

This page intentionally left blank.

# TABLE OF CONTENTS

| Introduction                             | 5   |
|--|-----|
| Land Use                                 | 27  |
| Transportation                           | 53  |
| Parks, Recreation and Open Space         | 93  |
| Housing                                  | 109 |
| Water Resources Management               | 179 |
| Heritage and Cultural Preservation       | 201 |
| Mississippi River Corridor Critical Area | 213 |
| Implementation                           | 215 |

This page intentionally left blank.



# 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 overarching issues that are integrated into each chapter, including racial and social equity, aging in community, community/public health, economic development, sustainability/resiliency and urban design. 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.

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

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.

# 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 vear 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. 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).

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-Englishspeaking 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, 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.
- Large redevelopment 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, maintain 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.

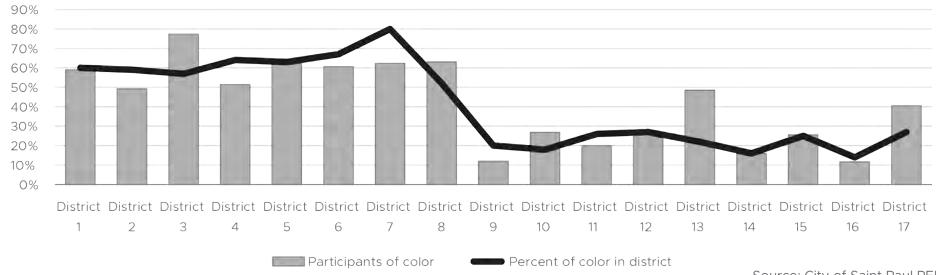
Extensive community engagement was undertaken to set the community vision and priorities for the Comprehensive Plan, and to identify issues to address within it. Our goal was to reach as many people as possible; be genuine about the role of engagement; and be representative by race, age and geography.

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 May-September 2016, the 800+ people of color





Source: City of Saint Paul PED

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 \_\_\_\_\_\_. The City Council held a public hearing in \_\_\_\_\_\_ and adopted the 2040 Comprehensive Plan in \_\_\_\_\_. The adopted Plan was sent to the Metropolitan Council on \_\_\_\_\_.

## **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 placebased 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, multimodal 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.

## 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.



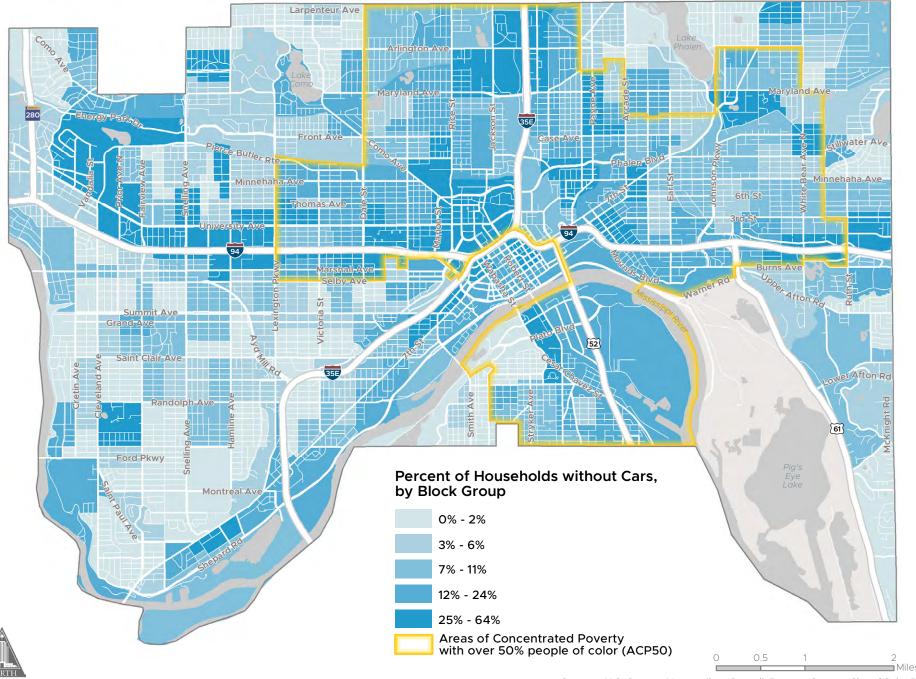
# Appendix A

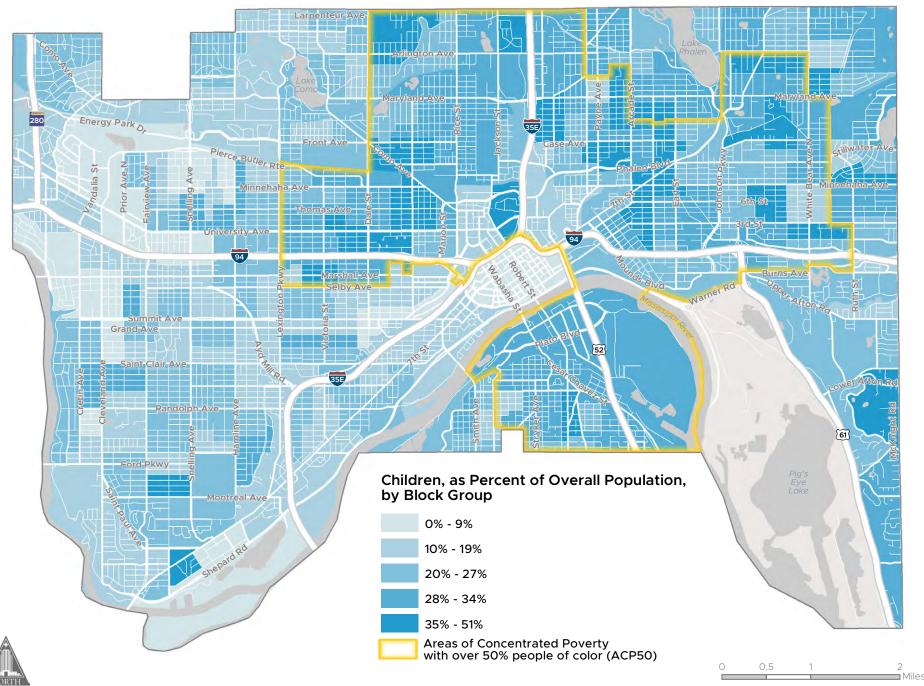
To view the following data online, please visit our Open Information Platfrom at: https://information.stpaul.gov/

| ap IN-1: Carless Households 1                 |
|---|
| ap IN-2: Children - Percent of Population 1   |
| ap IN-3: Family Poverty Rate 1                |
| ap IN-4: Homeownership1                       |
| ap IN-5: High School Graduation Rate1         |
| ap IN-6: No Bachelors Degree20                |
| ap IN-7: Non-English Speakers2                |
| ap IN-8: Non-Family Households2               |
| ap IN-9: Non-White                            |
| ap IN-10: Severely Cost Burdened Households 2 |
| ap IN-11: Single Parents                      |

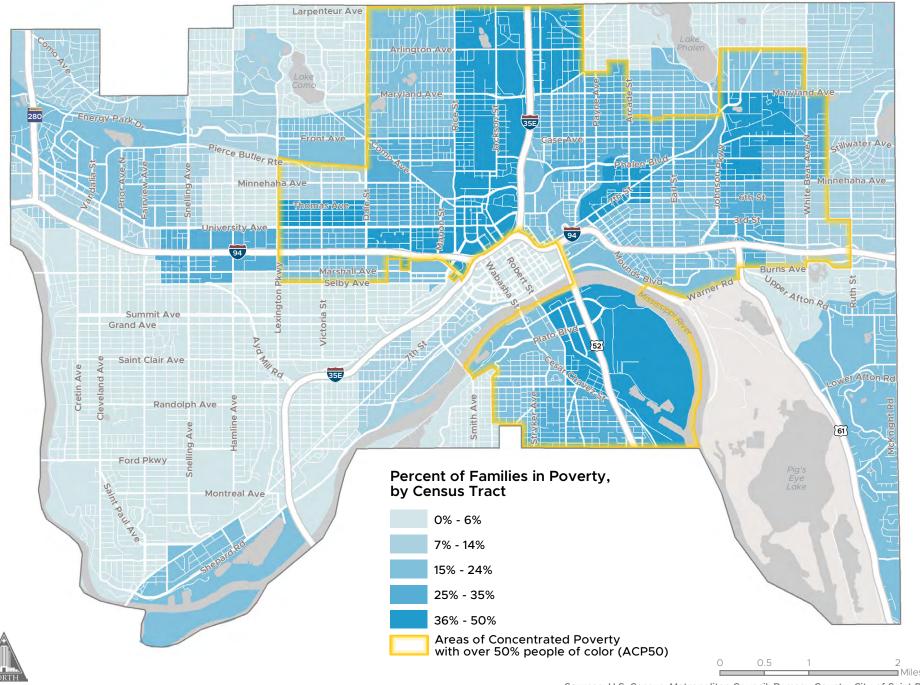
Note: ACP50 data for all from Metropolitan Council via MN Geospatial Commons, from annual release (2/5/2018). Other data as noted.

