Source: City of Saint Paul

Map HP-5: Historic Districts and Sites - Hill Area



Source: City of Saint Paul

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MISSISSIPPI RIVER CORRIDOR CRITICAL AREA

Introduction

The Mississippi River Corridor Critical Area (MRCCA) Chapter guides land use and development along the Mississippi River. Saint Paul contains 17 miles of river and 26 miles of shoreline within its city limits, the longest of any municipality within the Critical Area. While other plans have been adopted as part of the Comprehensive Plan that address the city's relationship to the Mississippi (e.g. the Great River Passage Master Plan), the Critical Area chapter uniquely responds to the requirements of Minnesota Rules, Chapter 6106, which lays out a regulatory framework to protect the MRCCA's resources and manage the balance between natural systems, urban development, recreation, and commerce. (Note: The Water Resources Management Chapter contains policies and implementation actions for surface water, groundwater, water supply and distribution, stormwater and wastewater.)

Designated by Governor's Executive Order in the 1970s, the Mississippi River Corridor Critical Area is a land corridor along the Mississippi River in the Twin Cities Metropolitan Area governed by special land planning requirements and land development regulations. These regulations, which are implemented through local MRCCA plans and ordinances, protect and preserve the natural, scenic, recreational, and transportation resources of this section of the Mississippi River. The MRCCA comprises 72 miles of river and 54,000 acres of surrounding land in 30 local jurisdictions. Saint Paul's portion of the Critical Area is shown on Figure 1.

In 1988, the U.S. Congress established the Mississippi National River and Recreation Area (MNRRA), a unit of the National Park System, that shares the same boundary as the MRCCA. The Park's Comprehensive Management Plan (CMP), signed by the Governor and Secretary of the Interior, incorporates by reference the MRCCA program for land use management. Rather than institute a separate layer of Federal regulations, the MNRRA largely relies on the MRCCA to manage land use within the Park. This reliance establishes a unique partnership and framework for land use management among local, State and Federal governments to protect the intrinsic resources of the Mississippi River Corridor.

The City has made significant progress on furthering the goals and strategies laid out in the 2002 Mississippi River Corridor Plan. Through improvements at Lilydale Regional Park, Upper Landing Park, Chestnut Plaza (including City House), Harriet Island Regional Park (including Raspberry Island), both the character of public space at the river's edge and public access to the river have been greatly enhanced. Individual master plans were prepared for key riverfront development sites – West Side Flats, Upper Landing, Victoria Park and Ford – that took the design guidelines in the 2002 Plan to the next level. These master plans guide private development and public infrastructure consistent with the goals of the Mississippi River Corridor Plan.

Perhaps most significantly, the City Council adopted the Great River Passage Master Plan in 2013 as an addendum to the Saint Paul Comprehensive Plan. The Great River Passage Master Plan contains guiding principles, goals, objectives and concept plans to connect new and enhanced parks and natural areas along the city's 26 miles of shoreline with one another and with adjacent neighborhoods. The Master Plan is a community-based vision with a corridor-wide perspective. It identifies transformative recreation and leisure opportunities along the river, and balances them with the protection and restoration of natural resources, adding value to adjacent land uses while respecting community and neighborhood desires for better access to the river. The Plan represents an evolution and refinement of previous efforts, with the addition of specific recommendations that will help Saint Paul work toward enhancing the natural environment and recreational qualities of the river, as well as the livability and economic vitality of the city. In 2017, the City Council adopted the Saint Paul River Balcony Master Plan, looking in more detail at one of the most popular ideas from the Great River Passage Master Plan. The River Balcony is envisioned as a 1.5-mile pedestrian pathway along the downtown bluff from the Science Museum to Union Depot, with connections to both the river's edge and the rest of downtown. Additional supporting materials for MRCCA Chapter policies can be found in the appendices beginning of page 250.

The following goals guide the MRCCA chapter:

1. Recognition, celebration and protection of the defining feature of Saint Paul for the benefit of the health, safety and welfare of the residents of the city, state, region and nation
2. Protection and enhancement of the unique urban ecology of the river corridor and valley
3. An economically-vibrant working river
4. High-quality and sustainable development that enhances the natural environment
5. Equitable public access/strong connections to the Mississippi River
6. The river as the backbone of a community-building network that extends beyond the shoreline and into the fabric of the surrounding neighborhoods
7. Balance between all of the ways the river is a resource to Saint Paul - environmental, natural, economic, cultural, social, physical, recreational, historic, spiritual

Districts

Six districts are defined in the MRCCA Rules, based on the natural and built character of different areas of the river corridor. In addition to the state-mandated districts, the City of Saint Paul has identified four reaches to guide future land use and development within its river corridor.

There are four key locations with potential conflicts between the MRCCA Districts, the Future Land Use districts and/or zoning. These are areas where Saint Paul will need to a strike a balance between the economic and social benefits of redevelopment and the natural, cultural and recreational resources of the Mississippi River. The City will utilize the criteria provided in the MRCCA Rules to evaluate potential visual impacts of additional height and if/when mitigation is needed. In some cases, the City may pursue flexibility in building height and/or district designation in the MRCCA ordinance.

1. Ford Site – The underlying zoning districts (F2 Residential Mixed Low, F3 Residential Mixed Mid, F5 Business Mixed and F6 Gateway) allow building heights 7-17' taller than those permitted in the CA-RTC and CA-UM districts.
2. Shepard Davern – The CA-RTC district allows heights of up to 48' with a Conditional Use Permit (CUP), whereas the underlying zoning of T3 allows heights of up to 55' without a CUP.
3. West Side Flats – The CA-UM district allows maximum heights of 65' without a CUP, while the underlying zoning of T3M (West Side Flats Master Plan) allows building heights of 75' as-of-right and up to 90' with a CUP.
4. Pig's Eye – The area just northwest of Pig's Eye Lake is designated as CA-ROS in the Rules, but industrial on the City's Future Land Use Map. Further, the CA-ROS district allows maximum heights of 35' and the CA-UM district allows maximum heights greater than 65' with a CUP, while the underlying zoning, I3 Restricted Industrial, allows heights of 75' as-of-right, with the option to go higher with greater setbacks.

Policy CA-1. Guide land use and development activities consistent with the management purpose of each of the MRCCA districts.

Primary Conservation Areas

Primary conservation areas (PCAs) define key natural and cultural resources and features that are addressed by the MRCCA rules. These resources include shore impact zones, wetlands, floodplains, confluences with major tributaries, bluff impact zones, native plant communities, and significant existing vegetative stands, natural drainage routes, unstable soils and bedrock, tree canopies, and cultural and historic properties. Key features and resources have been defined as PCAs throughout the MRCCA districts to ensure that they are given priority consideration for protection. Maps CA-2 through CA-6 and HP-1 through HP-5 identify locations of PCAs within the MRCCA boundary. Additional information on Primary Conservation Areas can be found in Map P-1 and Appendix B in the Parks, Recreation and Open Space chapter; the regional park master plans; Map WR-1 in the Water Resources Management chapter; and Maps HP-1 through H-5 in the Heritage and Cultural Preservation chapter.

Policy CA-2. Protect Primary Conservation Areas through planning, land use and land alteration regulations, and other tools.

Policy CA-3. Minimize impacts to PCAs from public and private development and land use activities.

Policy CA-4. Regulate development in the floodplain consistent with the requirements of the Federal Emergency Management Agency (FEMA) and the FEMA Flood Insurance Program (FIP).

Policy CA-5. Manage vegetation and conduct vegetation restoration consistent with park master plans and MRCCA requirements.

The River Reaches

The *Great River Passage Master Plan* provides the long-term vision for orienting the city toward the river, and connecting parks and natual areas along the river to one another and adjacent neighborhoods. The plan divides the Saint Paul riverfront into four "reaches:"

Gorge Reach
The Gorge is a deep river valley located west of downtown that is defined by steep limestone cliffs and heavily wooded slopes that come right to the river's edge. The Gorge Reach extends from the Minneapolis city limits at the upstream end near the historic Meeker Dam, to Fort Road (7th Street West) to the south. With the exception of the Ford Lock and Dam #1, and the occasional bridge crossing high above, river travelers are completely separated from the city that comes right to the top of the bluffs above them. This is a place of great scenic beauty, ecological richness and diversity.

Valley Reach
The vertical bluffs of the Gorge give way to the steeply wooded slopes of the Valley at the confluence of the Mississippi and Minnesota Rivers. The Valley Reach extends from the Fort Road Bridge to Downtown. The Valley is a broad floodplain of expansive swamp forests, wetlands, ponds, and lakes. Its features were formed by dynamic natural processes and frequent flood events that inundate much of the area. The Valley is a place of constant change, and most areas within this reach are undeveloped, except for widely scattered high points at the valley's edges.

Downtown Reach
The more natural landscapes of the Gorge and the Valley give way to dramatic urban forms of Downtown on the bluffs and the structured river edges on the east bank. On the west side, the geometric lines and engineered flood control levees, along with marinas and smaller-scale commercial buildings bisected by bridges, presents a very different urban river edge character.

Floodplain Reach
The Floodplain Reach is a landscape of contrasts. The vast open spaces of lakes, wetlands, and floodplain forests of the Pig's Eye area are a counterpoint to the heavily wooded and steeply sloping Highwood bluffs that define the eastern edge of the valley. Heavy industrial uses at both ends of the reach are connected by Highway 61 (also known as the Great River Road National Scenic Byway) and heavily used rail lines, which form a major barrier between the bluffs and floodplain landscapes. The industrial uses and major transportation infrastructure contrast with the less densely developed and heavily wooded neighborhoods to the east.

Policy CA-6. Promote the preservation and re-establishment of natural vegetation on privately-owned property.

Policy CA-7. Consider alternative design standards related to subdivision and development of land within the MRCCA, such as conservation design or transfer of development rights, in order to protect or restore PCAs.

Policy CA-8. Restore removed native plant communities and natural vegetation in riparian areas as development occurs.

Policy CA-9. Explore permanent protection measures (such as acquisition and conservation easements) to protect PCAs.

MRCCA Districts

The six MRCCA districts located within the City of Saint Paul are described below and Illustrated on the proceeding page:

- **Rural and Open Space District (CA-ROS)**
  The Rural and Open Space District is characterized by rural and low-density development patterns and land uses and includes land that is riparian or visible from the river, as well as large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district. The district must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.

- **River Neighborhood District (CA-RN)**
  The River Neighborhood District is characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. The district includes parks and open space, limited commercial development, marinas, and related land uses. The CA-RN district must be managed to maintain the character of the river corridor within the context of existing residential and related neighborhood development, and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline vegetation are priorities in the district.

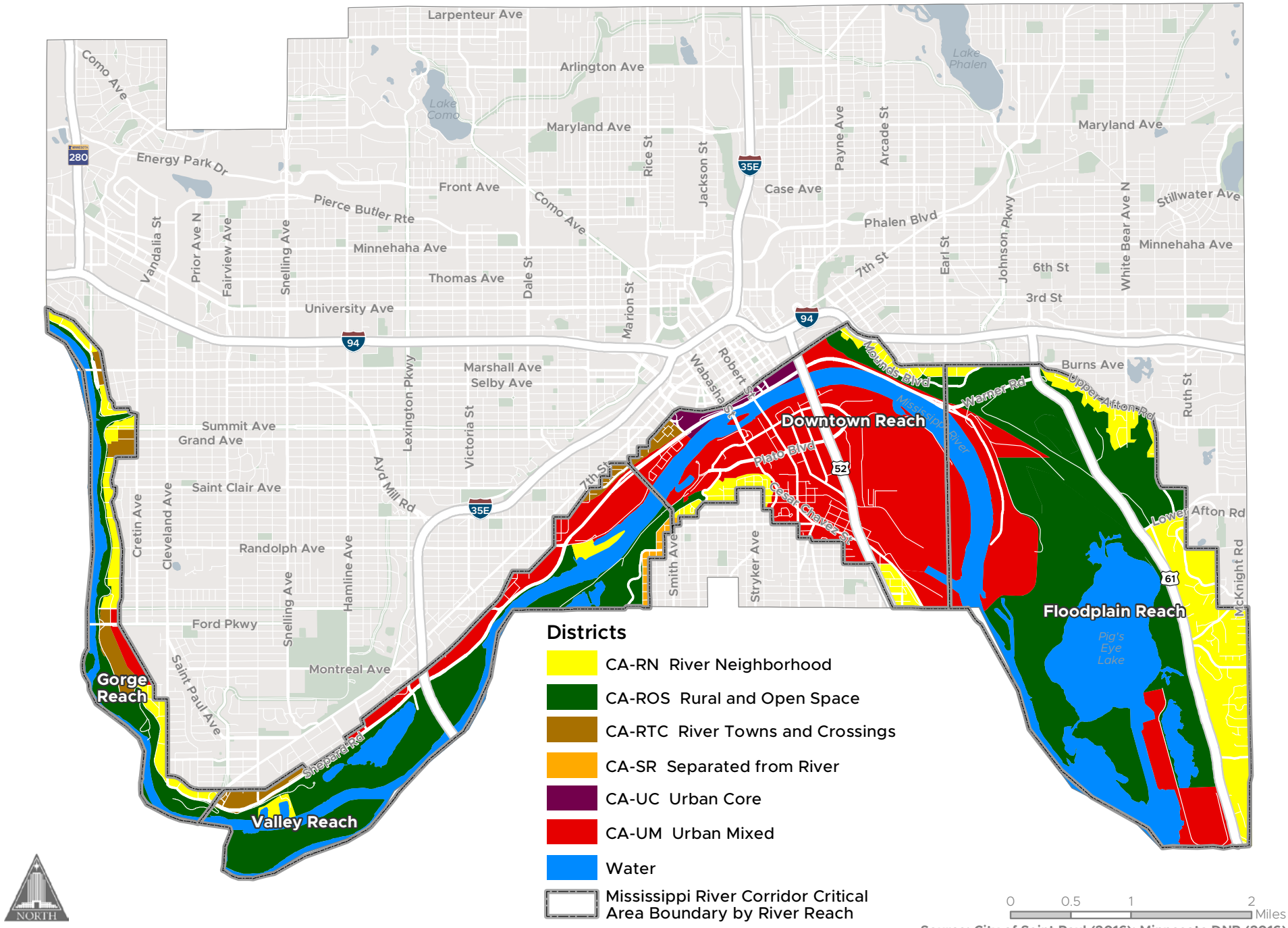
- **River Towns and Crossings District (CA-RTC)**
  The River Towns and Crossings District is characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses that predate designation of the Mississippi River and that include taller buildings. The CA-RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.

- **Separated from River District (CA-SR)**
  The Separated from River District is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River. The CA-SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district.

- **Urban Mixed District (CA-UM)**
  The Urban Mixed District includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space. The CA-UM district must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.

- **Urban Core District (CA-U)**
  The Urban Core District includes the urban cores of Minneapolis and Saint Paul. The CA-UC district must be managed with the greatest flexibility to protect commercial, industrial, and other high-intensity urban uses, while minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the river. Providing public access to and public views of the river are priorities in the district.

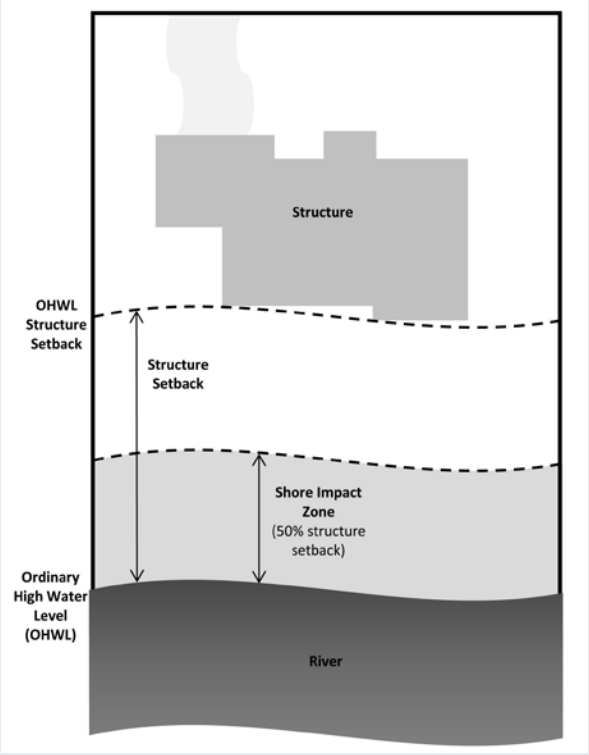
Figure 1: MRCCA Districts in Saint Paul



Source: City of Saint Paul (2016); Minnesota DNR (2016)

Shore Impact Zones

Shore Impact Zones (SIZs) are lands located between the ordinary highway water level of public waters and a line parallel to it at a setback of 50 percent of the requirement MRCCA district structure. SIZs apply to the Mississippi, all of its backwaters, and its four key tributaries (i.e., the Crow, Rum, Minnesota, and Vermillion Rivers). The locations of the SIZs are provided on Map CA-2.