Map IN-1: Carless Households

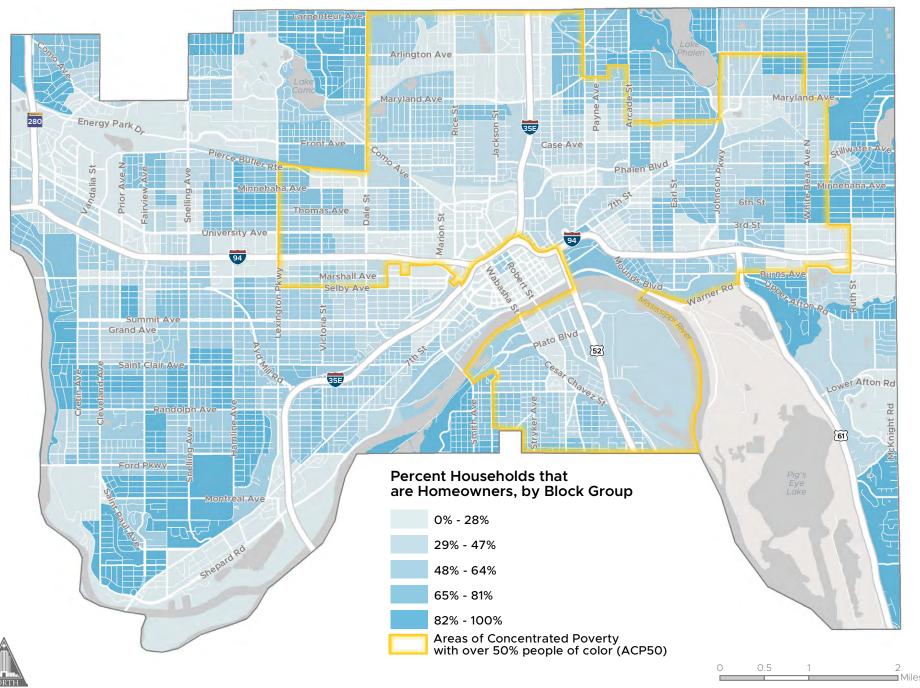




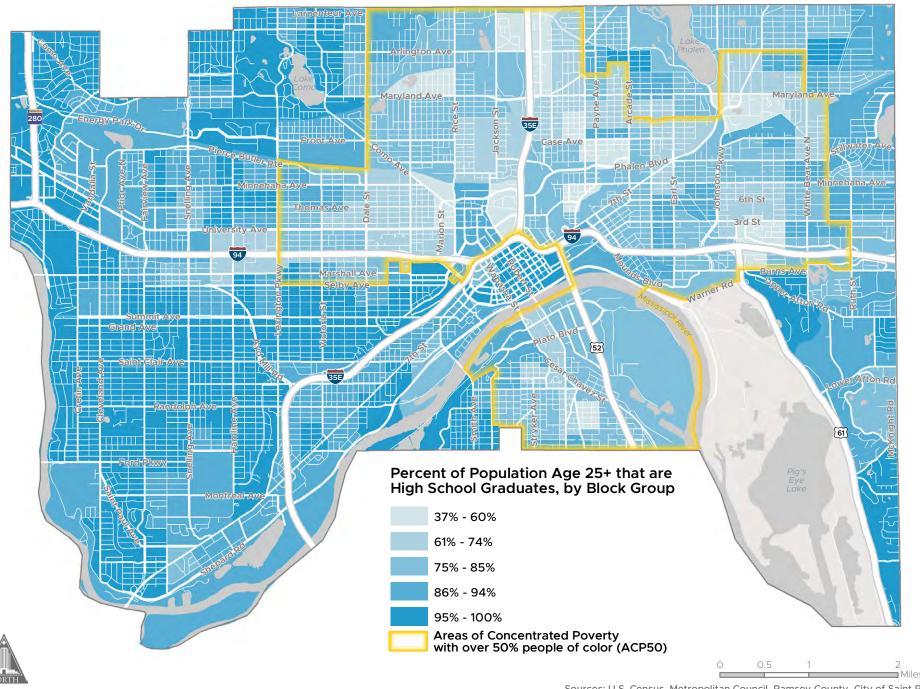
Map IN-3: Family Poverty Rate



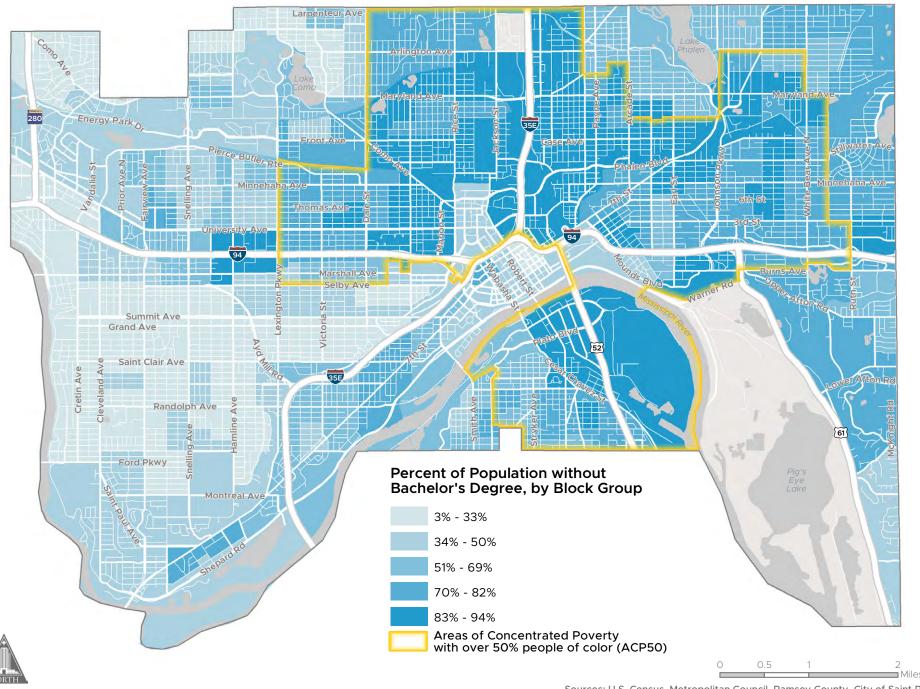
Map IN-4: Homeownership



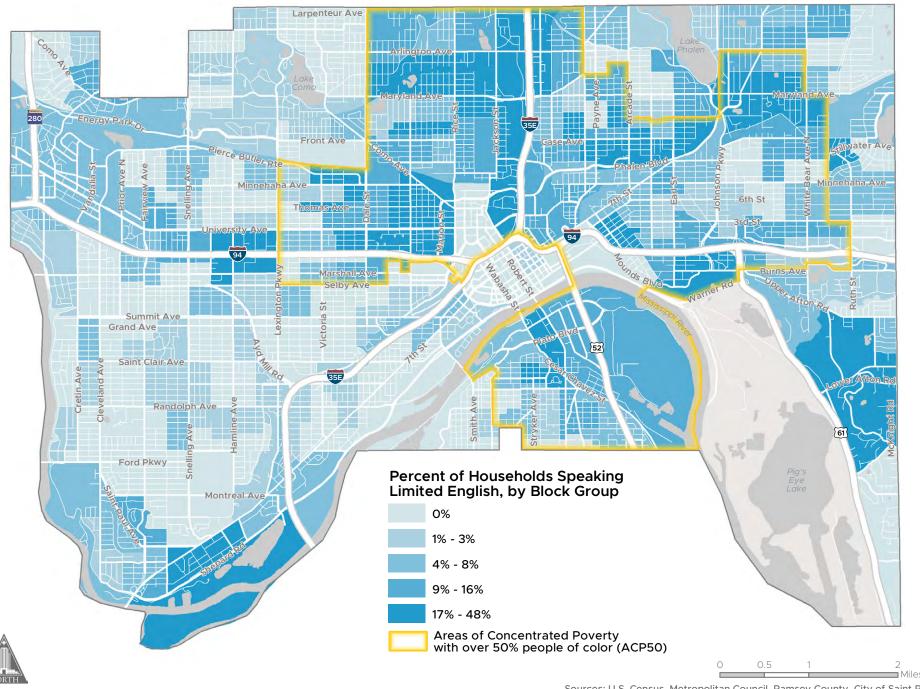
Map IN-5: High School Graduation Rate



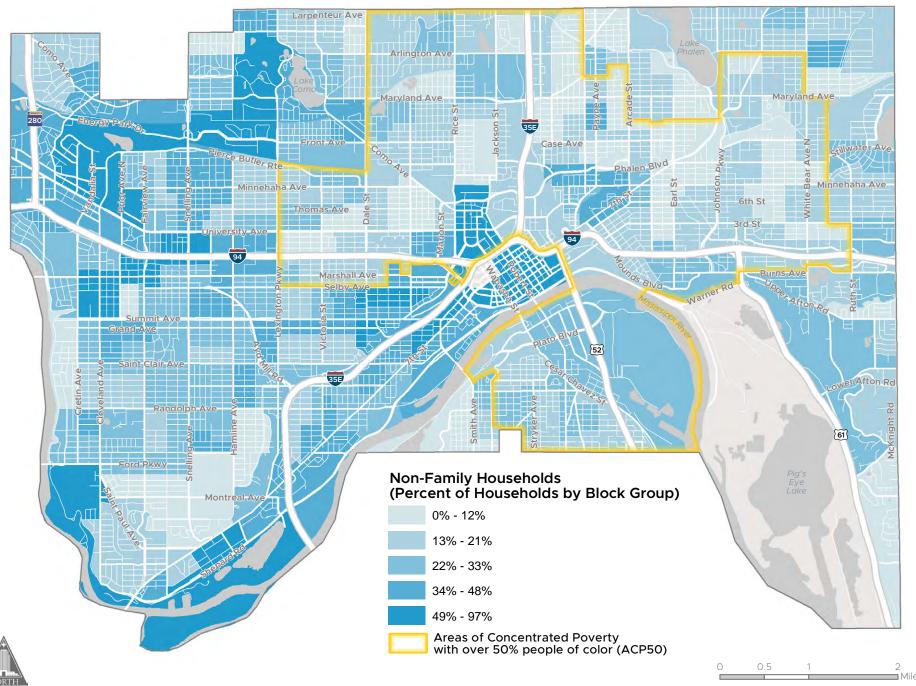
Map IN-6: No Bachelor's Degree

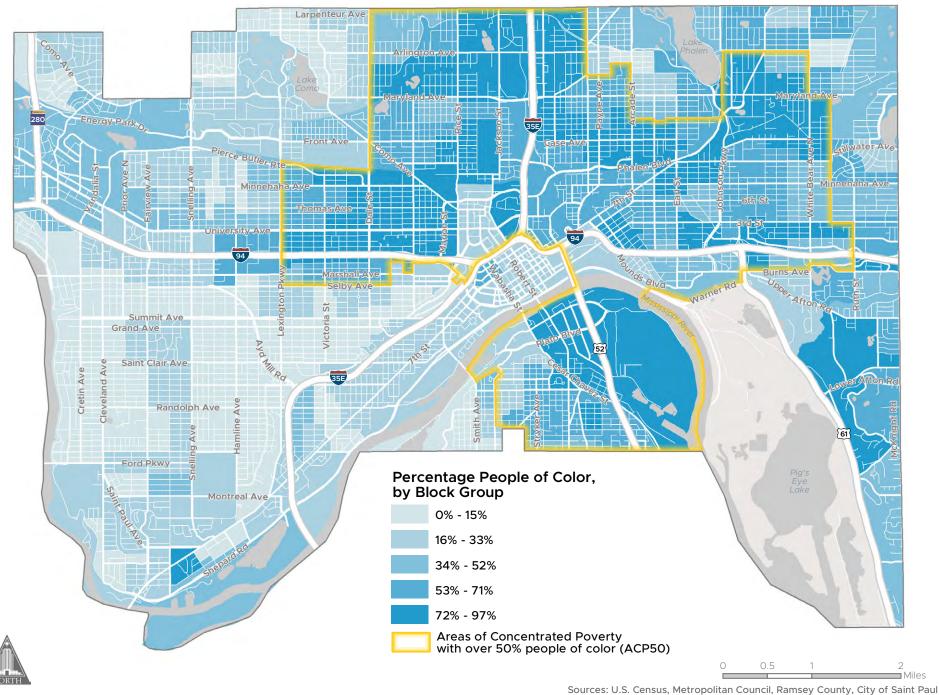


Map IN-7: Non-English Speakers



Map IN-8: Non-Family Households

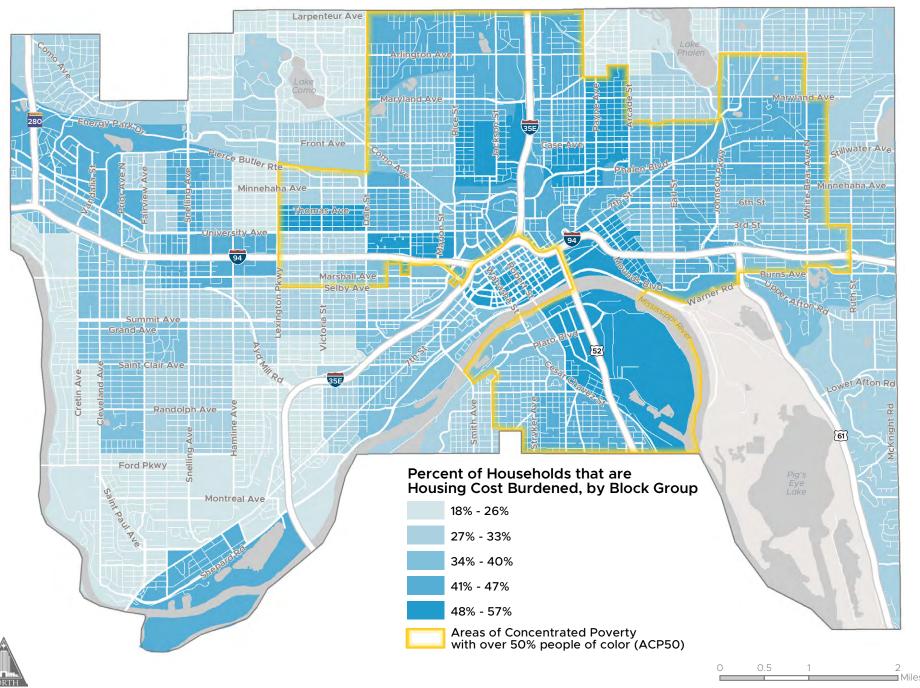




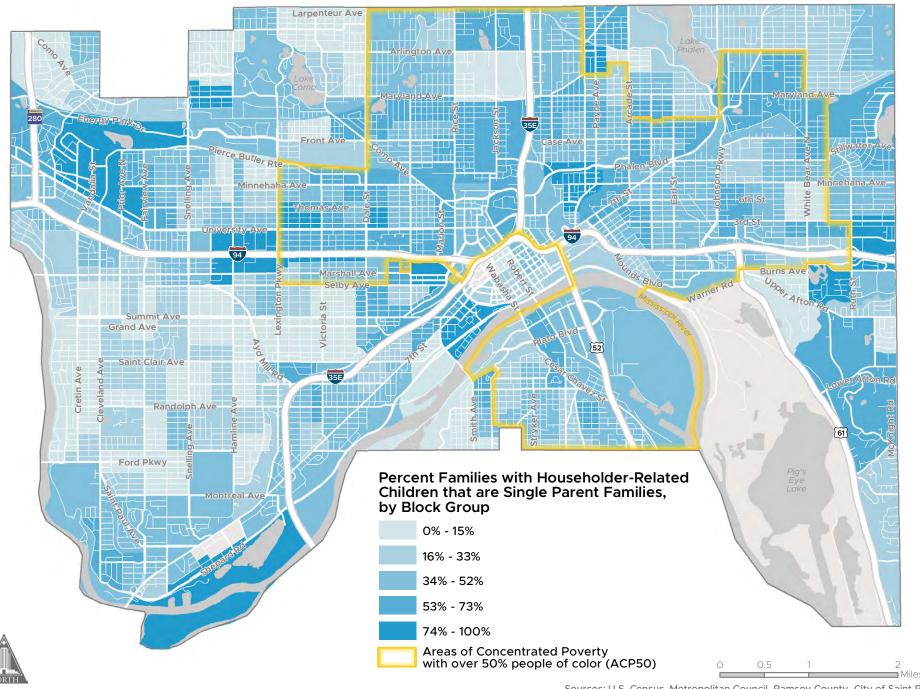
Public Hearing Draft - November 2, 2018

Appendix A | INTRODUCTION 23

Map IN-10: Severely Cost Burdened Households



Map IN-11: Single Parents



This page intentionally left blank.



# 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.

# 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 and adaptable 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. Redevelop 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 (Figure 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**

The policies in this chapter support a transitoriented development (TOD) approach. Focusing development along transit service, in a way that is well-designed and integrated into an existing community, will produce tangible benefits for residents, employers and employees. Certain benefits of TOD make it distinct from conventional development approaches. These benefits include:

- Quality of Life TOD can result in many quality-of-life benefits, including reducing automobile dependency; increasing the range of housing options, both the types of housing and the range of affordability available to a community; and enhancing the vitality of neighborhood main streets and centers.
- Public Health Because TOD reduces automobile dependency, residents can take advantage of a more walkable environment. Reduced vehicle trips also result in improved air quality.

- Economic Development TOD provides affordable access to jobs for people without automobiles or with few automobiles per household, attracts employers to locate around station areas, and broadens the overall tax base.
- Community Character The increased density in TOD projects provides opportunities to create public spaces and well-designed buildings that give identity and vitality to those spaces.
- Environmental Quality In addition to the public health benefits, TOD provides a design alternative to sprawl, and is an opportunity to pursue environmentally-sensitive site planning and green architecture.
- Transit Use when development does not have to be served solely by the automobile, TOD leads to increased transit ridership and the potential for additional funding sources for new transit facilities.

(Adapted from Planning and Urban Design

**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 iobs:
- 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;
- encouraging cultural and arts-based businesses and business districts, such as Little Mekong, Little Africa, Rondo and the Creative Enterprise Zone;

- supporting business, real estate and financial models that keep more money locally, such as locally-owned businesses, local-prioritized employment, employeeowned businesses and commercial land trusts:
- 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.

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 publiclyaccessible views through the regulation of structure placement, height, bulk and scale while accounting for other priorities (Figure LU-

# 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-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. (Figure T-17)

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 vehilcle charging and reduced parking minimums.

**Policy LU-14.** Ensure that stand-alone parking uses are limited, and that structured parking is mixed-use and/or convertible to other uses.

**Policy LU-15.** 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-16.** Promote access to sunlight for solar energy systems while accounting for the development rights of adjacent properties. (Figure: Map LU-6)

Policy LU-17. 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-18.** 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-19.** Encourage private landowners to provide public access to privately-owned open spaces, and facilitate joint use of athletic fields and school playgrounds.

### **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:

- 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.
- 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-20.** Identify, preserve, protect and, where possible, restore natural resources 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-21.** 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-22. Strengthen neighborhood connections to and within Downtown Saint Paul through development and improvements that support and complement Downtown businesses and urban villages.

**Policy LU-23.** Prioritize public and private investments in infrastructure that:

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

**Policy LU-24.** Continue to strengthen Downtown as a residential neighborhood that provides services and amenities for people of all ages.

Policy LU-25. 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-26. 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-27.** Support pedestrian-friendly streetscapes and visual interest through commercial building design.

**Policy LU-28.** Ensure that building massing, height, scale and design gradually transition to those permitted in adjoining districts.

## **Neighborhood Nodes**

Neighborhood Nodes are compact, mixeduse 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. The intent is for Neighborhood Nodes to be 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-29.** 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.

## **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
- Como-Front-Dale
- Como-Snelling
- Dale Station Area
- District del Sol
- E. 7th Street-Arcade
- 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-Dale
- Montreal-W. 7th-Lexington
- Mounds Station Area
- Mount Airy-Jackson
- Payne-Phalen

- Payne-Tedesco
- Phalen Village
- Phalen-Arcade
- Phalen-Cayuga
- 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/Minnehaha-Snelling
- St. Anthony Park Village
- St. Clair-Cleveland
- St. Clair-W. 7th
- Stillwater-Iroquois
- Stryker-George
- 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-Marvland

## **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, https://www. planetizen.com/node/70261)

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.