Public River Corridor Views

A primary objective of the Critical Area Act is to protect views to and from the Mississippi River. The Public River Corridor Views (PRCVs), defined in Appendix C, are the highly-valued views within the river corridor, including views toward the river from public parkland, historic properties and public overlooks, as well as views towards bluffs from the opposite shore. The wide variety of terrain and topographical features that lie within the MRCCA boundary have blessed the city with some of the best public views in the region. See Appendix C for an overview of Public River Corridor Views and details on each view.

Policy CA-10. Regulate building height, placement and design consistent with the intent of the MRCCA rules to protect, enhance and minimize impacts to Public River Corridor Views.

Policy CA-11. Protect and minimize impacts to PRCVs from public development activities.

Policy CA-12. Consider designated Public River Corridor Views from other communities in developing dimensional standards, view impact evaluation procedures, and mitigation identification procedures.

Policy CA-13. Support shorter buildings closer to the river's edge and taller buildings as distance from the river increases in order to maximize views of and from the river, and preserve visual access to the river as a public good (rather than privatized right).

Policy CA-14. Protect and minimize impacts to PRCVs from public and private vegetation management activities.

Restoration Priorities

Restoration of natural vegetation and plant growth within the MRCCA has many benefits, including the stabilization of soils, retention and filtration of runoff, provision of habitat and recharging of groundwater. The City of Saint Paul supports the restoration of natural vegetation throughout the MRCCA and will support efforts of its local government partners to do so. The DNR native plant communities/ significant vegetative stands and opportunity areas for vegetation restoration are mapped in Map CA-6.

Land in the MRCCA in Saint Paul generally falls into one of four categories: parkland; other public land, such as right-of-way; small residential parcels; or land held as larger parcels but already established as industrial or institutional uses. It is not likely that substantive restoration projects on land in any of these categories is feasible, since no substantial future subdivisions of residential land are likely; public land other than parkland already serves other public purposes that are likely incompatible with vegetation restoration; and change from industrial or institutional uses to uses more compatible with vegetative restoration on the remaining large parcels is unlikely due to both ownership and non-MRCCA policy reasons,. Some restoration of existing vegetative communities to enhance ecological function within existing regional parks in the MRCAA may be possible, but this would not constitute vegetative restoration for the purposes of the MRCCA Rules. However, careful analysis of the identified vegetation restoration opportunity areas should be undertaken to identify any areas where a project may be feasible.

Unstable soils are generally a result of a combination of factors, including soil type, type/amount of vegetative cover and slope. A general soil erosion susceptibility analysis based on slope is shown on Map CA-8. Some known previous slope failures in Saint Paul are also shown on the map. Bedrock may also be susceptible to erosion, though over longer timelines. Bedrock formations in Saint Paul are shown on Map CA-9.

Policy CA-15. Support re-establishment on both publicly- and privately-owned property of native plants and/or natural vegetative communities to provide wildlife habitat, soil stabilization, and runoff filtration.

Policy CA-16. Protect native and existing vegetation during the development process, and require restoration if any is removed by development. Priorities for restoration include stabilization of erodible soils, riparian buffers and bluffs or steep slopes visible from the river.

Policy CA-17. Sustain and enhance ecological functions (habitat value) during vegetation restoration.

Policy CA-18. Seek opportunities to restore vegetation to protect and enhance identified PRCVs.

Policy CA.-19. Seek opportunities to restore vegetation in identified restoration priority areas through site plan review and related vegetation permits.

Policy CA-20. Evaluate proposed development sites for erosion prevention, and bank and sloe stabilization issues; require restoration as part of the development process.

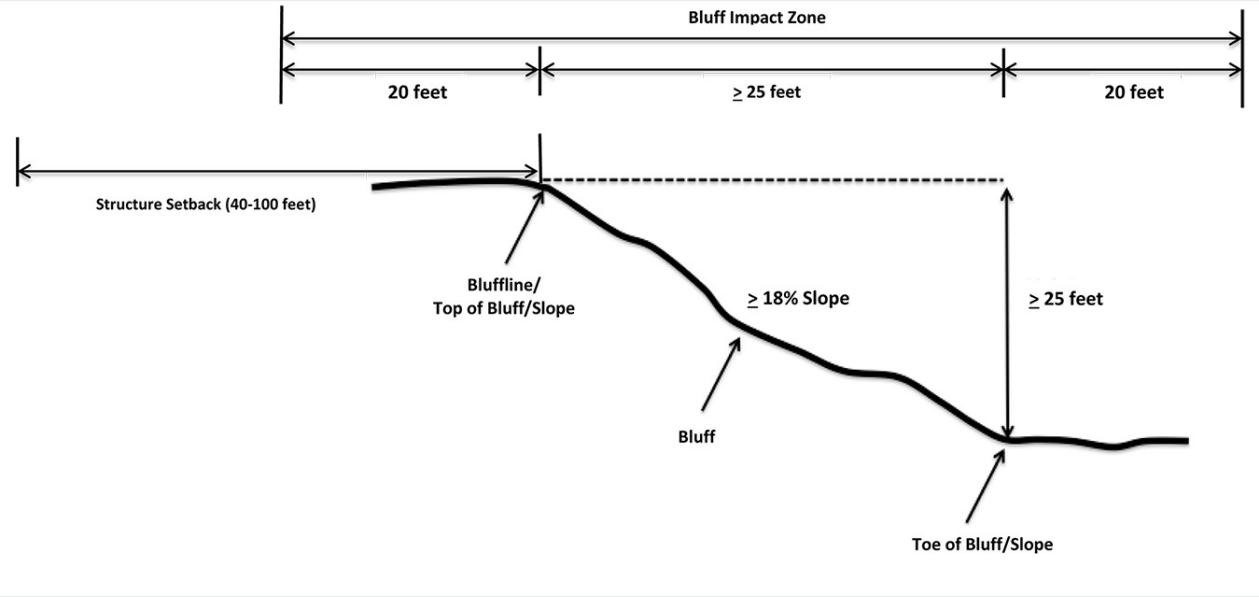
Policy CA-21. Pursue opportunities to clean-up known areas of significant contamination (such as the Pig's Eye Superfund site) within the Critical Area.

Bluff Impact Zones

The MRCCA rules define the Bluff Impact Zone as the bluff and land within 20 feet of the bluff (top of bluff and toe of bluff), as shown below. A "bluff" is defined within Minnesota Rule Section 6106.0050 Subp. 8 as a natural topographic feature having:

1. A slope that rises at least 25 feet and the grade of the slope averages 18 percent or greater measure over a horizontal distance of 25 feet, as follows:
   a. Where the slope begins above the ordinary high water level, from the toe of the slope to the top of the slope; or
   b. Where the slope begins below the ordinary high water level, from the ordinary high water level to the top of the slope; or

2. A natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater.



Native Plant Communities and Significant Existing Vegetative Stands

Native plant communities are defined within the MRCCA rules as a plant community that has been identified as part of the Minnesota Biological Survey (MBS) or biological survey issued or adopted by a local, state or federal agency. The MBS further identifies a Native Plant Community as a group of native plants that interact with each other and the surrounding environment in ways not greatly altered by humans or by introduced plant or animal species. These groups of native plant form recognizable units, such as an oak forest, a prairie, or a marsh, that tend to repeat across the landscape over time. The Minnesota Department of Natural Resources (DNR) describes the importance of native plant communities as:

> *Native plant communities provide a range of ecological functions that are increasingly recognized as valuable for the quality of life in Minnesota and even for human health and safety. Among these functions are water filtration, flood moderation, carbon storage, moderation of water-table level, local temperature moderation, erosion control, and development and enrichment of soil. Large tracts of native plant communities provide opportunities for sustainable resource use, such as logging systems that mimic natural cycles in forests and help to perpetuate all the beneficial functions that plant communities provide while also supplying commercial products.*

Significant vegetative stands depict those considered significant by the National Park Service and Minnesota DNR because they are largely intact and connective to native communities. Significant Vegetative Stands are described by the Metropolitan Council as follows:

> *This vegetation provides high ecological value in addition to the water quality and scenic values of "natural vegetation." Ecologically, this vegetation provides species diversity, habitat for endangered and threatened plants (supporting 19 state-listed rare plant species and 15 state-listed rare animal species in the MRCCA), and a continuous corridor where plants and animals can naturally spread and disperse. This latter characteristic is especially important as habitat becomes more fragmented, climate change accelerates, and invasive species increase. In addition, these vegetation areas serve as living remnants of the original native communities that existed in the corridor, even though they do not meet the size and quality criteria to be classified as a Native Plant Community by the MBS.*

Native Plant Communities and Significant Existing Vegetative Stands in Saint Paul are identified in Map CA-6.

Surface Water Uses

In Saint Paul, surface water uses vary from barge operations and fleeting to recreational boating. Via barges, Saint Paul is an import destination for products vital to the region, such as road salt, cement, fertilizer, aggregate and other commodities. Barge fleeting currently takes place mostly in the Downtown and Floodplain reaches; it should be avoided in the Valley Reach upriver of the confluence of the Mississippi and Minnesota rivers and in the Gorge Reach. Recreational boating occurs all along the Mississippi River in Saint Paul, but is heaviest at the marinas and landings noted on Map CA-7.

The area of greatest potential conflict between barge and recreational uses is in the central riverfront, generally between the High Bridge and Lafayette Bridge. Harriet Island Park, Chestnut Plaza, Raspberry Island, the Minnesota Boat Club, Paddleford Riverboat excursions and the public dock generate significant boat traffic in a relatively small area. At times of high water, recreational boating may be restricted or prohibited, especially in the Downtown Reach. Surface water uses are illustrated on Map CA-7.

Policy CA-22. Recognize the Mississippi River as a "working river" that is integral to the economies of Saint Paul, the Twin Cities Metropolitan Area, Greater Minnesota and the Upper Midwest, with trade connections to the world through New Orleans and the Panama Canal.

Policy CA-23. Balance commercial, industrial and recreational surface water uses.

Policy CA-24. Provide for barge fleeting, avoiding areas where it could have a negative impact on PCAs.

Water-Oriented Uses

Industry and commerce are an important function of the Mississippi River in Saint Paul. The shipping industry also serves Greater Minnesota and the Upper Midwest. Located 1,800 miles inland from the Gulf of Mexico, the Saint Paul Port is a hub in the intermodal freight transportation system, where barge, rail and truck traffic intersect. Agricultural products and other bulk materials are brought by rail and truck from throughout the Upper Midwest, and transferred to barges that travel to downriver ports. Barge Terminal #1, Barge Terminal #2, Southport Terminal and Upper River Services are major locations requiring water access. While there are no confirmed prospects for the immediate future, the City acknowledges that river-related, shipping-related and river-dependent industrial and commercial uses will continue to locate in the river corridor, and be integral to Saint Paul's quality of life and continued economic growth. The City recognizes that careful management of these uses is critical to avoid or minimize adverse effects on the river. The City of Saint Paul regulates land use in these port areas. However, barge fleeting is regulated by permits issued by the United States Army Corps of Engineers.

In addition, there are four recreational marinas in Saint Paul – Watergate Marina, two marinas managed by the Saint Paul Yacht Club (one by the High Bridge, the other just upriver from the Wabasha Bridge), and a marina between the Wabasha and Robert Street bridges. There are two canoe/kayak landings, a boat launch at Hidden Falls, and a boat landing where the Paddleford riverboats dock. The marinas and landings are all located in City or regional parks. Watergate Marina is the planned location for a new Environmental Learning Center as envisioned in the Great River Passage Master Plan.

Existing water-oriented uses are identified on Map CA-7.

Policy CA-25. Prioritize protection of natural resources, nature-based recreation and public access to the Mississippi River in the Gorge Reach.

Policy CA-26. Prioritize protection of natural resources, nature-based recreation and public access to the Mississippi River in the Valley Reach.

Policy CA-27. Prioritize urban development, activation of the riverfront, public access and green connections to the Mississippi River in the Downtown Reach.

Policy CA-28. Prioritize a balance between urban development and natural resources protection, and public access to the Mississippi River in the Floodplain Reach.

Policy CA-29. Limit commercial and industrial land uses along the river to those having an economic or operational need for a river location, provided that they do not:

1. have a significant adverse impact on water or air quality in the river corridor; or
2. substantially impair the visual character of the corridor from adjacent neighborhoods or the river itself.

Policy CA-30. Support the replacement, as leases expire, of non-river-related businesses with river-related businesses at Barge Terminal #1, Barge Terminal #2, Red Rock and Southport.

Policy CA-31. Minimize the visual and physical impacts of river-related commercial and industrial land uses through native vegetation and landscaping.

Policy CA-32. Partner with the Saint Paul Port Authority to remediate contaminated sites in the river corridor.

Policy CA-33. Support the redevelopment of vacant and underutilized industrial sites as mixed-use urban villages that reconnect the city to the river, where these sites are not able to be reused as commercial or industrial businesses having an economic or operational need for a river location.

Policy CA-34. Design new public and private development to embrace the river and turn its face to it, so that the river's edge becomes the city's shared "front yard."

Historical and cultural sites found within the MRCCA boundary as listed in the National Register of Historic Places.

The City of Saint Paul is rich in history and deeply connected to its past. The Mississippi River plays a large role in this connection to the past. Those who have lived on the lands that now make up the City of Saint Paul have understood the importance of the Mississippi for thousands of years as a source of life and spirituality. The following list of the historical and cultural sites listed in the National Register of Historic Places within the MRCCA boundary

1. Lock and Dam No. 2
2. Edward Sr. and Markell Brooks House
3. Giesen-Hauser House
4. Indian Mounds Park Site
5. Carvers Cave
6. West Summit Avenue Historic District
7. Highland Ford Parkway Bridge (intercity Bridge)
8. Mendota Bridge
9. Saint Paul Municipal Grain Terminal (City House)
10. Harriet Island Pavilion
11. Anthony Yoerg Sr. House
12. Riverview Branch Library
13. Saint Matthew School
14. Colorado St. Bridge (Bridge No. L8803)
15. Holman Field Administration Building
16. Riverside Hanger Complex (Holman Field)
17. Minnesota Boat Club Boathouse (on Raspberry Island)
18. Chapel of Saint Paul Site
19. Robert Street Bridge (Bridge No. 9036)
20. Lowertown Historic District
21. U.S. Post Office and Custom House
22. Irvine Park Historic District

Open Space & Recreational Facilities

Open spaces and recreational features provide an opportunity for the public to engage with the river. Saint Paul will continue to support the connection between the public and the river through the planning, development and maintenance of open spaces and recreational features. Several regional bike trails connect and carry people through MRCCA; the City of Saint Paul currently owns seven parks within it. Open space and recreational facilities are identified in the Parks, Recreation and Open Space Chapter on Map PR-1.

Policy CA-35. Maintain and expand public access to the river's edge.

Policy CA-36. Maintain and expand open space and recreational facilities along the river, connect them with one another as part of the Great River Passage, and connect them to adjacent neighborhoods.

Policy CA-37. Prioritize the use of park dedication funds for public river access on sites immediately adjacent to the river's edge.

Policy CA-38. Encourage the creation, connection and maintenance of open space, recreational facilities and other public connections to the Mississippi River.

Policy CA-39. Identify and encourage the connection of land in the CA-SR district to existing and planned parks and trails.

Policy CA-40. Encourage applying park dedication requirements within the MRCCA to improve public river access.

Transportation & Public Utilities

The Mississippi River corridor has been and continues to be a critical transportation corridor for movement of goods and people. For the purposes of this chapter, public transportation facilities include transportation facilities provided by federal, state, county or local government and dedicated to public use, such as roadways, transit facilities, railroads and bike/pedestrian trails. Public utilities include electric power facilities, essential services and transmission facilities. Two power plants exist along the river: an Xcel Energy natural gas facility on Shepard Road, and a District Energy co-generation facility in downtown. Xcel also maintains a series of electric transmission towers along the north side of the central riverfront. The power generating facilities do not negatively impact PRCVs, but the transmission towers have a significant negative impact on PRCVs and, in some cases, obstruct public access to the river. The existing power generation and transmission facilities are shown on Map CA-7. A buried gas pipeline, not shown on map, also crosses the Mississippi River in Saint Paul. No new power generation or transmission facilities within the MRCCA are known to be planned.

Maps T-10, T-16, and T-18 in the Transportation Chapter show existing, planned and potential transitways and streets within the MRCCA. Policies regarding public utilities within the MRCCA boundaries are similar to those city-wide.

Policy CA-41. Ensure multi-modal access to the river and connections to the broader transportation system.

Policy CA-42. Minimize impacts to PCAs and PCRVs from solar and wind generation facilities, public transportation facilities and public utilities.