**Policy LU-30.** 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-31.** Establish or enhance open space close to Neighborhood Nodes, such as public parks, publicly-accessible private open spaces, and school playgrounds.

Policy LU-32. 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-33. Encourage 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-34.** Provide for multi-family housing along arterial and collector streets to facilitate walking and leverage the use of public transportation.

Policy LU-35. Promote neighborhoodserving commercial businesses within Urban Neighborhoods that are compatible with the character and scale of the existing residential development.

Policy LU-36. 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 while minimizing the reduction of tax base.

Policy LU-37. 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-38.** 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-39.** Maintain large-lot residential development with private utilities that preserves the natural ecosystem along the river bluffs.

**Policy LU-40.** Allow for cluster development with public utilities that preserves the natural ecosystem along the river bluffs.

## 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-41. 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-42.** Support and encourage brownfield redevelopment that increases tax base, job creation and job retention.

**Policy LU-43.** 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-44.** 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-45.** Minimize the amount of surface parking in industrial districts through a more efficient use of existing parking and development of shared parking.

**Policy LU-46.** Pursue partnerships to improve public open space access along the Mississippi River.

**Policy LU-47.** Support efforts to convert former industrial buildings to complementary production uses.

**Policy LU-48.** Support efforts to combine small parcels in industrial zones in order to allow for uses requiring larger building footprints.

**Policy LU-49.** 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-50. 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-51. 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-52.** 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. 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. 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-53. Lessen the negative impacts of interstate highways by supporting design interventions, such as "freeway lids" and landscaping and liner buildings on new bridges, that improve connectivity, hide the road and/or reduce pollution.

**Policy LU-54.** Protect intermodal operations and freight railways from encroachment of other land uses that conflict with their safe operation.

**Policy LU-55.** Use the least amount of land practicable for transportation and utilities uses in order to maximize land for urban development.

**Policy LU-56.** Protect and expand river shipping terminals to strengthen the role of Saint Paul as a logistics hub of the Upper Mississippi.

**Policy LU-57.** Ensure that industrial development needing access to freight infrastructure is appropriately located to serve its freight and other intermodal needs

This page intentionally left blank.

Public Hearing Draft - November 2, 2018

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

# Appendix A

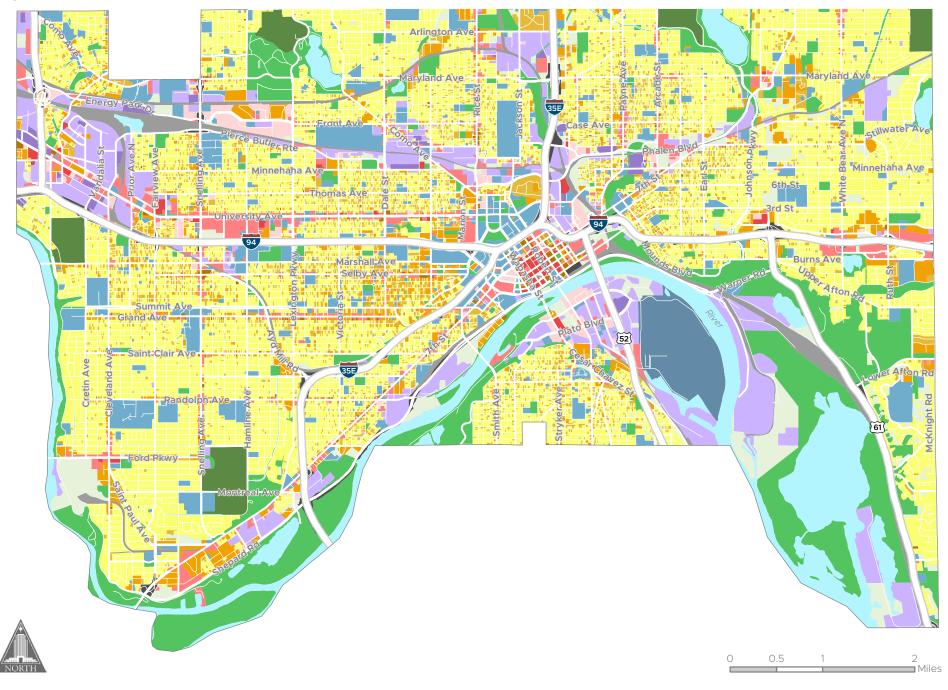
| Map LU-1: Current Land Use (2016)                 | 41  |
|---|-----|
| Map LU-2: 2040 Land Use                           | 43  |
| Map LU-3: Opportunity Sites                       | 45  |
| Map LU-4: Significant Public Views                | 46  |
| Map LU-5: Thive MSP 2040 Community Designation    | 47  |
| Map LU-6: Gross Solar Potential                   | .48 |
| Appendix <b>B</b>                                 |     |
| Figure LU-1: Current Land Use Table (2016)        | 50  |
| Figure LU-2: 2040 Land Use Table                  | 50  |
| Figure LU-3: Figure LU-3: 2040 Employment Density |     |
| and General Land Use Mix                          | 51  |
| Figure LU-4: 2040 Residential Land Use Density    |     |
| Ranges  | 51  |
| Figure LU-5: Transit Density Goals                | .52 |
| Figure LU-6: General Housing Unit Development     |     |
| Estimates and Timeline Based on Opportunity Sites | 52  |

Public Hearing Draft - November 2, 2018

Single Family Detached Single Family Attached Multifamily Retail and Other Commercial Office Mixed Use Residential Mixed Use Industrial Mixed Use Commercial and Other Industrial and Utility Institutional Park, Recreational or Preserve **Golf Course** Major Highway Railway Airport Agricultural Undeveloped Water

40 LAND USE | Appendix A

Map LU-1: Current Land Use



Public Hearing Draft - November 2, 2018

Appendix A | LAND USE 41

#### Land Use Descriptions

#### **Neighborhood Nodes**

Neighborhood Nodes are compact, mixeduse 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 mixed-use core of Saint Paul, 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. Singlefamily 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 neighborhoodserving commercial may also be present, typically at intersections of arterial and/or collector streets.

#### Semi-Rural

Semi-Rural land is primarily large-lot, lowdensity 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.

#### 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.

#### Major Parks and Open Spaces

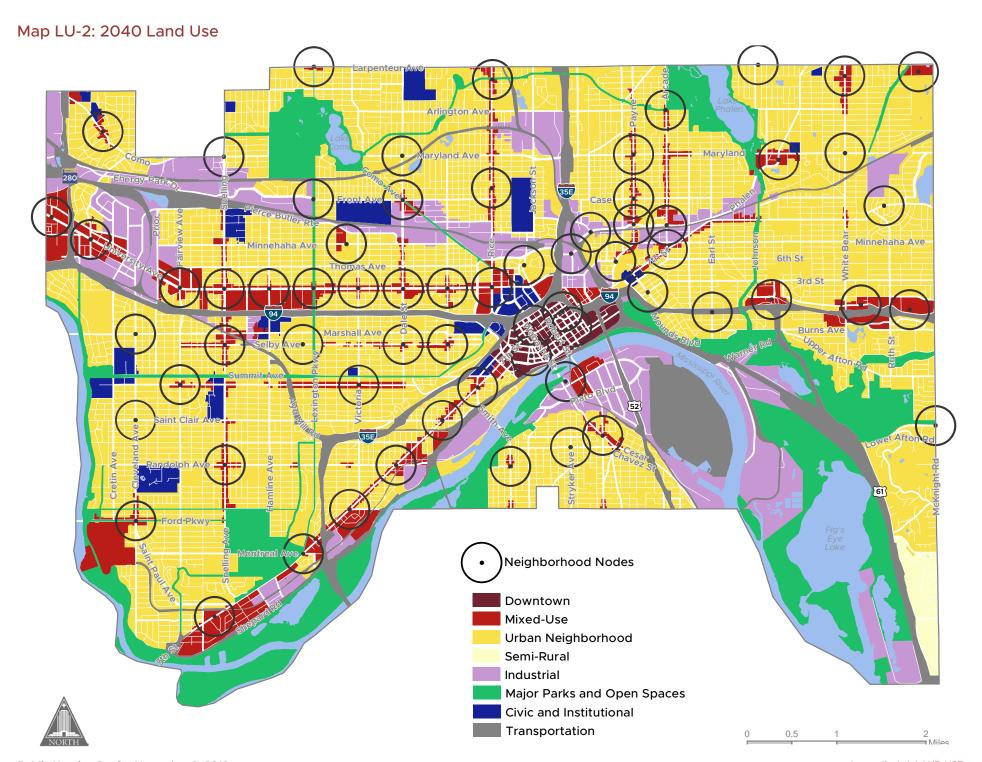
Major Parks and Open Space land use includes regional parks, City parks larger than 200 acres, City parks adjacent to the river and parkways.