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Appendix **A**

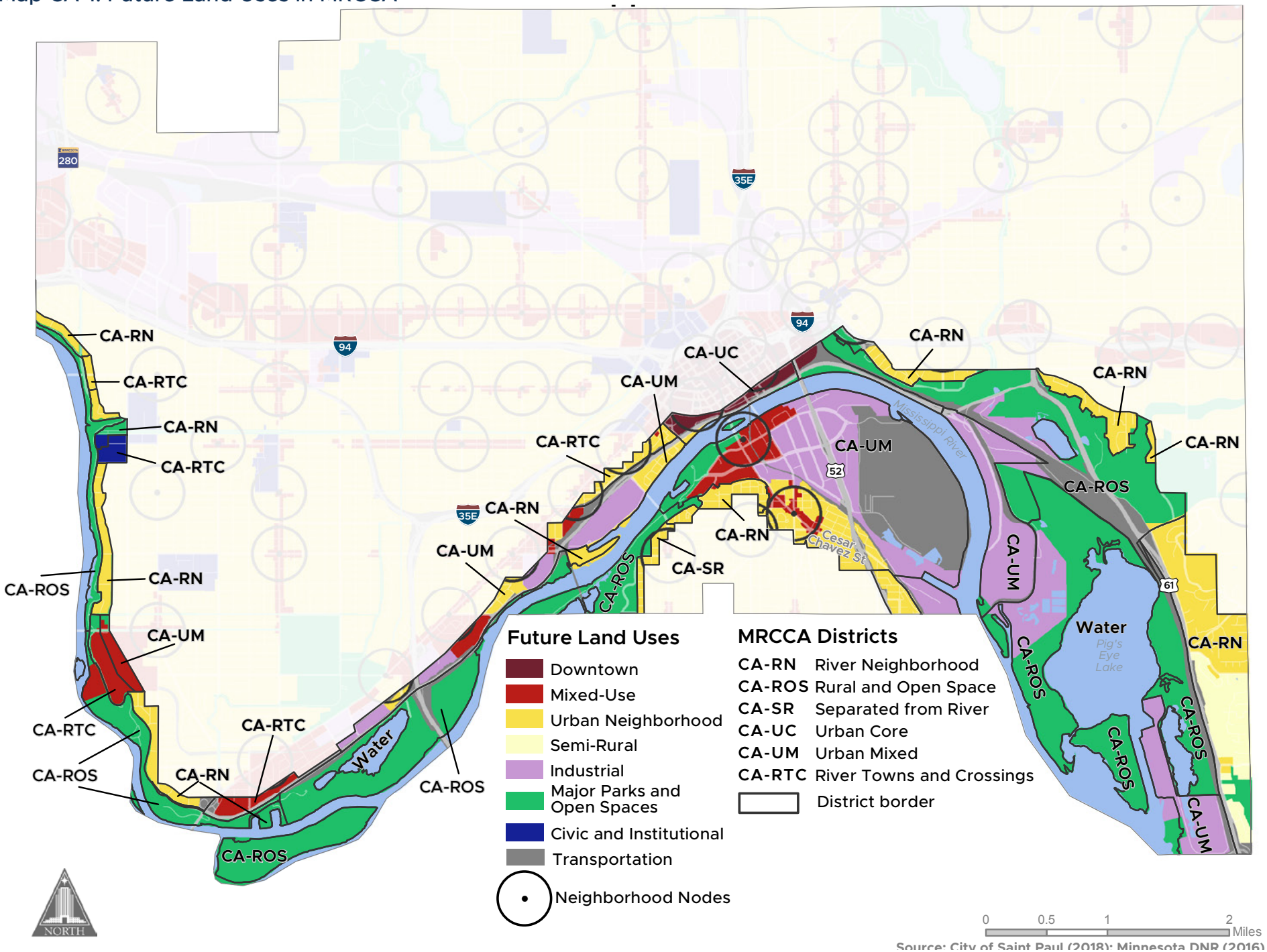
Maps of MRCCA

Appendix **B**

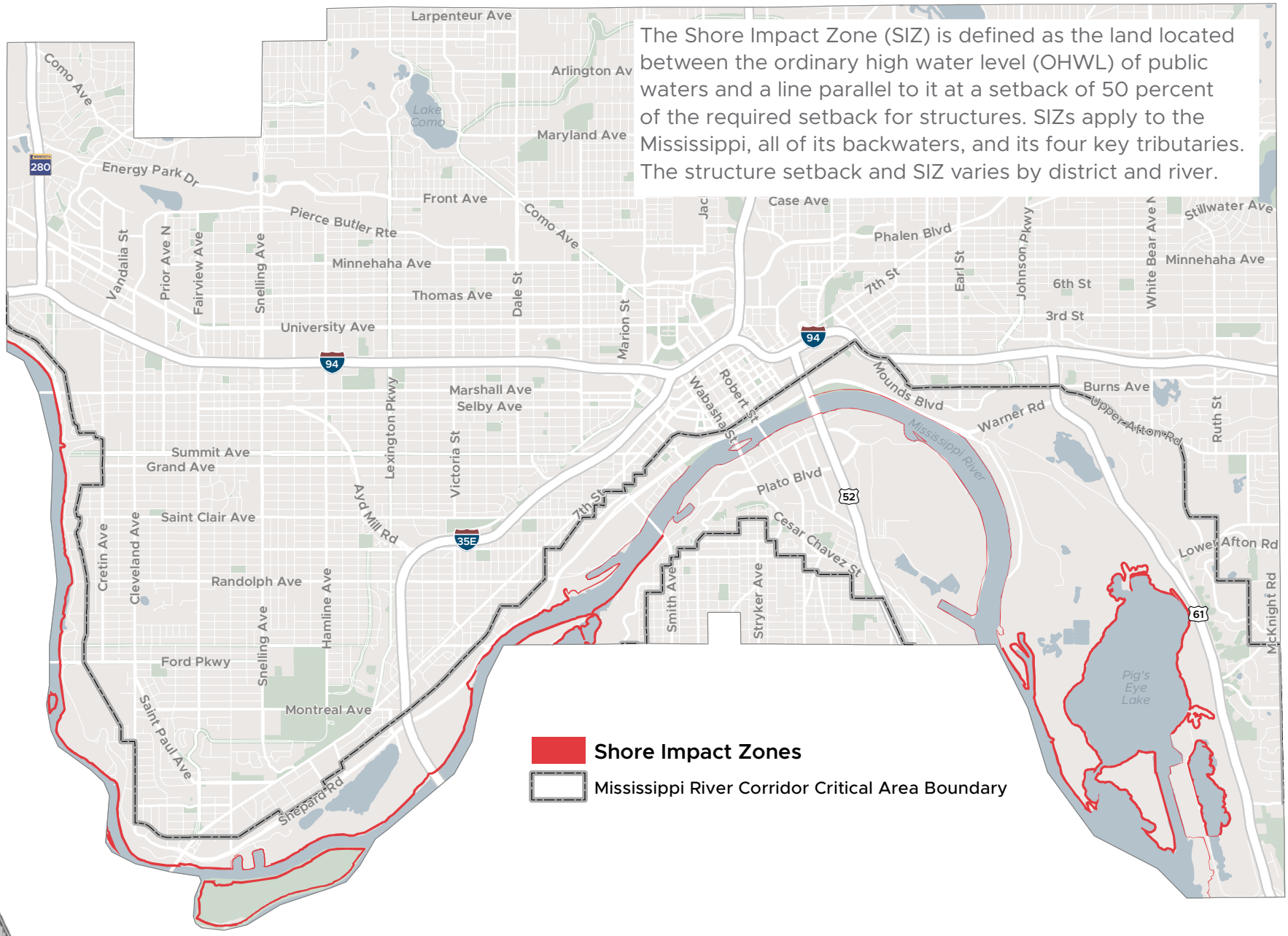
Appendix **C**

Note: These appendices provide supporting content for MRCCA-related policies and satisfy associated Metropolitan Council requirements.

Map CA-1: Future Land Uses in MRCCA

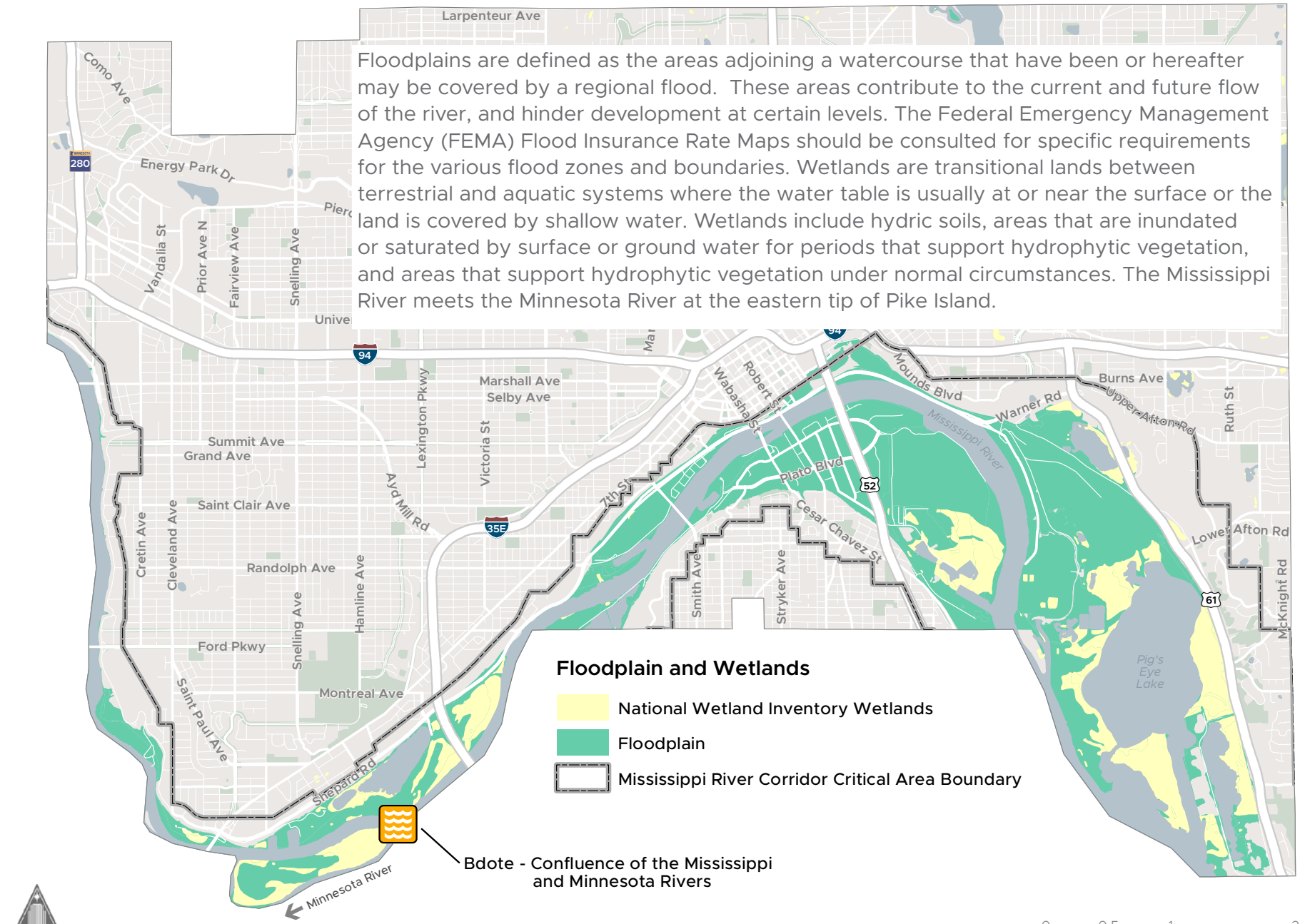


Map CA-2: Shore Impact Zones



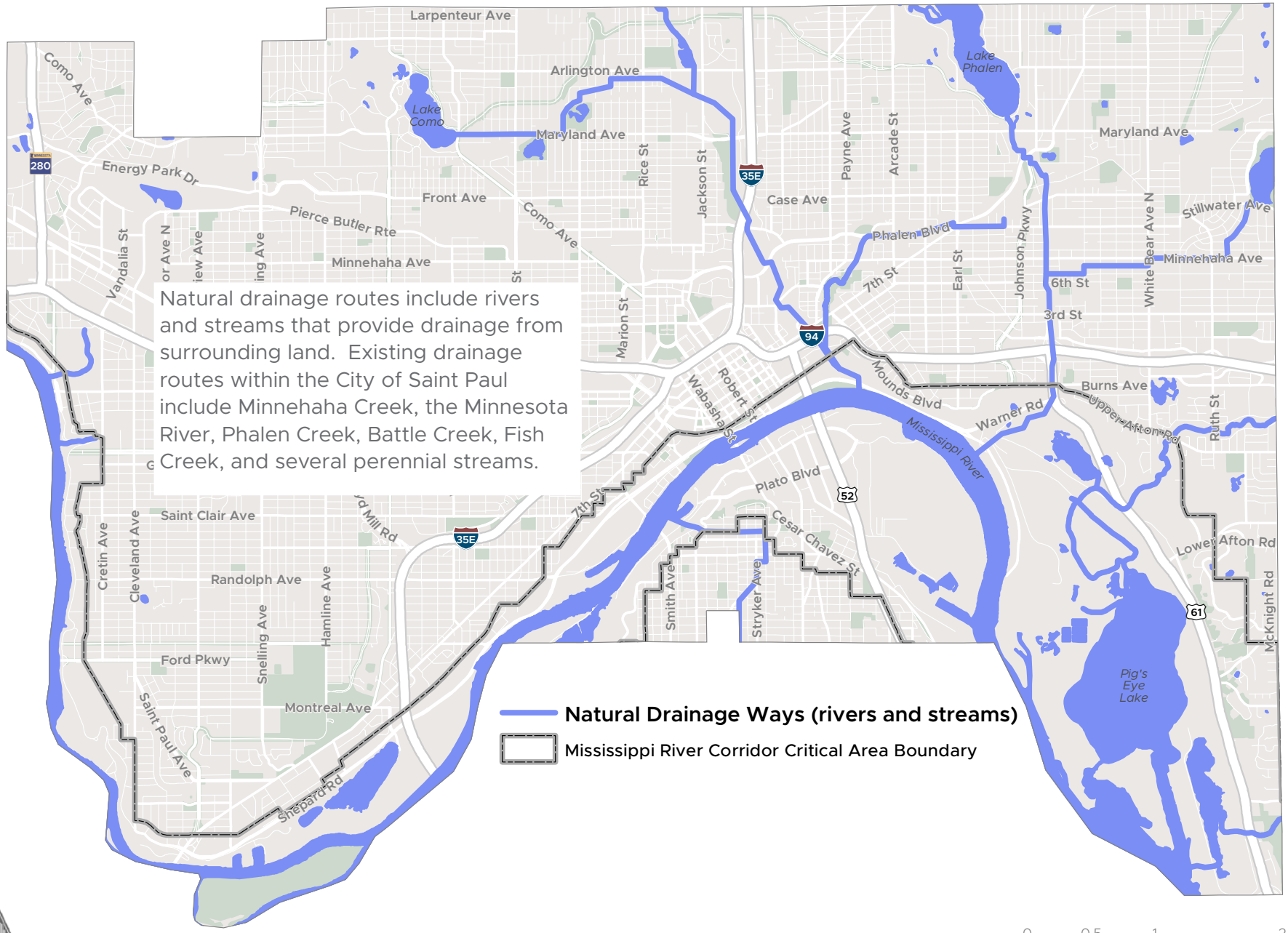
Source: City of Saint Paul (2016); Minnesota DNR (2016)