#### 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.

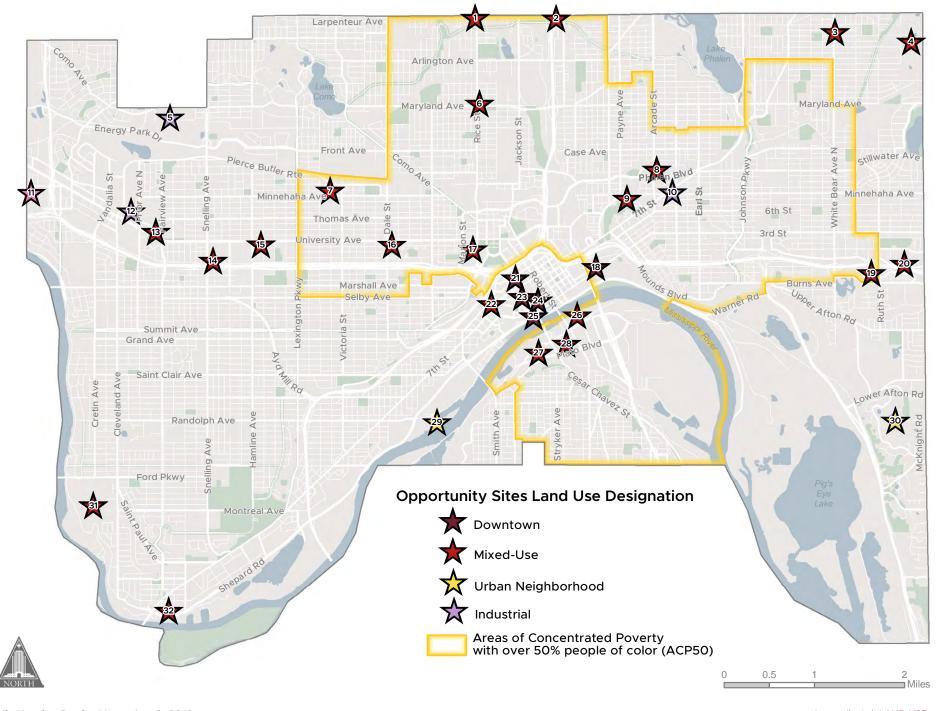


Public Hearing Draft - November 2, 2018

Appendix A | LAND USE 43

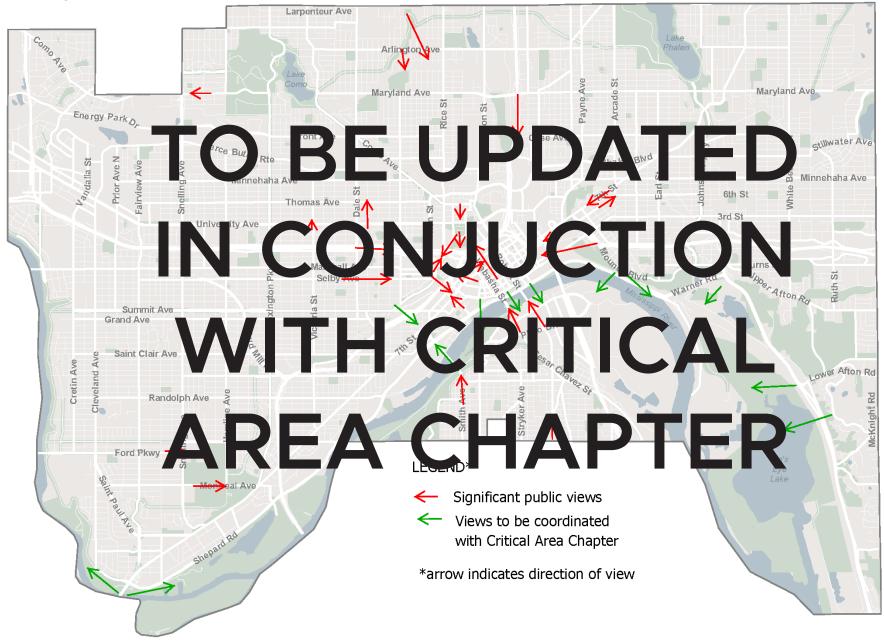
| *             | 1, Rice-Larpenteur Site                  | *             | 17, Sears Site                   |
|---------------|--|---------------|----------------------------------|
| *             | 2, 35E-Wheelock                          | *             | 18, Prince Street                |
| * 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

#### Map LU-3: Opportunity Sites



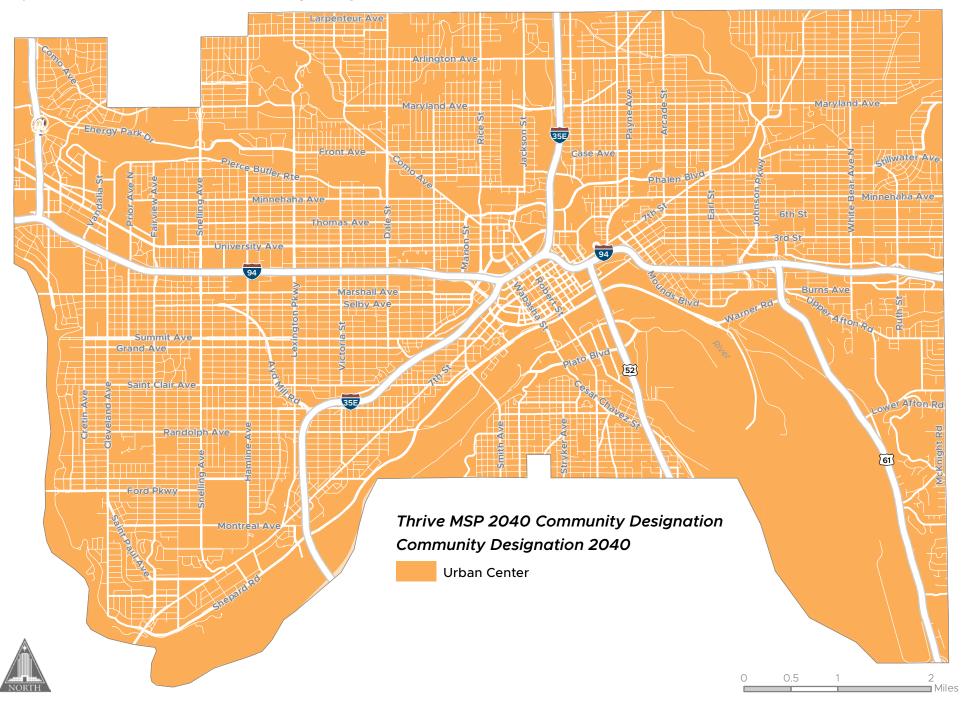
Public Hearing Draft - November 2, 2018 Appendix A | LAND USE 4

#### Map LU-4: Significant Public Views





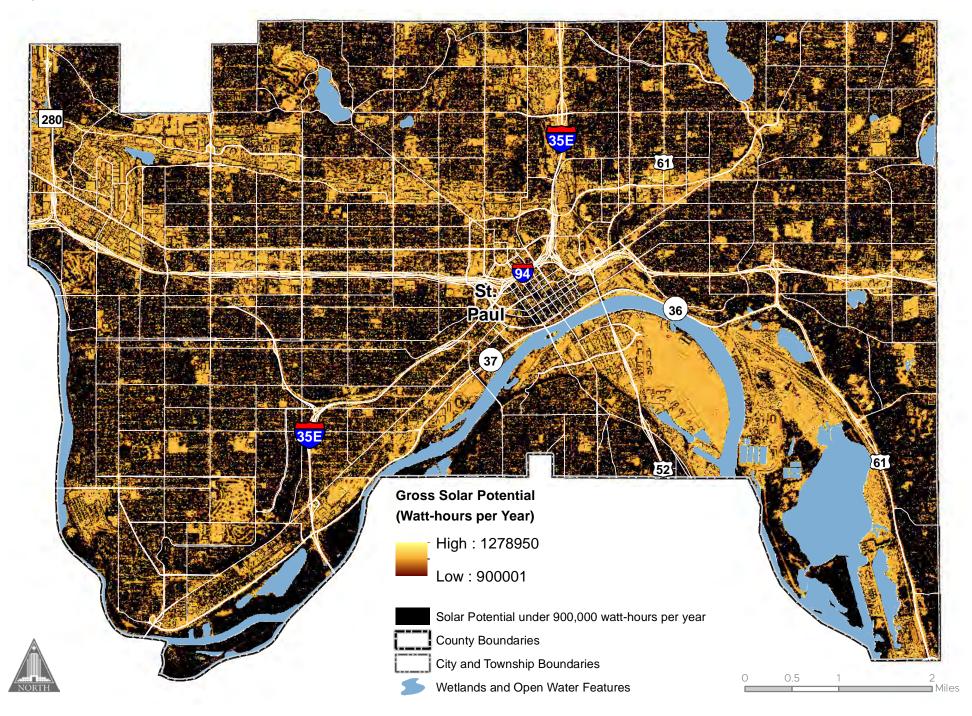
Map LU-5: Thrive MSP 2040 Community Designation



Public Hearing Draft - November 2, 2018

Appendix A | LAND USE 47

Map LU-6: Gross Solar Potential



#### **Gross and Rooftop Solar Resource Calculations**

| Gross Potential | Rooftop Potential | Gross Generation     | Rooftop Generation   |
|-----------------|-------------------|----------------------|----------------------|
| (Mwh/yr)        | (Mwh/yr)          | Potential (Mwh/yr)** | 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 for Review

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     | 863    | 2.4%             |
| Downtown                    | 412    | 1.1%             |
| Industrial                  | 3,439  | 9.6%             |
| Major Parks and Open Spaces | 4,158  | 11.6%            |
| Mixed-Use                   | 2,652  | 7.4%             |
| Semi-Rural                  | 262    | 0.7%             |
| Transportation              | 2,838  | 7.9%             |
| Urban Neighborhood          | 18,762 | 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%                     |

<sup>\*</sup> Land use mix represents a generalized average for the land use type citywide. It is not a mandate or requirement for any individual development project.

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

| Land Use Type      | Base Range        | At Neighborhood Node |  |  |
|--------------------|-------------------|----------------------|--|--|
| Downtown           | 30-300 units/acre |                      |  |  |
| Mixed-Use          | 15-75 units/acre  | 20-200 units/acre    |  |  |
| Urban Neighborhood | 7-30 units/acre   | 15-55 units/acre     |  |  |
| Semi-Rural         | 1-7 units/acre    | n/a                  |  |  |
| Citywide**         | 20 units/acre     |                      |  |  |

<sup>\*</sup>Density ranges represent a goal for new development averaged across the generalized future land use type. Individual projects may exceed targeted goals.

<sup>\*\*</sup>FAR applies to only employment generating land uses. Minimum FAR includes existing employment uses, such as commercial parking and outdoor storage.

<sup>\*\*</sup>Metropolitan Council's requirement for communities with the urban core designation. All of Saint Paul falls within this category.

Figure LU-5: Transit Density Goals\*

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

<sup>\*</sup>Average for new development in areas identified in a station area plan as appropriate for redevelopment.

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

| 2040 Land Has         | 2020  |                          |       | 2030                     |       | 2040                     |       | TOTAL                    |  |
|-----------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|-------|--------------------------|--|
| 2040 Land Use         | Acres | Development<br>Estimates | Acres | Development<br>Estimates | Acres | Development<br>Estimates | Acres | Development<br>Estimates |  |
| Downtown              | 1.9   | 17-173                   | 6.1   | 55-551                   | 0.0   | 0                        | 8.0   | 72-724                   |  |
| Mixed-Use             | 37.4  | 273-2,332                | 193.6 | 1,460-13,274             | 194.5 | 1,475-13,539             | 425.5 | 3,208-29,144             |  |
| Urban<br>Neighborhood | 0.7   | 4-19                     | 75.1  | 484-2,060                | 134.2 | 888-3,757                | 209.9 | 1,376-5,836              |  |
| Industrial            | 0.0   | 0                        | 15.3  | 0                        | 31.5  | 0                        | 46.9  | 0                        |  |
| TOTAL                 | 40.1  | 295-2,524                | 290.1 | 1,999-15,995             | 360.2 | 2,363-17,296             | 690.3 | 4,657-35,705             |  |

<sup>\*</sup> The purpose of this table is to satisfy Metropolitan Council requirements to illustrate development capacity for population growth estimates. The figures in this table are estimated based on many broad assumptions. Redevelopment sites included in the analysis were generally larger than one acre. 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.

<sup>\*\*</sup>Minimum represents an average goal for new development.

<sup>\*\*\*</sup>Individual projects may exceed target goals.



## 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, and prioritizes safety for people walking and biking.

## 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.

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. These priorities - as well as our land use priorities - will also guide our approaches to future technology changes.

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.

Our transportation system will also work handin-hand with land use by improving access to employment, providing quality transit where we expect more density and presenting a finer-grained streetscape in large site redevelopments.

## Goal 1: Investment reflects City priorities.

Policy T-1. Prioritize safety and 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 such as downtown. 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 wellmaintained infrasctructure that benefits the most people (See Maps T-10 and T-11).

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, and 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 2016, there were 314 vehicular crashes involving pedestrians and bicyclists alone, including 4 fatalities and 242 injuries (163 requiring hospital attention).

## **Age and Transportation Trends**

Young and elderly persons use public transit at higher rates than other age groups. As Baby Boomers age, overall transit use is expected to increase, and the design of transit and access to it will need to accommodate that trend. Millennials have had lower levels of driver's license possession than previous generations

at the same age, both nationally and locally, pointing towards increased use of other transportation modes that could endure over their lifetimes.

(based on *Travel Behavior Over Time*, MnDOT, 2015)



# Goal 3: A transportation system that supports employment and access to jobs.

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.

**Policy T-15.** Explore freight delivery solutions that resolve loading/unloading conflicts in congested areas so as to support businesses and provide safety to pedestrians and road users.

**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 and the Metropolitan Airports Commission to maintain a regional aviation system that balances commercial demand and capacity while being compatible with the community.

**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 forthcoming 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 Figure 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, working with transit providers to improve their service offerings and supporting transit facilities (See Maps T-5 and T-6).

Policy T-28. Facilitate intermodal trips at mobility hubs (where transportation modes convene or intersect) by providing enhanced security, lighting, information, 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 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 mode users, 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.

#### **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;
  - pedestrian/bicycle median refuge islands.

#### **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)



Policy T-31. Establish (or re-establish) the rightof-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, higherdensity 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.

#### Goal 5: Sustainable and equitable maintenance models.

Policy T-34. Pursue fiscally-sustainable models for equitably maintaining transportation infrastructure in Saint Paul, including for rightof-way maintenance, bridges, sidewalks, trails and alley snowplowing.

**Policy T-35.** Consider the full long-term infrastructure costs when allocating maintenance funding compared to reconstruction funding.

Policy T-36. 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-37. 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-38. Seek opportunities to improve the environmental sustainability of rights-of-way in the city, such as through shared, stackedfunction green infrastructure (SSGI) and planting trees to reduce the urban heat island effect.

Policy T-39. Lessen the negative impacts of interstate highways by supporting design interventions, such as "freeway lids" 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-40. 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 shapes and responds to technology.

Policy T-41. Ensure that new technologies, such as automated vehicles, further the City's transportation and land use priorities.

Policy T-42. Ensure that right-of-way design accounts for changing vehicle technologies and forms of use, such as automated vehicles, carsharing and ride-sharing.

This page intentionally left blank.

# Appendix A

| Мар | T-1: Missing Sidewalks                          | 62 |
|-----|---|----|
| Мар | T-2: Number of Lanes on Arterials               | 63 |
| Мар | T-3: Bikeways                                   | 64 |
| Мар | T-4: Regional Bicycle Transportation Network    | 65 |
| Мар | T-5: Job Concentrations and Transit             | 66 |
| Мар | T-6: Households without Vehicles and Transit    | 67 |
| Мар | T-7: Existing Transitways                       | 68 |
| Мар | T-8: Planned/Potential Transitways              | 69 |
| Мар | T-9: Boardings and Alightings on Transit System | 70 |
| Мар | T-10: Pavement Condition Index                  | 71 |
| Мар | T-11: Functional Road Classification            | 72 |
| Мар | T-12: Annual Average Daily Traffic              | 73 |
| Мар | T-13: Forcasted 2040 Average Daily Traffic      | 74 |
| Мар | T-14: Future Right of Way Needs                 | 75 |
| Мар | T-15: Freight Corridors and Facilities          | 76 |
| Мар | T-16: Planned Improvements to Metro Highways    | 77 |
| Мар | T-17: Airport Safety Zones and Noise Contours   | 78 |
| Мар | T-18: Transit Market Areas                      | 79 |

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

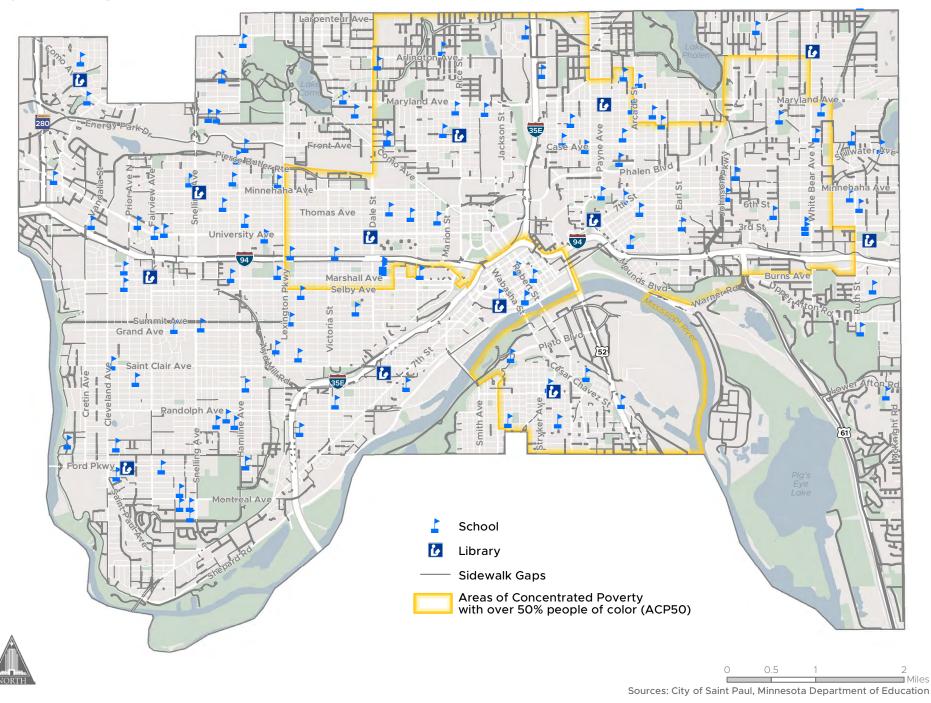
| Appendix B List of Potential Projects     | . 80 |
|---|------|
| Appendix <b>C</b>                         |      |
| Other Required Transportation Information | 81   |