Map CA-3: Floodplain and Wetlands



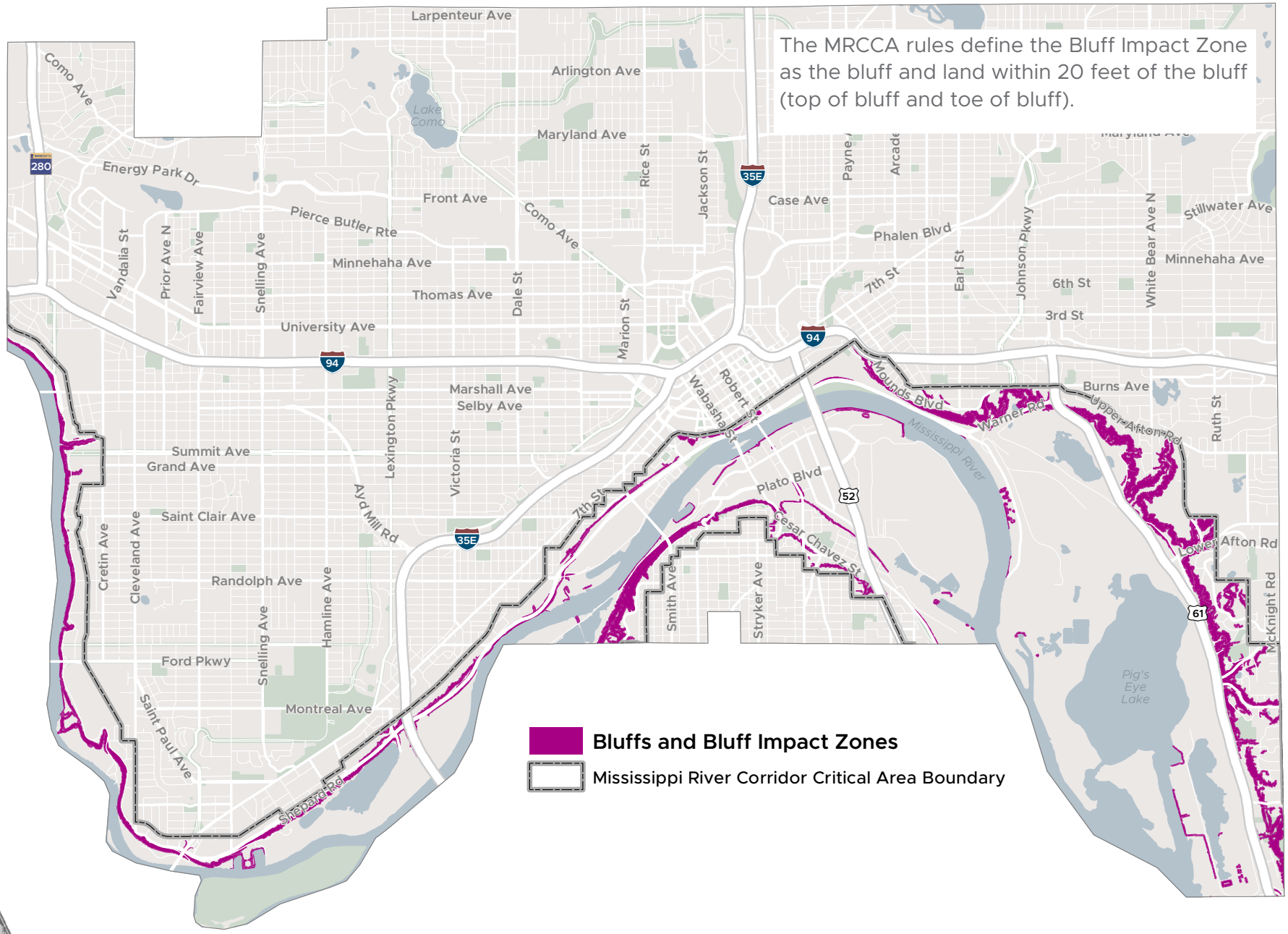
Source: City of Saint Paul (2016); Minnesota DNR (2016)

Map CA-4: Natural Drainage Ways



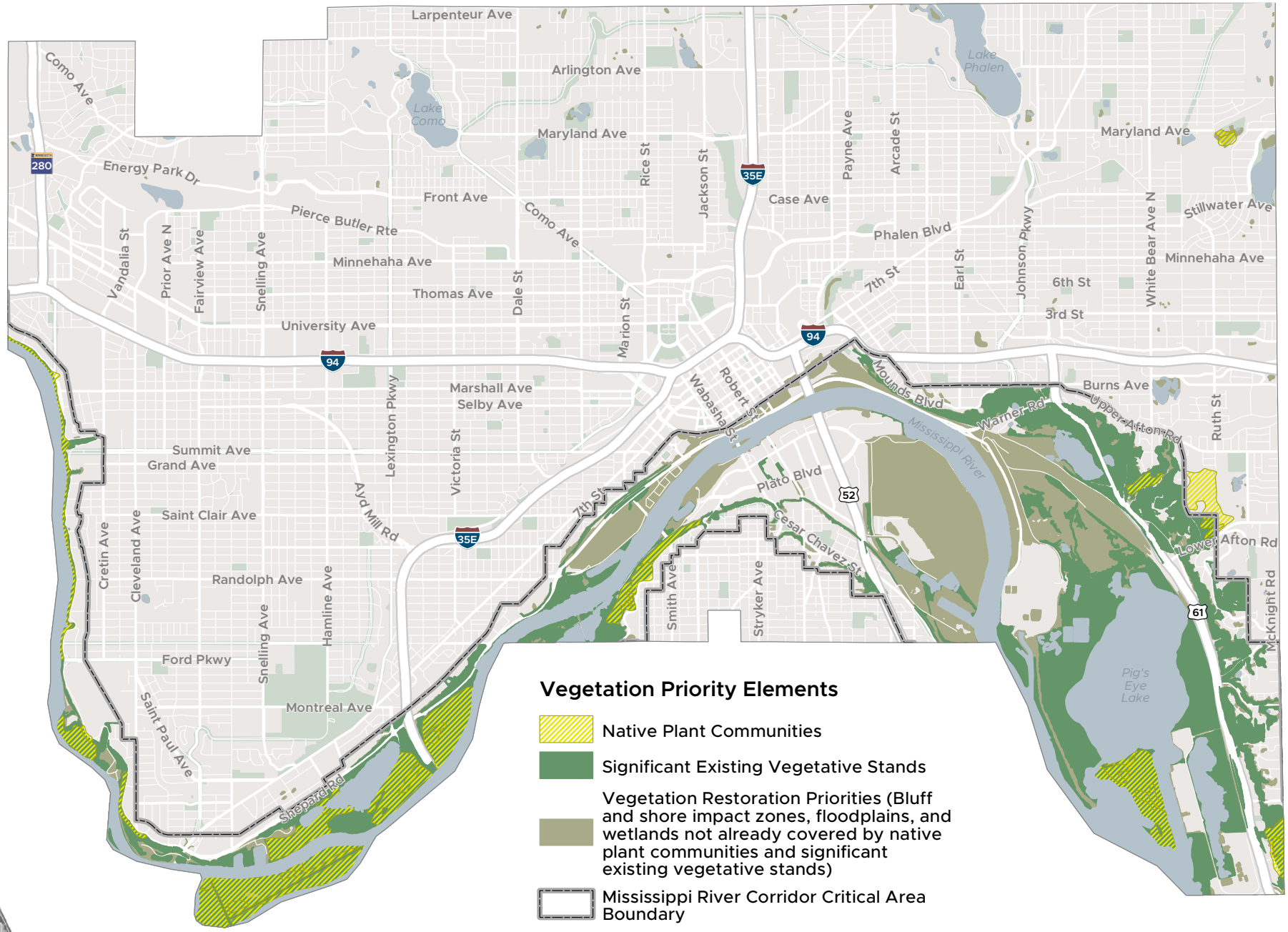
Source: City of Saint Paul (2016); Minnesota DNR (2016)

Map CA-5: Bluffs and Bluff Impact Zones



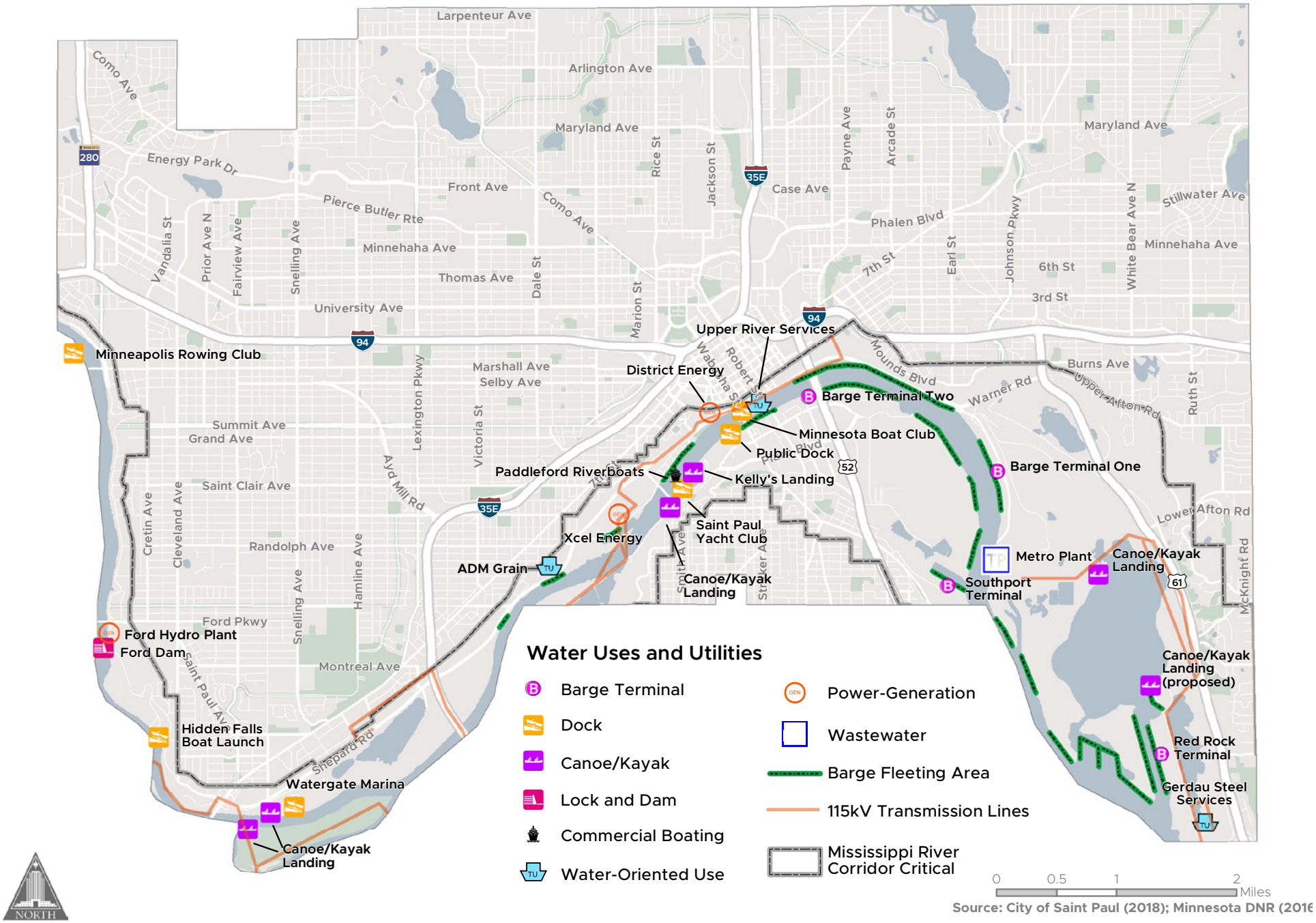
Source: City of Saint Paul (2016); Minnesota DNR (2016)

Map CA-6: Native Plant Communities and Significant Existing Vegetative Stands



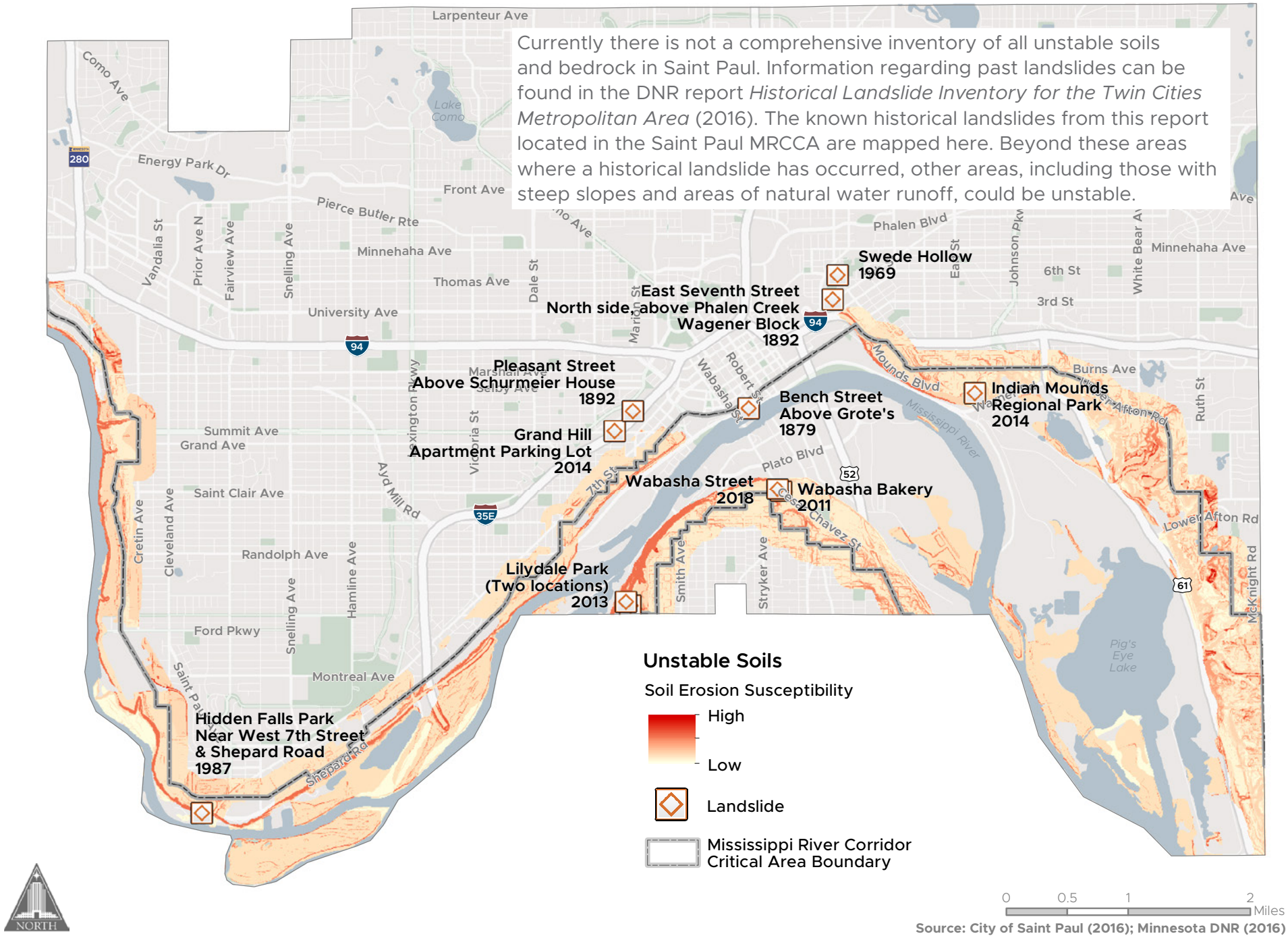
Source: City of Saint Paul (2016); Minnesota DNR (2016)

Map CA-7: Utilities, Water-Oriented Uses and Surface-Water Uses



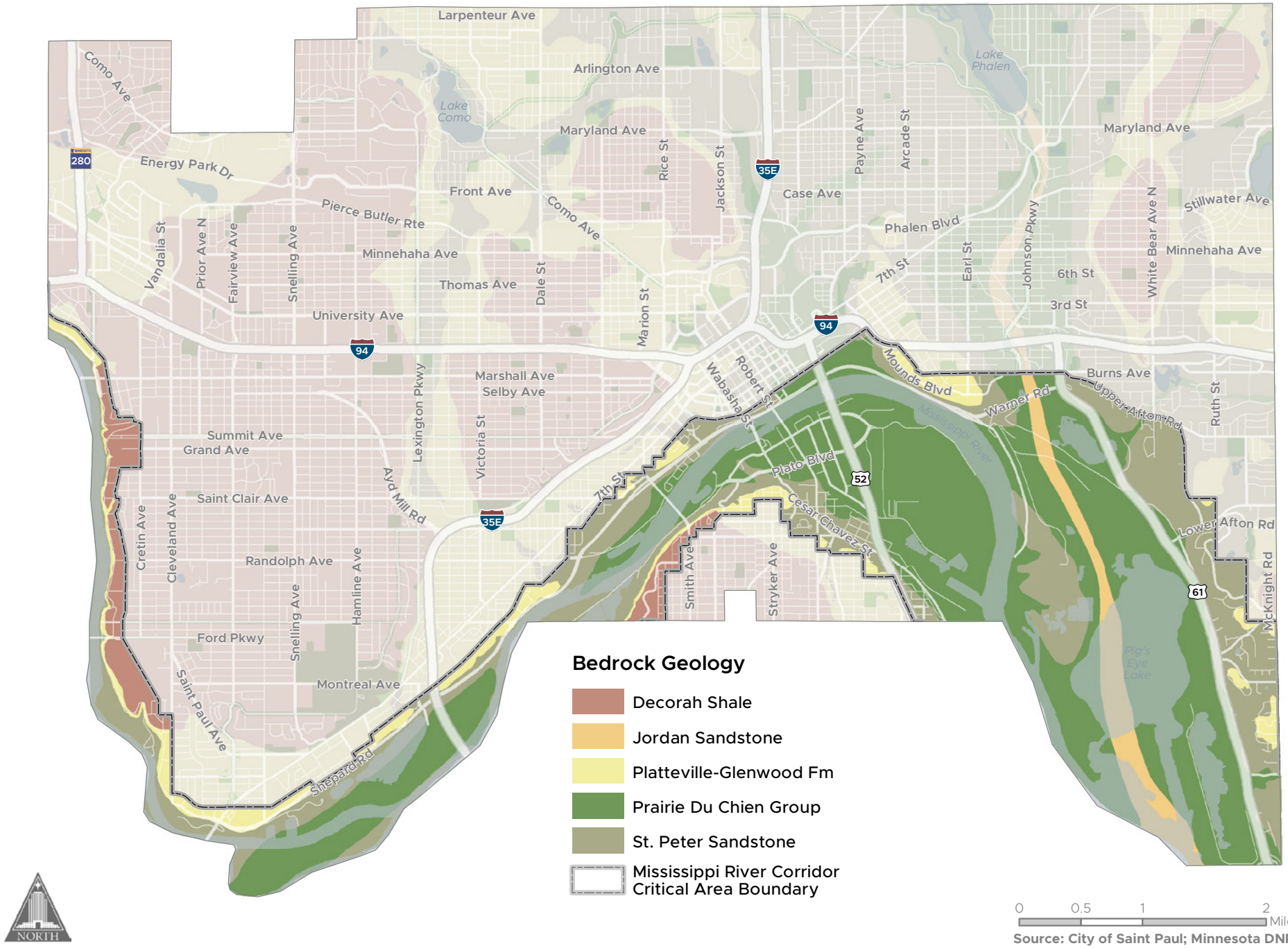
Source: City of Saint Paul (2018); Minnesota DNR (2016

Map CA-8: Unstable Soils



Source: City of Saint Paul (2016); Minnesota DNR (2016)

Map CA-9: Bedrock



Source: City of Saint Paul; Minnesota DNR

Figure CA-1: Dimensional Standards within the MRCCA - Height

Structure Height	
The height of structures, including accessory structures, is determined by local ordinance, provided that it is no taller than the heights defined for each of the MRCCA districts as defined in Minnesota Rules Section 6106.0120. The height established for each district may also be modified through the Conditional Use Permit process, provided that the specific criteria are met. The defined structure height within each district is as follows:	
District	**Height**
CA-ROS	35 feet
CA-RN	35 feet
CA-RTC	48 feet, provided that tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimizes interference with public river corridor views.
CA-SR	Height is determined by the local government's underlying zoning requirements, provided the structure height in the underlying zoning is generally consistent with the height of the mature treeline, where present, and existing surrounding development, as viewed from the ordinary high water level of the opposing shore.
CA-UM	65 feet, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views.
CA-UC	Height is determined by the local government's underlying zoning requirements, provided tiering of structures away from the Mississippi River and blufflines is given priority, with lower structure heights closer to the river and blufflines, and structure design and placement minimize interference with public river corridor views.
Source: Minnesota Rule Section 6106.0120 Subp. 2.	

Figure CA-2: Dimensional Standards within the MRCCA - Structures and Setbacks

Location of Structures and Impervious Surface Setbacks		
Proposed structures and impervious surfaces must be located outside of the shore impact zone (see Map CA-2) and must meet the setback requirements defined within each of the districts. Additionally, structures and impervious surfaces cannot be located within the bluff impact zone (see Map CA-5) and must meet setback requirements.		
District	River Setback	Bluff Setback
CA-ROS	200 feet	100 feet
CA-RN	100 feet	40 feet
CA-RTC	75 feet	40 feet
CA-SR	Not defined for Mississippi River	40 feet
CA-UM	50 feet	40 feet
CA-UC	As specified in underlying zoning	40 feet
Source: Minnesota Rule Section 6106.0120 Subp. 2. and Section 6106.0180		

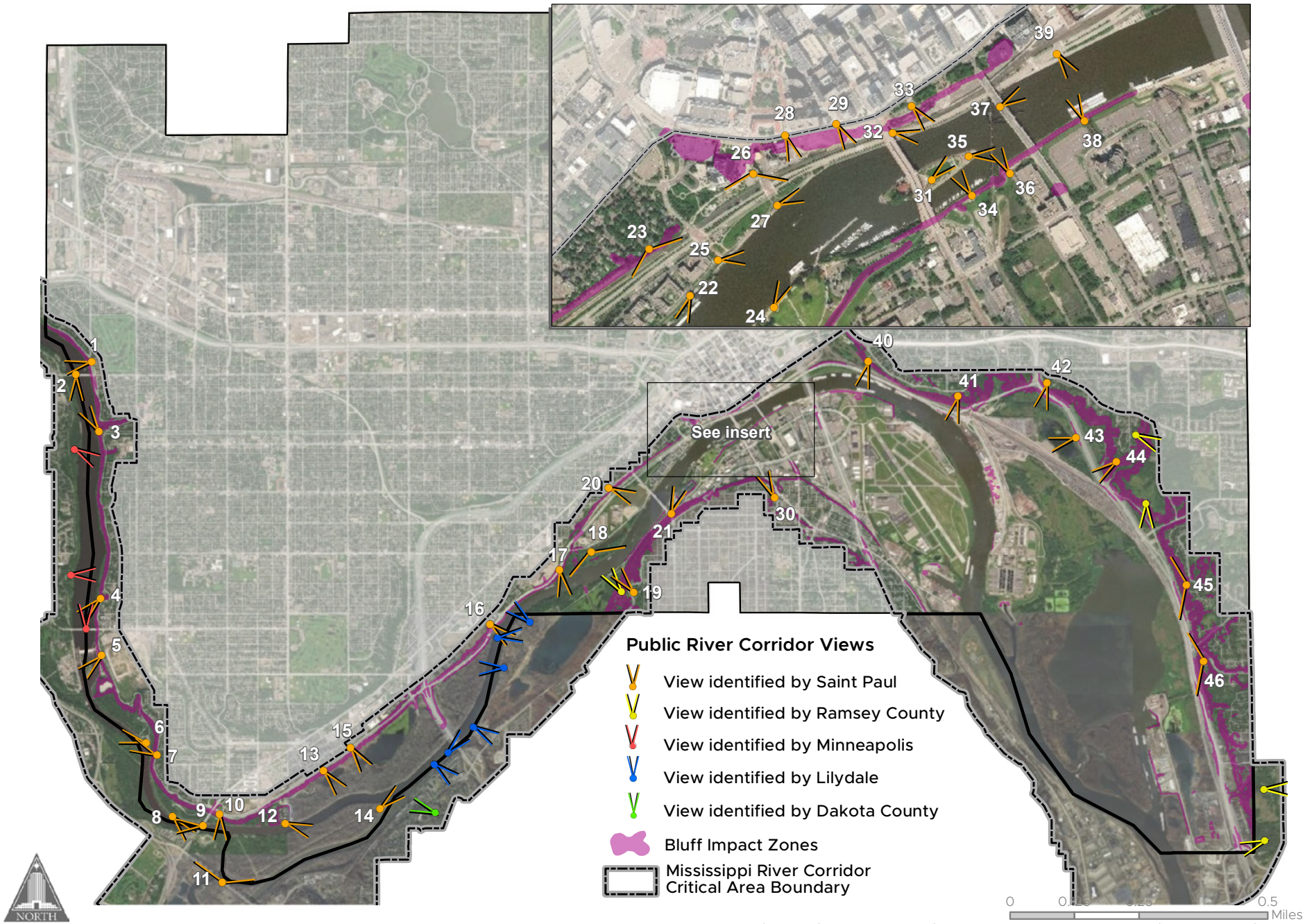
Appendix C

Public River Corridor Views

The Public River Corridor Views in this plan originate on public property, including parks and trails, historic properties and bridge overlooks. In addition, views toward bluffs from the opposite side of the shore are noted.

The City of Saint Paul has identified 44 PRCVs within the city limits or from the opposite side of the shore. The City recognizes that other jurisdictions may identify PRCVs. To ensure that these views are preserved, the City will continue to work with all public and private partners to preserve and protect PRCVs.

Map CA-10: Public River Corridor Views



Source: City of Saint Paul (2018); Minnesota DNR (2016); SRF Consulting (2017); Esri (2016)

View 1: Mississippi River Boulevard North of Marshall Avenue

The overlook at the Mississippi Gorge Trail, north of the Marshall Ave Bridge, provides a scenic view of the river's west and east banks. Upstream, there is a view of the Franklin Avenue bridge and the University of Minnesota. Across the river, there is a view of the Minneapolis Rowing Club and traces of the commercial district along Lake Street in Minneapolis. In the summer months, this view may become impeded by overgrown foliage and shrubbery.

View 2: Marshall Avenue Bridge

The overlook on the Marshall Avenue Bridge provides a wonderfully long and straight view of the steep bluffs on each bank of the river. The downstream view is minimally impeded and provides a great view of the water, shoreline and forested areas. This view is perfect for residents to enjoy the dazzling colors of the trees as they change during the fall months.

View 3: Shadow Falls Overlook

The overlook at the Mississippi Gorge Trail, near Shadow Falls Park just west of Summit Avenue, is a high outcrop that provides two views: one looking upriver towards the Marshall Avenue Bridge, and the other looking directly across the river to Longfellow Beach. This overlook gives the public an opportunity to stop and marvel at the natural beauty of the Mississippi River corridor.

View 4: Hartford Avenue Overlook

The overlook at the Mississippi Gorge Trail, near South Woodlawn Avenue and the Temple of Aaron Congregation, provides a scenic vista with four views. Upriver are views of the forested west bank of the river. Downriver are views of the Ford Bridge. There are no buildings that impede the views at this location, providing an excellent and tranquil location to enjoy nature and the views of the forests that run the length of the Gorge Reach.

View 5: Ford Dam Overlook

The Ford Dam Overlook provides unobstructed views of the historic Lock and Dam No. 1. Upriver are views of the Ford Bridge and historic structures adjacent to the dam. Across the river are views of the steep bluff and bedrock present all along this stretch of the river. This area of whitewater provides contrast to the calmer portions of the river both upriver and downriver of this point. The overlook provides some of the most “up-close and personal” views of historic structures in the entire MRCCA area within Saint Paul city limits.

View 6: Hidden Falls Park North

This viewing spot within Hidden Falls Regional Park provides the public with direct access to the river. looking upriver provides unobstructed views of the west bank of the river and the many trees lining the shore. People can walk along the small beach or fish and kayakers and canoers can make a quick stop as they continue downstream.

View 7: Mississippi River Boulevard by Elsie Lane

Along Mississippi River Boulevard there are several outcroppings that provide unique perspectives of the river corridor. This upriver view, taken near the intersection of Mississippi River Boulevard and Elsie Lane, provides views of the river and several buildings in south Minneapolis.

View 8: Hidden Falls South

The small beaches and water access points to the south of the Hidden Falls parking lot provide views of the west bank of the river and the opposite shoreline. This location, along the water and across from the bluffs on the west bank, provides quality downriver views of the buildings at Historic Fort Snelling. This view can be accessed on foot or by bicycle, as it lies just off a trail. The location also serves as an area for fishing and picnicking.

View 9: Highway 5 Bridge

The Highway 5 Bridge provides an excellent opportunity to view the river just as one leaves the Gorge Reach and enters the Valley Reach. Upriver views show the river as it turns north towards Minneapolis. This view is easily accessible for pedestrians and cyclists who are visiting the area, or who would like to have a great view of the river on their day trip to Historic Fort Snelling.

View 10: Gannon Road Overlook

This overlook, located along Shepard Road just south of Highway 5, provides views of the west bank of the river, the opposite shoreline and the confluence of the Mississippi and Minnesota rivers at Fort Snelling. The open terrain and rolling hills behind the Fort are clearly seen.

View 11: Highway 55 Bridge

In the long view from the Highway 55 Bridge, the downtown skylines of Saint Paul and Minneapolis are visible at the same time. With the river in the foreground, this view shows how the Mississippi River connects the two largest cities at the heart of the region, the Mississippi National River and Recreation Area and the Mississippi River Corridor Critical Area.

View 12: Watergate Marina

Watergate Marina provides several unique vantage points of the river corridor. From the banks, thick forest can be seen covering the west bank of the river. During warmer months, views from the banks may be impeded by overgrown vegetation. From the docks, downriver and upriver views consist of the riverbanks and dock infrastructure at the marina. This view is easily accessible by bicycle due to the many trails that pass by the marina.

View 13: Sam Morgan West

This is one of several new overlooks proposed in the *Great River Passage Interpretive Plan*. Located where Alton Street meets the bluff, on the river side of Shepard Road. This upper bluff spot features views of the river gorge and Lilydale Regional Park. The Interpretive Plan recommends intersection improvements, seating, a drinking fountain and bike racks at this new overlook.

View 14: Bdote

Accessible only by boat or from Ft. Snelling State Park, Pike Island is one of the few locations in Saint Paul where one can experience the river at the water's edge. The eastern tip of the island is the confluence of the Minnesota and Mississippi rivers, with a mostly undisturbed view of natural bluffs.

View 15: Sam Morgan East

This is one of several new overlooks proposed in the *Great River Passage Interpretive Plan*. Located where Rankin Street meets the bluff, on the river side of Shepard Road. This upper bluff spot features views of the river gorge and Lilydale Regional Park. The Interpretive Plan recommends seating, a drinking fountain and bike racks at this new overlook.

View 16: Victoria Park Overlook

This overlook is part of the emerging Victoria Park, the centerpiece of the Victoria Park Urban Village. The view across the river from this point is of a mostly natural bluff edge, including Lilydale Regional Park.

View 17: Fountain Cave

The Fountain Cave Overlook is proposed in the Great River Passage Interpretive Plan. Located on the river side of the Sam Morgan Trail along Shepard Road, the overlook is planned for seating, a drinking fountain and bike racks. There is currently a plaque along the trail referencing the historic location of the cave. Views of the river corridor are mostly obscured by trees.

View 18: Island Station

The historic Island Station site is planned for redevelopment. A critical component of the development plans will be maintenance of public access through the site from Randolph Avenue and the Sam Morgan Trail to the river's edge. In addition, the *Great River Passage Interpretive Plan* identifies Island Station as a location for a new overlook with spaces for gathering, performance and interpretation. The view from the river's edge is of a mostly natural landscape. This is a site where views of the site from the river are also very important. Building height, scale, configuration and materials must be sensitive to the site's location in the Valley Reach.

View 19: Cherokee Regional Park

This spot is in the midst of a regional park, overlooking Lilydale Regional Park and above the fossil beds. The *Great River Passage Interpretive Plan* recommends an overlook designed for performances and gatherings, with a public art project that frames the view. Selective clearing would open views to the river and opposite shoreline.

View 20: Cliff Street Overlook

The Cliff Street Overlook sits on top of the bluffs on the east riverbank parallel to Cliff Street. This overlook is unique because it is set back much further from the river than other overlooks. The landscape provides downriver views of the historic Island Station site (now an Opportunity Site), a business park, industrial uses, roadways, the Xcel Energy natural gas plant, and the High Bridge. Similar to other overlooks in the corridor, the viewer will see bluffs and shoreline upriver along the west bank.

View 21: High Bridge Overlook

Looking downriver, the long view from this vantage point highlights both the natural/recreational and urban characteristics of the Saint Paul waterfront. With the Saint Paul Yacht Club Marina in the foreground, the view extends to include the housing at Upper Landing, Upper Landing Park and Chestnut Plaza, and the downtown skyline. The *Great River Passage Interpretive Plan* recommends improving this overlook with different railings to open views, native plantings, new pavement and a slightly elevated seating platform.

View 22: Washington Street Overlook

This view along the Sam Morgan Regional Trail provides close views of the Mississippi River, as the overlook is located just over the water level. Views of the High Bridge and Harriet Island Regional Park are prominent from this location.

View 23: Walnut Street Overlook

This view point is at the southern terminus of Walnut Street at the bluff. It sits on top of a partially- exposed bluff above railroad tracks and overlooking Shepard Road. While not an official overlook, the spot is an important location from which to view the Upper Landing Urban Village, City House and Harriet Island Regional Park. The street and block pattern, building configuration and heights, and street alignments in Upper Landing were sited to maintain views to the river and from the river back to the bluff.

View 24: Harriet Island Steps

Standing on the steps that disappear into the water, one can experience what it feels like to be on the water. The view is primarily of the downtown skyline, with Upper Landing housing and City House in the foreground.

View 25: Chestnut Plaza

This location, along the Sam Morgan Regional Trail at Chestnut Plaza in Upper Landing Park, provides downriver views of an increasingly urban landscape. This landscape includes a paved promenade along the river, the Wabasha Street Bridge, as well as Harriet Island Regional Park and its public dock. Unlike previous views of the west bank, the steep bluffs are no longer in view, as a flatter and more urban landscape has taken its place.

View 26: Sam Morgan Overlook

This overlook along the Sam Morgan Regional Trail is located just above the water level along the trail. Views of the river and opposing shoreline can be experienced from this location.

View 27: Science Museum Overlook

This view showcases the evolution of the city's relationship to the Mississippi River. Looking downriver, the river opens up into the wide floodplain, with the industrial waterfront in the far distance. Looking straight ahead, the central waterfront, devoted to mostly transportation (railroad and Shepard Road) and recreational uses (Raspberry Island, Harriet Island, the public dock, Upper Landing Park, Chestnut Plaza and the Sam Morgan Regional Trail) comes into view. Looking upriver, the Upper Landing Urban Village displays the return of residents to the river's edge.

View 28: Market Street

The origin of this view is where Market Street comes out of downtown and terminates at the bluff. The upriver view is of the District Energy Co-generation Plant, Science Museum of Minnesota, Upper Landing housing and park space, and Harriet Island Regional Park. The downriver view is the wide floodplain, with the downtown skyline on the ascending bank and the West Side Flats on the descending bank. Preservation/framing of this view corridor along an extended Market Street right-of-way will be critical in the siting, scale, design and height of new development on the Ramsey West site (along Kellogg Boulevard between Wabasha and Market streets).

View 29: St. Peter Street

The origin of this view is where St. Peter Street comes out of downtown and terminates at the bluff. Currently, the view is wide open, revealing the wide floodplain and curve in the river's course downriver, and Harriet Island Regional Park and Upper Landing development upriver. Preservation/framing of this view corridor along an extended St. Peter Street right-of-way will be critical in the siting, scale, design and height of new development on the Ramsey West site (along Kellogg Boulevard between Wabasha and Market streets).

View 30: West Side

The view immediately below this viewing spot is of low-density industrial land and Harriet Island Regional Park. The longer view is of the Upper Landing housing and the downtown skyline. As the area behind Harriet Island redevelops over time, a building height gradient of lower towards the river and taller closer to the bluffs must be maintained. However, buildings immediately below the bluff should not obscure the views across the river. The *Great River Passage Interpretive Plan* recommends an overlook at the historic location of the Green Stairs that features seating, interpretation and a drinking fountain.

View 31: Raspberry Island North Side

There are multiple locations throughout Raspberry Island that provide views to the Mississippi River and both shorelines. This location is at water level, providing a unique feel for one's place in the river corridor. The downtown skyline, as well as the emerging West Side Flats neighborhood, are visible from this location.

View 32: Wabasha Street Bridge Overlook

This overlook provides a view of the river and surrounding area from a higher elevation, opening the expanse of the view. Raspberry Island and Harriet Island Regional Park are viewed from this location.

View 33: Kellogg Mall Overlook

The overlook at Kellogg Mall Park provides an elevated view of the Mississippi River, Raspberry island, and the West Side Flats. This location is elevated above the railroad tracks.

View 34: West Side Flats Overlook

This viewing point, located on top of the Mississippi River levee, offers excellent views of the downtown skyline and Raspberry Island. Both the *Great River Passage Master Plan* and *West Side Flats Master Plan* encourage development landward of the esplanade to have active first-floor uses that open up to the esplanade. More public activity at this location will make this stunning view of downtown accessible to more people.

View 35: Raspberry Island Overlook

Located on the downriver tip of Harriet Island, the view origin is at water level, with the Robert Street Bridge immediately above the viewer. The lone remaining portion of natural bluff in the Downtown Reach is visible just east of the Wabasha Bridge, as is Kellogg Mall Park and the downtown skyline. The emerging West Side Flats urban village is taking shape on the descending bank.

View 36: Livingston Avenue Overlook

The view point is the overlook along the esplanade on top of the river levee. Directly across the river is one of the most beautiful views of downtown Saint Paul, both the high-density core and Lowertown. Downriver, Lower Landing Park, the boat landing itself, and the long view of Indian Mounds Park are visible. Both the *Great River Passage Master Plan* and *West Side Flats Master Plan* encourage development landward of the esplanade to have active first-floor uses that open up to the esplanade. More public activity at this location will make this stunning view of downtown accessible to more people.

View 37: Robert Street Bridge

The Robert Street Bridge provides a 360-degree view of the surrounding area, including the industrial waterfront.

View 38: River Park Plaza Overlook

Located on the Mississippi River levee, this overlook provides views of Lowertown and Lower Landing. The bluffs of Indian Mounds Park are visible in the long view downriver. Both the *Great River Passage Master Plan* and *West Side Flats Master Plan* encourage development landward of the esplanade to have active first-floor uses that open up to the esplanade. More public activity at this location will make this stunning view of downtown accessible to more people.

View 39: Lower Landing

This view is from the Sam Morgan Regional Trail at the Lower Landing, a popular boat landing for the Delta Queen, American Queen, tugboats and other large boats plying the Mississippi River. Looking out from this point, the industrial character of the river is most prominent, with Barge Terminal #2, Upper River Services and the Riverview Industrial Area directly across the river. The Lafayette Bridge is directly in front of the viewer. The Lower Landing is where the river curves and opens to the Floodplain Reach. The *Great River Passage Interpretive Plan* recommends a landform overlook at this location that features seating, interpretation and a drinking fountain.

View 40: Mounds Boulevard Overlook

With the height of this view on top of the East Side bluff, all of the downtown skyline is visible, as is the industrial waterfront (including the Downtown Airport at Holman Field) on the descending bank. The Floodplain Reach is fully visible here.

View 41: Indian Mounds Park Overlook

The Indian Mounds are the most notable sacred site along this stretch of the Mississippi River. One of the most stunning views of the entire urban riverfront is from Indian Mounds Park. Everything about Saint Paul's relationship to the Mississippi River is visible here – its urban beginnings between the Upper and Lower Landings, the waves of transportation systems that have followed the river (railroads, barges, roads, airports), its evolving land uses from housing to industry to recreation, and the natural remnants of bluffs and caves. This is the postcard view of Saint Paul on the Mississippi. The *Great River Passage Interpretive Plan* recommends improving the two existing overlooks at the geologic marker and Carver's Cave. The geologic marker overlook should be a gathering place, while the Carver's Cave overlook should be a vista overlook.

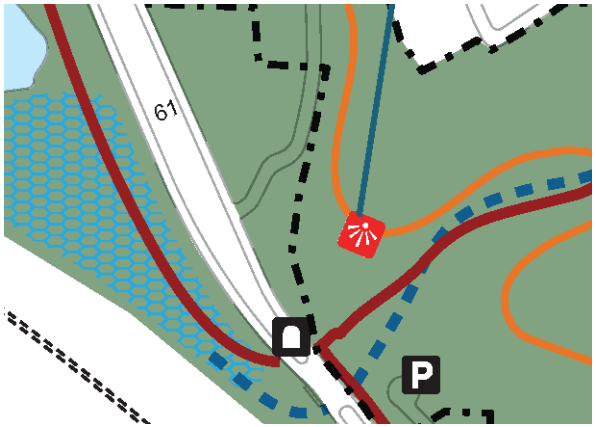
View 42: Burns Avenue Scenic Overlook

This is an existing overlook just east of Highway 61. The view is of the industrial riverfront, including Holman Field, and the broad Floodplain Reach.

View 43: Little Pigs Eye Lake

This spot has spectacular views from the river bluff of downtown and Pig's Eye Lake, home to a large heron rookery. The *Great River Passage Interpretive Plan* recommends a new overlook with seating, interpretation and a drinking fountain.

View 44: Highwood Bluffs North*



The most significant view from this spot is of Pig's Eye Lake and the heron rookery. This is the heart of the natural landscape of the Floodplain Reach, where the river corridor reaches its greestest width. The *Great River Passage Interpretive Plan* recommends three new overlooks along the Highwood Bluff Trail (North, Middle and South, views 44, 45 and 46) with seating, interpretation, a drinking fountain, wayside and one bike maintenance station.

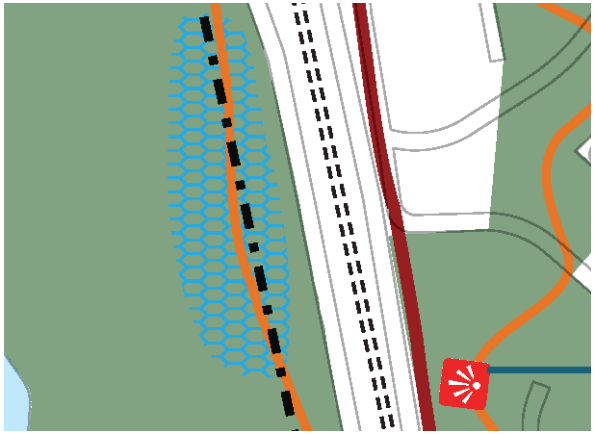
*This site is not publicly accessible because the Highwood Bluff Trail has not yet been constructed at this location. The image indicates the planned location of future the overlook as identified in the *Great River Passage Interpretive Plan*.

View 45: Highwood Bluffs Middle*

This point also has a spectacular view of Pig's Eye Lake and the heron rookery. This is the heart of the natural landscape of the Floodplain Reach, where the river corridor reaches its greestest width. The *Great River Passage Interpretive Plan* recommends three new overlooks along the Highwood Bluff Trail (North, Middle and South, views 44, 45 and 46) with seating, interpretation, a drinking fountain, wayside and one bike maintenance station.

*This site is not publicly accessible because the Highwood Bluff Trail has not yet been constructed at this location. The image indicates the planned location of future the overlook as identified in the *Great River Passage Interpretive Plan*.

View 46: Highwood Bluffs South*



This is the third viewing spot along the Highwood Bluff Trail (in addition to Highwood Bluffs North and Middle, views 44 and 45) with views of downtown Saint Paul, Pig's Eye Lake and the heron rookery. This is the heart of the natural landscape of the Floodplain Reach, where the river corridor reaches its greatest width. The *Great River Passage Interpretive Plan* recommends a new overlook here with seating, interpretation, a drinking fountain, wayside and one bike maintenance station.

*This site is not publicly accessible because the Highwood Bluff Trail has not yet been constructed at this location. The image indicates the planned location of future the overlook as identified in the *Great River Passage Interpretive Plan*.

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IMPLEMENTATION

Introduction

The Implementation Chapter lays out action steps to make the goals and policies of the 2040 Comprehensive Plan a reality.

General Implementation

The City of Saint Paul will implement the 2040 Comprehensive Plan in numerous ways. Specifically, the City will:

- analyze existing programs, regulations, plans and processes for conformance, and revise accordingly;
- align fiscal tools and spending with goals and policies;
- direct staff work;
- educate the implementers, including through distribution of Comprehensive Plan guides and checklists across departments, and training as necessary;
- develop public engagement standards and policies for use across City departments;
- develop processes across departments to involve relevant parties at the beginning of development projects;
- work with the Planning Commission to prepare an annual evaluation of implementation progress, involving other City departments and commissions as appropriate;
- implement and regularly update the City's Racial Equity Plan to realize and measure equity-related goals and policies;
- pursue small area plans, master plans and studies to refine the geographic and topical scale of the 2040 Comprehensive Plan as necessary;
- pursue outside funding that aligns with goals and policies;
- communicate with outside agencies, developers, community organizations and other members of the public who can drive implementation; and
- disaggregate population data in plans and reports, when practicable, particularly when reporting on race- and equity-related issues.

The City will also analyze existing Comprehensive Plan addenda for conformance with the 2040 Comprehensive Plan and pursue any necessary revisions.

Further Planning Work

In the course of preparing the 2040 Comprehensive Plan, it became clear that two additional plans should be prepared. Both of these are short-term items.

- Climate Action and Resilience Plan - Building on decades of Saint Paul's framework for community resilience, the City is currently in the process of developing a Climate Action & Resilience Draft Plan. The draft plan focuses on achieving carbon neutrality in city operations by 2030, and citywide by 2050 with a suite of targets and actions to decrease emissions across every sector in the city. It also identifies ways to cultivate long-term resilience, enhance the natural infrastructure of the city, and promotes a vision for Saint Paul's future with diminished threats of climate change.
- Equitable Economic Development Strategy – This comprehensive, city-wide economic development strategy, focused on equity, should include local-scaled topics, such as Neighborhood Nodes, as well as regional issues, such as transit and workforce development.

Official Controls

Implementation tools include official controls such as the Zoning Ordinance, the Subdivision Ordinance, the Heritage Preservation Ordinance and Site Plan Review.

Fiscal Tools

The City uses a variety of fiscal tools to fund implementation of multiple chapters of the 2040 Comprehensive Plan, including

- Capital Improvement Budget (CIB), which funds large infrastructure and improvement projects including for utilities, parks, and streets. The CIB is currently adopted annually, and in 2019 was $50.34 million. The CIB process is being redesigned to improve equity and inclusion, strategic investment (more strategic framework), and fiscal responsibility. The CIB is informed by the Public Works' Five-Year Capital Improvement Program.
- Public Works 5-Year Capital Improvement Program - the Department of Public Works funding priorities are listed in a Five-Year Capital Plan updated and adopted annually by the Mayor and City Council.

- Tax Increment Financing (TIF), which is used for redevelopment and brownfields remediation;
- the Sales Tax Revitalization Program (STAR), also known as the "1/2 cent sales tax program," which is a flexible funding program intended to provide support for RiverCentre, cultural activities, and community-based and neighborhood- oriented development opportunities through an open and public competitive process;
- special assessment districts, such as Business Improvement Districts (BIDs); and
- special funds as allocated by the Mayor and City Council.

Outside Funding

Outside funding sources applicable to multiple chapters' implementation include:

- Community Development Block Grants (CDBG);
- Livable Communities Act (LCA) grants, administered by the Metropolitan Council;
- Brownfields cleanup grants from the Minnesota Pollution Control Agency (MPCA); and
- Redevelopment grants from the Minnesota Department of Employment and Economic Development (DEED).

Timelines

The following tables assign time periods (Short-, Medium-, or Long-Term) for implementation based on urgency, complexity and time/ resource constraints involved in each item's implementation. "Ongoing" items are anticipated to occur throughout the 2040 Comprehensive Plan's duration.

Figure IM-1: Land Use Chapter Implementation

The Land Use Chapter guides equitably-distributed community amenities, access to employment and housing choice by focusing growth and investment around Neighborhood Nodes that support daily needs within walking distance.

		Item	Timeline	Funding Sources
Land Use	1	Work with the Saint Paul Port Authority to identify potential future light industrial business centers.	Ongoing	• Department of Planning and Economic Development budget • Special allocations • Grant funds
	2	Support the Site Assembly state legislation and seek other sources of patient capital for acquisition and assembly of redevelopment sites.	Ongoing	
	3	Conduct a zoning study to establish a minimum density for development Downtown.	Short-Term	
	4	Analyze and consider revisions to the Zoning Code, including dimensional standards, conditional use permit standards and site plan review standards in response to the 2040 Comprehensive Plan (See Map IM-1: Current Zoning and Table IM-1: Zoning District Summary).	Short-Term	
	5	Re-convene Joint Airport Zoning Board (JAZB) in partnership with the Metropolitan Airports Commission to develop and implement an Airport Zoning Ordinance for Saint Paul Downtown Airport.	Short-Term	
	6	Complete Station Area Plans for planned stations along the Riverview Corridor transit route.	Short-Term	
	7	Conduct a feasibility study of commercial land trusts.	Short-Term	
	8	Conduct a zoning study of home occupation standards to allow start-up businesses that reflect innovations in the business sector, while limiting negative impacts on adjacent parcels and streets.	Short-Term	
	9	Conduct a zoning study for “transit-supportive” residential infill development in proximity to transit with more flexible design standards similar to Traditional Neighborhood zoning districts.	Short-Term	
	10	Implement Economic Development Strategy	Short-Term	
	11	Consider a process to further evaluate and monitor equitable distribution of community amenities.	Short-Term	
	12	Initiate a city-wide, comprehensive equitable economic development strategy. It should include local-scaled topics, such as Neighborhood Nodes, as well as regional issues, such as transit and workforce development.	Short-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-1: Land Use Chapter Implementation (Continued)

		Item	Timeline	Funding Sources
Land Use	13	Initiate a small area plan focused on the land use change occurring in Lafayette Park to determine the appropriate development policies and future land use goals for the area.	Short-Term	• Department of Planning and Economic Development budget • Special allocations • Grant funds
	14	Identify and implement ways in which the City can minimize displacement in neighborhoods where the proximity to high-frequency transit has increased redevelopment pressure and/or housing costs.	Short-Term	
	15	Systematically review and modify the Zoning Code to remove unnecessary hurdles to small-scale commercial and residential development.	Short-Term	
	16	Complete and implement Climate Action Plan.	Short-Term	
	17	Initiate a small area plan focused on the area around Bandana Square to determine the appropriate development policies and future land use goals for the area.	Short-Term	
	18	Participate in the development of coordinated design guidelines for the geography shared by Prospect Park, St. Anthony Park, CEZ and Towerside.	Short-Term	
	19	Study the creation of "Planned Manufacturing Districts" that preserve industrial land.	Short-Term	
	20	Study the economic development impact and market demand for 'maker space and small scale or custom production'.	Short-Term	
	21	Conduct zoning studies in conjuction with transit corridor improvements.	Medium-Term	
	22	Conduct a zoning study of commercial design standards.	Medium-Term	
	23	Identify and study areas of the city where lack of stormwater infrastructure is a barrier to redevelopment.	Medium-Term	
	24	Study the feasibility, appropriate location and design of land bridges.	Medium-Term	
	25	Consider creating a system of business councils to complement the District Council system and improve geographic coverage of business representation.	Long-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-2 Transportation Chapter Implementation

The Transportation Chapter guides the creation of a safe equitable and well-maintained multi-modal transportation system that supports vitality and the needs of all users, and sets the stage for infill development to accommodate the city's projected growth.

		Item	Timeline	Funding Sources
Transportation	1	Build City-led road construction projects consistent with the 2040 Comprehensive Plan.	Ongoing	• Saint Paul Streets Fund (SPS) (street improvement bonds) • Minnesota State Aid (MSA) (City share of State fuel taxes) • Right-of-Way Maintenance Assessment Funds • Sidewalk Infill Program, which addresses standalone sidewalk projects • MnDOT Cooperative Agreement Program • Regional Solicitation for federal transportation funds (administered biennially by the Metropolitan Council) • Regional Solicitation for the federal Highway Safety Improvement Program (HSIP) (administered biennially by MnDOT) • Transportation Economic Development (TED) (administered by MN DEED) • Other MnDOT funds, such as Local Road Improvement Program, Safe Routes to School, and funds focusing on freight movement, trunk highway safety or bridges • Right-of-Way Loan Acquisition Fund (RALF) (administered by the Met Council) • Transportation Investment Generating Economic Recovery (TIGER) grants
	2	Inform Ramsey County mill and overlay, restriping and reconstruction projects.	Ongoing	
	3	Inform Minnesota Department of Transportation roadway reconstruction and maintenance projects, including "Reimagine I-94."	Ongoing	
	4	Participate in Metro Transit's Service Improvement Plan process, which occurs every five years.	Ongoing	
	5	Participate in transitway planning processes led by other agencies, such as those currently underway for the Riverview, Gateway/Gold Line and Rush Line corridors.	Ongoing	
	6	Use the Bicycle Plan, Pedestrian Plan and Street Design Manual to guide implementation of the bicycle network, pedestrian network and complete streets.	Ongoing	
	7	Continue to collaborate with Active Living Ramsey Communities, Ramsey County and other municipalities to implement the Ramsey County Pedestrian and Bicycle Plan and complete the Connected Ramsey Communities Network.	Ongoing	
	8	Transition City vehicle fleets to electric propulsion, including typical passenger vehicles in the short- to medium-term, and larger vehicles and public safety vehicles as technology allows.	Ongoing	
	9	Improve pedestrian and bicyclist mode share and crash data to inform and evaluate investments.	Ongoing	
	10	Analyze and consider revisions to the Bicycle Plan, Pedestrian Plan and Street Design Manual.	Short-Term	
	11	Adopt and implement a "Vision Zero" program.	Medium-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-2 Transportation Chapter Implementation (Continued)

		Item	Timeline	Funding Sources
	12	Evaluate how and where trucks should be accommodated in street and site design to maintain economic vitality while prioritizing pedestrian and bicyclist safety. Then revise the truck route map, Street Design Manual, City ordinances and other official policies accordingly.	Medium-Term	
	13	Work towards increasing all (not just work commute) trips' mode share for non-single-occupant vehicles, aiming to surpass the following interim goals prior to 2040, as measured via the Metropolitan Council's Travel Behavior Inventory (TBI): • 25% walking • 20% public transit • 8% bicycling	Long-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-3: Parks, Recreation and Open Space Chapter Implementation

The Parks, Recreation and Open Space Chapter sets broad policy to create an equitable, safe, connected and sustainable park system for all users.

		Item	Timeline	Funding Sources
Parks, Recreation and Open Space	1	Continue data collection and management efforts using new technology when available, and incorporate into decision-making tools.	Ongoing	• Parkland dedication funds • Minnesota Legacy Amendment funds • Environment and Natural Resources Trust Fund (limited to high-quality natural areas) • State bonding through Metropolitan Council (for regional parks and trails) • DNR Grants • Watershed District grants • Transportation Investment Generating Economic Recovery (TIGER) grants
	2	Seek out customer and resident feedback on needs, satisfaction and trends, and incorporate into decision-making tools.	Ongoing	
	3	Maintain accurate maps that show, at a minimum: city parks, service area, property boundaries, transit access and physical barriers.	Ongoing	
	4	Complete projects that enhance the park system.	Ongoing	
	5	Update the Parks and Recreation Vision Plan in response to the 2040 Comprehensive Plan.	Short-Term	
	6	Update the Parks and Recreation System Plan in response to the 2040 Comprehensive Plan.	Short-Term	
	7	Update annually the Parks and Recreation Strategic Implementation Plan consistent with the 2040 Comprehensive Plan.	Short-Term	
	8	Review adopted master plans for conformance with the 2040 Comprehensive Plan.	Short-Term	
	9	Review access and user fees to determine where increases are market-appropriate and where raising or imposing fees would not significantly impact access.	Short-Term	
	10	Develop objective criteria for investment, including, but not limited to, equity, cost-benefit analysis, changing development intensity, and people potentially served.	Short-Term	
	11	Develop objective and updatable methods to identify where there are disparities in accessibility to park assets based on race, ethnicity, income and ability.	Short-Term	
	12	Complete the Parks, Civic and Open Space Zoning Study initiated by Planning Commission Res 14-11, removing the referenct to Parks Policy 2.1 in the *2030 Comprehensive Plan*.	Short-Term	
	13	Develop a set of measurable performance standards for all community centers, play areas, pools, and other amenities.	Medium-Term	
	14	Develop new ways to engage the public in the use of Saint Paul Public Schools and Parks and Recreation Department land and facilities.	Medium-Term	
	15	Coordinate across City departments to achieve city-wide tree canopy goals.	Medium-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-4: Housing Chapter Implementation

The Housing Chapter addresses the housing needs of all Saint Paul residents, from physical structure to fairness, choice, stability and affordability.

		Item	Timeline	Funding Sources
Housing	1	Coordinate with the City's elected officials and lobbyists to work on state- and federal-level housing policy issues.	Ongoing	See Housing Chapter Appendix H-A for possible funding sources for current and future housing needs.
	2	Work with other City departments and external partners, such as nonprofit and social service providers, to help build household income and net worth.	Ongoing	
	3	Partner with financial and other institutions to explore alternative financing tools that improve access to housing capital across all income groups.	Ongoing	
	4	Update the City's Consolidated Plan and other housing-related planning documents in response to the 2040 Comprehensive Plan.	Short-Term	
	5	Review and update the following documents, as needed, to ensure consistency with the 2040 Comprehensive Plan: • Low-Income Housing Tax Credit Qualified Allocation Plan (QAP) • Project and Program Evaluation Tool	Short-Term	
	6	Review existing programs to ensure that they meet current and future housing needs as identified in the 2040 Comprehensive Plan.	Short-Term	
	7	Review and update the City's official controls to advance housing goals and policies.	Short-Term	
	8	Study the extent and impact of historic housing discrimination in Saint Paul.	Short-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-5: Water Resources Chapter Implementation

The Water Resources Chapter focuses on integrated water resource management to provide a safe, reliable, and sustainable water supply and ensure excellent surface water quality while though a right-sized and well-maintained gray stormwater infrastructure and sustainable wastewater conveyance and treatment infrastructure.

		Item	Timeline	Funding Sources
Water	1	Address inflow and infiltration using tools, policies and strategies described in the Water Resources Chapter.	Ongoing	• Watershed District grants • Minnesota Legacy Amendment funds
	2	Implement capital investment in water supply infrastructure as described in the Water Supply Plan.	Ongoing	
	3	Carry out educational, operational, and other efforts related to surface water quality as described in the Local Surface Water Management Plan.	Ongoing	
	4	Conduct a study to explore the feasibility of a “no net loss” of wetlands policy.	Short-Term	
	5	Evaluate adequacy and efficiency of stormwater-related official controls, including consideration of changing precipitation patterns.	Short-Term	
	6	Re-establish the City’s inter-departmental Brownfields Working Group to focuys on groundwater quality.	Short-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-6: Heritage and Cultural Preservation Chapter Implementation

The Heritage and Cultural Preservation Chapter sets policy for the preservation and celebration of architecturally, culturally and historically significant buildings, districts, sites and views in Saint Paul.

		Item	Timeline	Funding Sources
Heritage and Cultural Preservation	1	Complete context studies of, and designate as appropriate, areas, places, buildings, structures, landscapes and other objects having historical, cultural, architectural, archaeological and/or engineering significance to the African-American, Asian, Latino and Native American communities.	Ongoing	• Arts and Cultural Heritage Fund • Certified Local Government grants • Federal Transportation Enhancement programs • Federal Transit Enhancement programs • Federal Investment Tax Credits, including the Federal Historic Preservation Tax Incentives Program • Save America's Treasures program • Preserve America program • State of Minnesota programs, including State Grants-in Aid, State Capital Projects Grants-in-Aid and State Historic Preservation Tax Incentives • Non-profit organizations, such as Preservation Alliance of Minnesota and
	2	Develop an annual work plan for the Heritage Preservation Commission that prioritizes: • survey and designation work; • education; and • stakeholder engagement.	Ongoing	
	3	Develop and fund the creation of programs and materials to educate staff, partners and the public about the history of the city; the rationale and laws behind - and importance of - preservation activities; and how preservation activities relate to both public and private property.	Ongoing	
	4	Establish a consistent cycle of survey, evaluation and designation projects for areas, places, buildings, structures, landscapes and other objects having historical, cultural, architectural, archaeological and/or engineering significance.	Ongoing	
	5	Produce and consistently update a list of outside preservation funding resources to provide to internal and external partners.	Ongoing	
	6	Support neighborhood revitalization and reinvestment by using heritage preservation tools, such as historic tax credits, in African-American, Asian, Latino and Native American communities.	Ongoing	
	7	Establish an inter-departmental staff team advisory group to address City department applications and issues.	Short-Term	
	8	Explore the Heritage Preservation Commission's authority and process regarding demolition permits as part of any revisions to Chapter 73.	Short-Term	
	9	Fund a City staff position to focus on grant-writing and resource allocation.	Short-Term	
	10	Create a "Pocket Guide to Preservation in Saint Paul (and how the City can help)".	Short-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-6: Heritage and Cultural Preservation Chapter Implementation (Continued)

The Heritage and Cultural Preservation Chapter sets policy for the preservation and celebration of architecturally, culturally and historically significant buildings, districts, sites and views in Saint Paul.

		Item	Timeline	Funding Sources
	11	Develop a clearinghouse where information pertaining to heritage and cultural preservation can be collected and disseminated to City departments and the public.	Short-Term	
	12	Develop a process and set of criteria to assess the economic viability of historic resources, with an eye toward determining which economic incentives should be used for the rehabilitation of historic resources to realize their full economic potential.	Medium-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-7: Mississippi River Corridor Critical Area Chapter Implementation

The Mississippi River Corridor Critical Area (MRCCA) Chapter guides land use and development along the Mississippi River.

		Item	Timeline	Funding Sources
Critical Area	1	Amend the City's existing MRCCA ordinance to comply with the goals and policies of this plan, as well as with Minnesota Rules, part 6106.0070, Subp. 5 – Content of Ordinances, including: a. zoning regulations to protect environmentally sensitive areas, including shoreland impact zones, natural drainage routes, gorges, bluffs and bluff impact zones; b. zoning and performance standards and/or permitting processes to protect native plant communities and significant vegetative stands, areas of unstable soil or bedrock, and sites of cultural or historical significance; c. zoning to require mitigation for impacts to Primary Conservation Areas when issuing discretionary zoning approvals; d. zoning, including permit requirements, restricting clear-cutting in certain Primary Conservation Areas; e. vegetation management practices for park lands and, where feasible, promote vegetation management for screening views of buildings and other urban development from public viewing areas; and f. zoning regulations that provide for water-oriented uses.	Short-Term*	• TBD
	2	Update the zoning map to reflect new MRCCA districts.	Short-Term	
	3	Work with the Saint Paul Port Authority and other partners to eliminate any negative environmental effects of industry.	Short-Term	
	4	Work with the Saint Paul Port Authority to maintain barge fleeting and other commercial navigation operations.	Short-Term	
	5	Ensure that information on the location of Public Conservation Areas (PCAs) is readily available to property owners to understand how PCA-related ordinance requirements (such as vegetation management and land alteration permits) apply to their property for project planning and permitting.	Short-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

* Note that the City is required to update its MRCCA ordinance within one year of being notified to do so by MnDNR. We anticipate the Saint Paul update occurring in 2021.

Figure IM-7: Mississippi River Corridor Critical Area Chapter Implementation (Continued)

The Mississippi River Corridor Critical Area (MRCCA) Chapter guides land use and development along the Mississippi River.

		Item	Timeline	Funding Sources
Critical Area	6	Ensure that information on the location of Public River Corridor Views (PRCVs) is readily available to property owners to understand how PRCV-related ordinance requirements (such as vegetation management and land alteration permits) apply to their property for project planning and permitting.	Short-Term	• TBD
	7	Establish procedures for processing land development applications with potential impacts to PRCVs that include: a. the information that must be submitted and how it will be evaluated; b. the visual analysis approach for conditional use permits for additional height in the RTC and UM districts, as well as for variances; and c. the appropriate mitigation procedures/methods for variances and conditional use permits.	Short-Term	
	8	Actively communicate with communities that have identified important public river corridor views in Saint Paul.	Short-Term	
	9	Ensure that information on the location of natural vegetation restoration priorities is readily available to property owners to understand how relevant ordinance requirements apply to their property for project planning and permitting.	Short-Term	
	10	Establish a vegetation permitting process to ensure consideration of restoration priorities as development permits are issued.	Short-Term	
	11	Establish a process for evaluating priorities for natural vegetation restoration, erosion prevention, bank and slope stabilization, and other restoration priorities identified in the MRCCA Plan as development permits are issued.	Short-Term	
	12	Develop a system for reviewing, tracking and monitoring open space required as part of the subdivision process.	Short-Term	

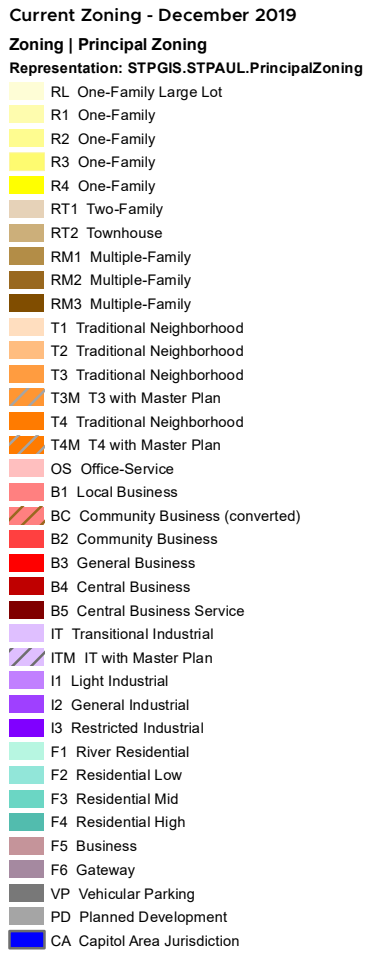
General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)

Figure IM-7: Mississippi River Corridor Critical Area Chapter Implementation (Continued)

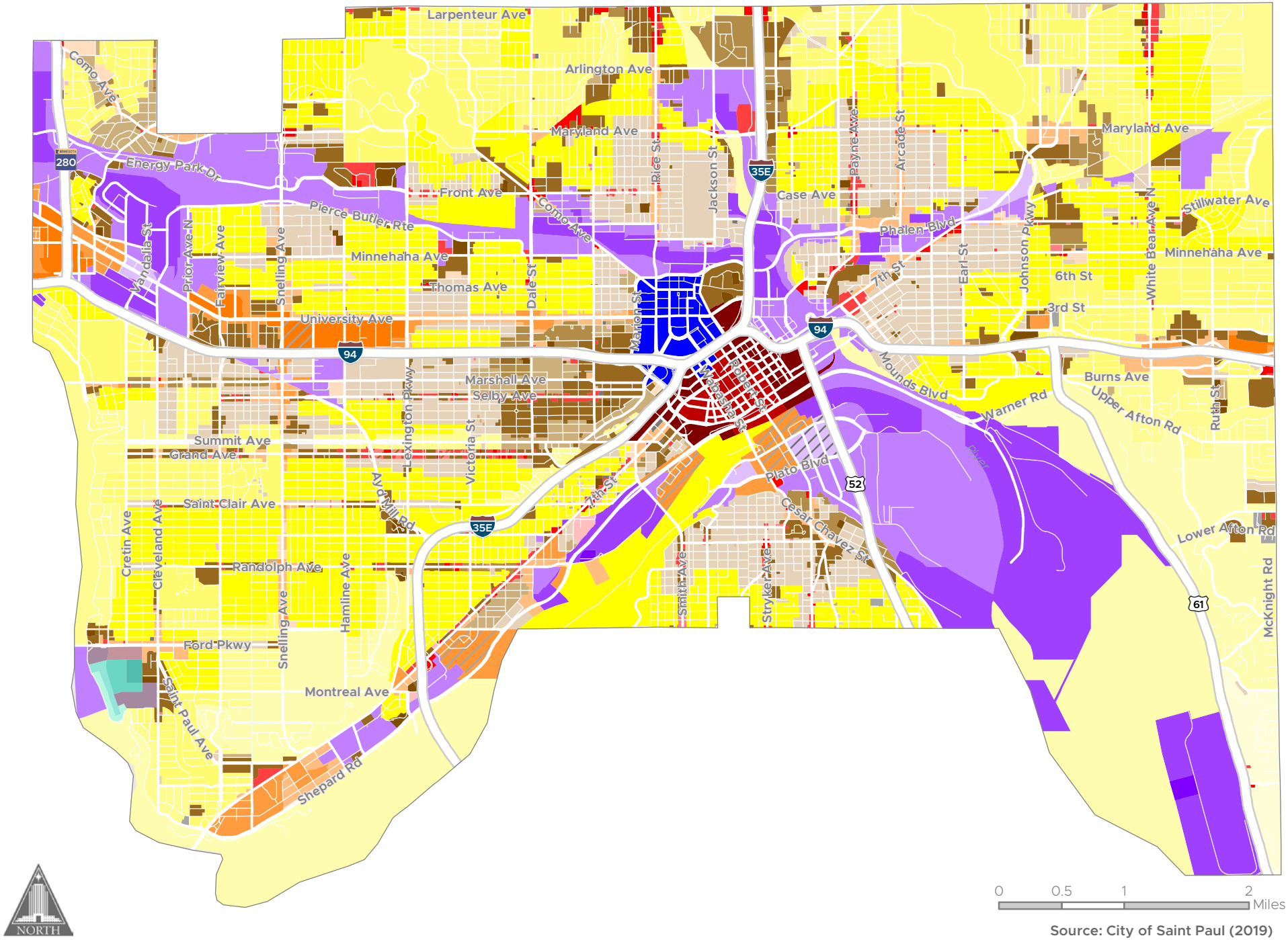
The Mississippi River Corridor Critical Area (MRCCA) Chapter guides land use and development along the Mississippi River.

		Item	Timeline	Funding Sources
	13	Address potential conflicts between MRCCA districts, the Future Land Use districts and/or underlying zoning as part of the subsequent MRCCA ordinance work.	Short-Term	
	14	Incorporate specific design and placement conditions into local permits for solar and wind generation facilities and essential and transmission services that minimize impacts to PCAs and PRCVs.	Medium-Term	

General Timeline Guidelines:
Short-Term (0-5 years)
Medium-Term (5-10 years)
Long-Term (10+ years)


Current Zoning - December 2019
Zoning | Principal Zoning
Representation: STPGIS.STPAUL.PrincipalZoning
RL One-Family Large Lot
R1 One-Family
R2 One-Family
R3 One-Family
R4 One-Family
RT1 Two-Family
RT2 Townhouse
RM1 Multiple-Family
RM2 Multiple-Family
RM3 Multiple-Family
T1 Traditional Neighborhood
T2 Traditional Neighborhood
T3 Traditional Neighborhood
T3M T3 with Master Plan
T4 Traditional Neighborhood
T4M T4 with Master Plan
OS Office-Service
B1 Local Business
BC Community Business (converted)
B2 Community Business
B3 General Business
B4 Central Business
B5 Central Business Service
IT Transitional Industrial
ITM IT with Master Plan
I1 Light Industrial
I2 General Industrial
I3 Restricted Industrial
F1 River Residential
F2 Residential Low
F3 Residential Mid
F4 Residential High
F5 Business
F6 Gateway
VP Vehicular Parking
PD Planned Development
CA Capitol Area Jurisdiction

Map IM-1: Current Zoning



Source: City of Saint Paul (2019)

Zoning District Descriptions

RL One-Family Large Lot Residential District
The RL one-family large lot residential district is the lowest density residential district. It provides for a semirural environment of predominantly low-density, one-family dwellings along with civic and institutional uses, public services and utilities that serve the residents in the district. The district is designed to protect, maintain and enhance wooded areas, wildlife and plant resources, fragile bluff areas, topography and large expanses of natural vegetative cover; to reduce erosion and excessive stormwater runoff associated with higher-density development; and to facilitate installation of private wells and individual sewage treatment systems for one-family detached dwellings.

R1—R4 One-Family Residential Districts
The R1—R4 one-family residential districts provide for an environment of predominantly low-density, one-family dwellings along with civic and institutional uses, public services and utilities that serve the residents in the districts. Because of their residential nature, these districts are not intended for more intensive uses such as small conference centers, private retreat centers and reception houses.

RT1 Two-Family Residential District
The RT1 two-family residential district provides for an environment of predominantly low density one- and two-family dwellings along with civic and institutional uses and public services and utilities that serve the residents in the district. The district recognizes the existence of older residential areas of the city where larger houses have been or can be converted from single-family to two-family residences in order to extend the economic life of these structures and allow the owners to justify the expenditures for repairs and modernization. Because of its residential nature, this district is not intended for more intensive uses such as small conference centers, private retreat centers and reception houses.

RT2 Townhouse Residential District
The RT2 townhouse residential district provides for two-, three-, and four-family and townhouse structures, along with civic and institutional uses, public services and utilities that serve residents in the district. It is intended to provide for a variety of housing needs and to serve as zones of transition between one- and two-family residential districts and multiple-family residential districts and business districts. The district recognizes the existence of older residential areas of the city where larger houses have been or can be converted from single-family to two-, three-, or four-family residences in order to extend the economic life of these structures and allow the owners to justify the expenditures for repairs and modernization. The RT2 district further provides for housing that has many of the amenities of single-family dwellings arranged in a low-density, multiple-family pattern. Because of its residential nature, this district is not intended for more intensive uses such as small conference centers, private retreat centers and reception houses.

RM1 Low-Density Multiple-Family Residential District
The RM1 low-density multiple-family residential district is intended to provide for an environment of predominantly one- and two-family, townhouse and lower-density multiple-dwelling structures, along with civic and institutional uses, public services and utilities that serve residents in the district, to provide for a variety of housing needs, and to serve as zones of transition between less restricted districts and more restricted districts.

RM2 Medium-Density Multiple-Family Residential District
The RM2 medium-density multiple-family residential district is intended to provide for more extensive areas of multiple-family residential development and a variety of congregate living arrangements, as well as uses that serve the needs of the multiple-family residential districts. It is intended to provide for comprehensive development of multiple-family uses and a balance of population concentration near major thoroughfares, transit, and related facilities.

RM3 High-Rise Multiple-Family Residential District
The RM3 high-rise multiple family residential district is intended to provide sites for high density multiple-dwelling structures adjacent to high-frequency transit service and high traffic generators commonly found in the proximity of major shopping centers and areas abutting major thoroughfares and expressways. It is also designed to serve the residential needs of persons desiring apartment-type accommodations with central services as opposed to the residential patterns found in the RM1 and RM2 multiple-family residential districts. The high-rise nature of the district is provided to allow for greater density with lower coverage, which will in turn result in more open space.

T1 Traditional Neighborhood District
The T1 traditional neighborhood district is intended to provide for compact, pedestrian-oriented mixed-use areas of limited size, with a variety of residential, office and service uses that primarily serve neighborhood needs. It is also intended to serve as a transitional use of land along major thoroughfares, between commercial or industrial districts and residential districts or other less intensive land uses.

T2 Traditional Neighborhood District
The T2 traditional neighborhood district is designed for use in existing or potential pedestrian and transit nodes. Its intent is to foster and support compact, pedestrian-oriented commercial and residential development that, in turn, can support and increase transit usage. It encourages, but does not require, a variety of uses and housing types, with careful attention to the amount and placement of parking and transitions to adjacent residential neighborhoods.

T3 Traditional Neighborhood District
The T3 traditional neighborhood district provides for higher-density pedestrian- and transit-oriented mixed-use development. It is designed for development or redevelopment of land on sites large enough to support:

(a) A mix of uses, including residential, commercial, civic and open space uses in close proximity to one another;
(b) A mix of housing styles, types and sizes to accommodate households of varying sizes, ages and incomes;
(c) A system of interconnected streets and paths that offer multiple routes for motorists, pedestrians and bicyclists, and are connected to existing and future streets;
(d) A system of open space resources and amenities; and incorporation of environmental features into the design of the neighborhood.

The T3 district is also intended for smaller sites in an existing mixed-use neighborhood center where some of the above elements already exist, or in an area identified in the comprehensive plan as a potential "urban village" site. The above elements may be found within the T3 district or adjacent to it; the intent is that all would be present within a reasonable walking distance.

T4 Traditional Neighborhood District.
The T4 traditional neighborhood district provides for high-density, transit-supportive, pedestrian-friendly mixed-use development. It is particularly intended for use near transit stops along fixed rail transit (including commuter rail, light rail and trolley) corridors, where a greater reliance on transit makes high-density mixed-use development possible and desirable.

OS Office-Service District
The office-service district is intended to accommodate various types of office and service uses performing administrative, professional and personal services and to serve as a transitional use between the more intensive uses of land such as major thoroughfares or commercial districts and the less intensive uses of land such as one-family residential.

B1 Local Business District
The B1 local business district is intended to permit those uses as are necessary to satisfy the basic convenience shopping or service needs of persons residing in nearby residential areas.

BC Community Business (Converted) District
The BC community business (converted) district is a business district expressly for existing residential structures in commercial areas, which will permit the operation of businesses which do not generate large amounts of traffic and at the same time will retain the visual character of the building forms and open space associated with residential uses. This includes a limited height on buildings and front and side yards. It is further the intent of this district to provide parking for employees who work in buildings which are converted from residential to business use.

B2 Community Business District
The B2 community business district is intended to serve the needs of a consumer population larger than that served by the "local business district," and is generally characterized by a cluster of establishments generating large volumes of vehicular and pedestrian traffic.

B3 General Business District
The B3 general business district is intended to provide sites for more diversified types of businesses than those in the B1 and B2 business districts, and is intended for use along major traffic arteries or adjacent to community business districts.

B4 Central Business District
The B4 central business district provides for a variety of retail stores and related activities, office buildings and service establishments which occupy the prime frontages in the central business district and serve a consumer population beyond the corporate boundaries of the city. The district is also designed to provide for the needs of the daytime work force, a central business district resident population and a transient population, along with the recreation demands of such population groups.

B5 Central Business-Service District
The B5 central business-service district is intended to provide necessary services for the population area which is served by all of the previous business districts. Such service establishments often involve objectionable influences, such as noise from heavy service operations and large volumes of truck traffic, and are thus incompatible with the previous business districts. The district provides for wholesaling, restricted manufacturing and other business uses which are needed in proximity to the central business district and require central location to permit serving of the entire city.

IT Transitional Industrial District
The IT transitional industrial district is intended to provide sites for commercial, office and light industrial uses that are compatible with nearby residential and traditional neighborhood districts, parks, and parkways.

I1 Light Industrial District
The I1 light industrial district is intended to accommodate wholesale, warehouse, and industrial operations whose external physical effects are restricted to the area of the district and in no manner affect surrounding districts in a detrimental way. The I1 district is intended to permit, along with other specified uses, the manufacturing, compounding, processing, packaging, assembly, or treatment of finished or semifinished products from previously prepared material.

I2 General Industrial District
The I2 general industrial district is intended primarily for manufacturing, assembling and fabrication activities, including large scale or specialized industrial operations whose external effects will be felt in surrounding districts. The I2 district is intended to permit the manufacturing, processing and compounding of semifinished products from raw material and prepared material. The processing of raw material in bulk form to be used in an industrial operation is a permitted use in the I2 district.

I3 Heavy Industrial District
The I3 heavy industrial district is intended to provide sites for uses which are or can be objectionable or hazardous unless surrounded by other types of industrial districts.

VP Vehicle Parking District.
The VP vehicle parking district is intended to permit the establishment of off-street parking facilities to be used solely for off-street parking of private passenger vehicles as a use incidental to a principal use. The district will serve a use district which has developed without adequate off-street parking.

PD Planned Development District
The PD planned development district is intended to permit more flexible and creative private or public development or redevelopment than is possible under standard zoning classifications. Planned developments shall be harmonious with the general surrounding uses, permitting flexibility in overall development while ensuring adequate safeguards and standards for public health, safety, convenience, and general welfare.

F1 River Residential District
The F1 river residential district provides for high quality one-family, two-family and multi-family dwellings with up to six (6) dwelling units each and rear carriage house dwellings with an additional one (1) to two (2) dwelling units in a combined garage structure. The district is characterized by deep setbacks from Mississippi River Boulevard, consistent with the historic form along the parkway.

F2 Residential Mixed Low District
The F2 residential mixed-use low-rise district provides for compact, pedestrian-oriented residential with at least seventy (70) percent of the development acres dedicated for townhouse use. The district provides for some low-scale multi-family structures, live-work units, and limited neighborhood serving retail, office, civic and institutional uses.

F3 Residential Mixed Mid District
The F3 residential mixed-use mid-rise district provides for a more extensive range of multi-family residential and congregate living types, as well as transit-oriented mixed-use development with retail, office, civic and institutional uses. A variety of housing and land uses within each block is encouraged to provide visual interest and convenient pedestrian access to amenities and services.

F4 Residential Mixed High District
The F4 mixed-use high-rise district provides for high density, transit-supportive, pedestrian-oriented multi-family residential and congregate living; with integrated retail, office, civic and institutional uses; and with the scale and mass of buildings moderated by use of vegetative buffers, step backs on upper floors, courtyards, and architectural features that break up the mass of facades.

F5 Business Mixed District
The F5 business mixed district provides for a variety of retail, dining, office and service establishments, with buildings oriented to public right-of-way, ground floor activity that transitions between outdoor public spaces and indoor uses. Multi-family residential use may be incorporated on upper floors.

F6 Gateway District
The F6 gateway district is intended to serve as the main entrance and economic heart of the Ford redevelopment site. The district provides for a variety of business and office uses independently or in combination with retail and service establishments. Limited housing, civic and educational uses may also be present. The district is focused on employment activity and complementary work force services.

CA Capitol Area Jurisdiction
The CA Capitol Area is under the jurisdiction of the Capitol Area Architectural and Planning Board. The City of Saint Paul does not have zoning authority in this area.

Timing of Implementation Steps that Affect Regional Systems

Saint Paul is a mostly built-up community with sewer, water and transportation infrastructure available throughout the city. Most infill development and redevelopment anticipated to occur over the coming decades will be incremental and have no effect on regional systems. The Ford Site, West Side Flats, Snelling-Midway and Hillcrest are larger anticipated redevelopments that could affect such regional infrastructure systems. These sites are anticipated to develop on approximately the timelines in the table below:

Implementation Tools for the Comprehensive Plan

The Comprehensive Plan has several primary tools for implementation including:

- Zoning Code
- Zoning Map
- Capital Improvement Budget (see also Public Works 5-Year Capital Improvement Program)

<table>
<tr><th></th><th></th><th>2018</th><th>2019</th><th>2020</th><th>2021</th><th>2022</th><th>2023-2040</th></tr>
<tr><td rowspan="6">Redevelopment Area</td><td rowspan="2">Ford Site</td><td rowspan="2">Development rights awarded to master developer</td><td>Alternative Urban Area-wide Review (AUAR)</td><td colspan="3">Infrastructure development</td><td rowspan="2">Future phases</td></tr>
<tr><td colspan="2">Detailed development plan</td><td colspan="2">First phase of development</td></tr>
<tr><td rowspan="2">West Side Flats</td><td colspan="3">Wastewater infrastructure improved to facilitate crossing under the Mississippi River to support additional land use intensity</td><td colspan="3"></td></tr>
<tr><td colspan="6">Sites are redeveloped in phases</td></tr>
<tr><td>Snelling-Midway (Soccer Stadum)</td><td colspan="2">First phase of development (soccer stadium and park)</td><td colspan="4">Future phases</td></tr>
<tr><td rowspan="2">Hillcrest</td><td colspan="2" rowspan="2"></td><td rowspan="2">Site sold to St. Paul Port Authority</td><td>Alternative Urban Area-wide Review (AUAR)</td><td>First phase of development</td><td></td></tr>
<tr><td colspan="2">Detailed development plan</td><td>Infrastructure development</td><td></td></tr>
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