# Appendix **D**

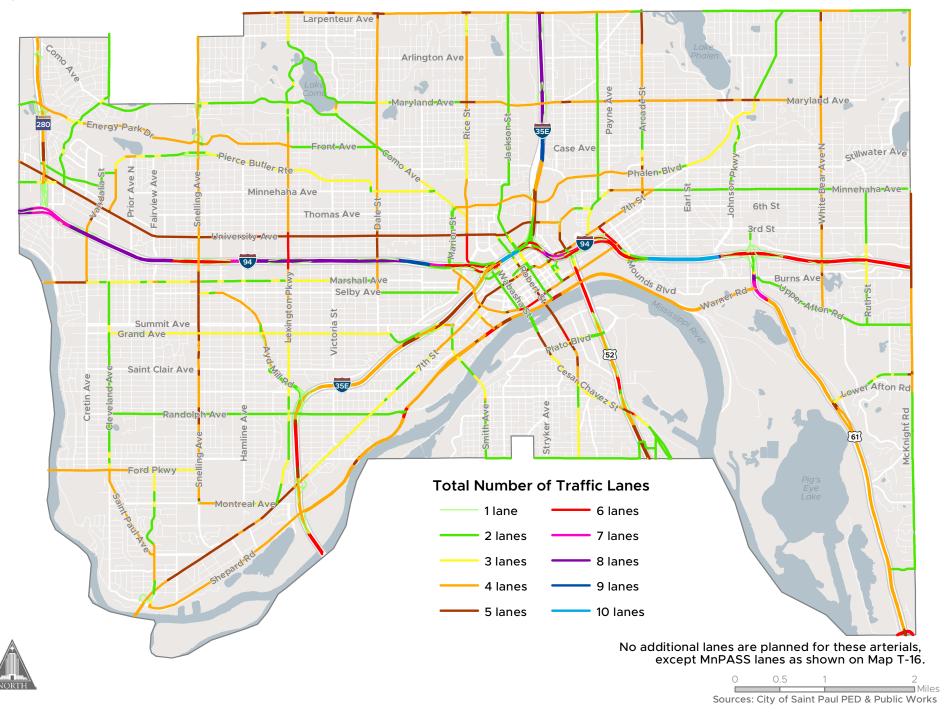
| Figure T | -1: Transpor | tation Analysis | Zone (TAZ) | Estimates | 82 | 2 |
|----------|--------------|-----------------|------------|-----------|----|---|
|          |              |                 |            |           |    |   |

Public Hearing Draft - November 2, 2018 TRANSPORTATION 61

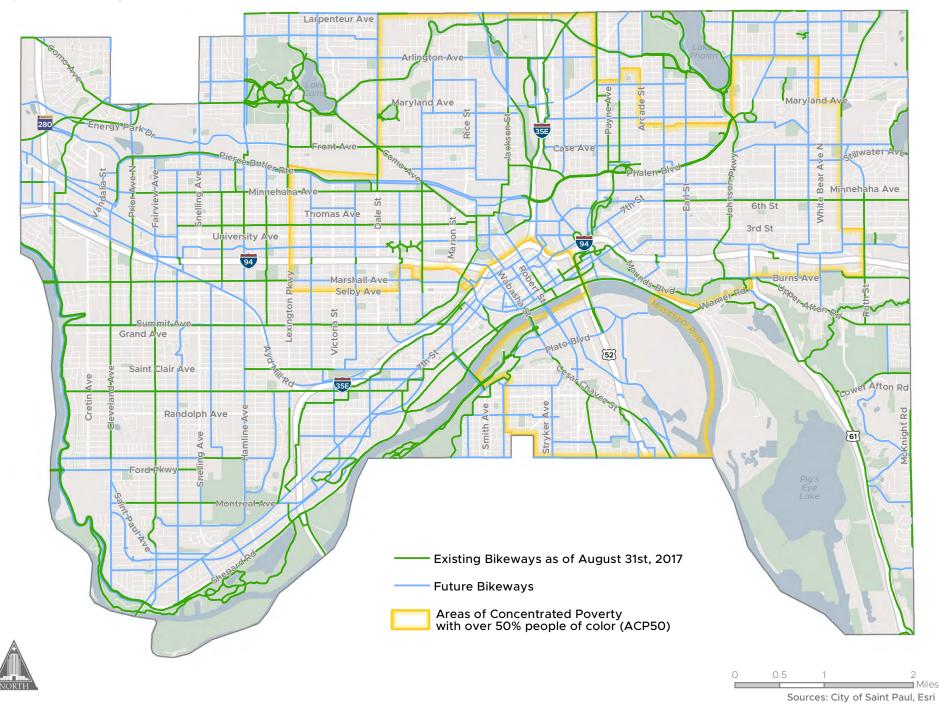
Map T-1: Missing Sidewalks



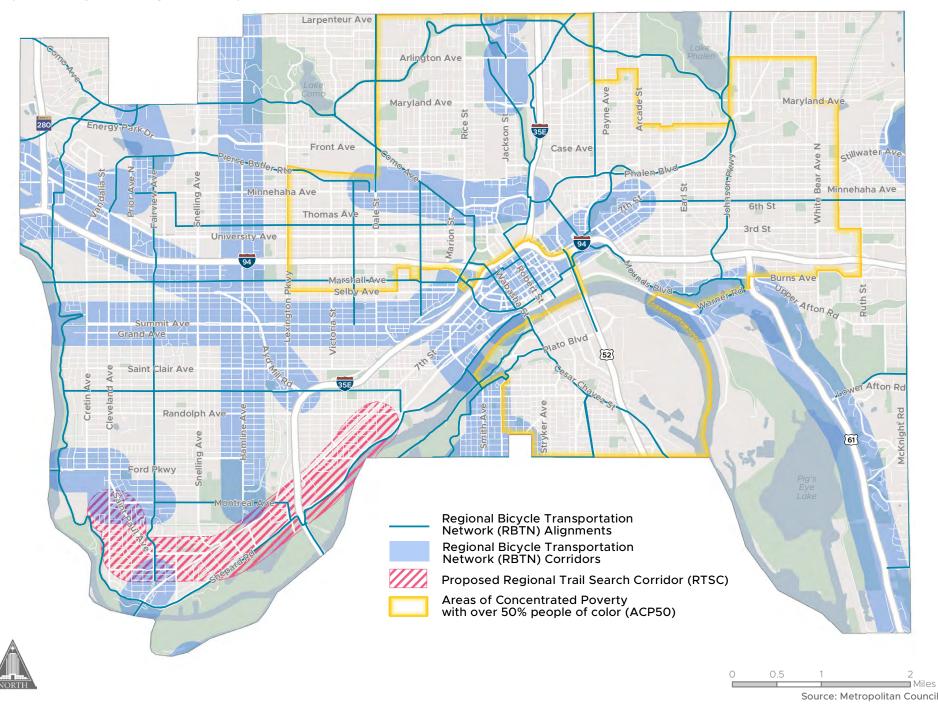
Map T-2: Number of Traffic Lanes on Arterials



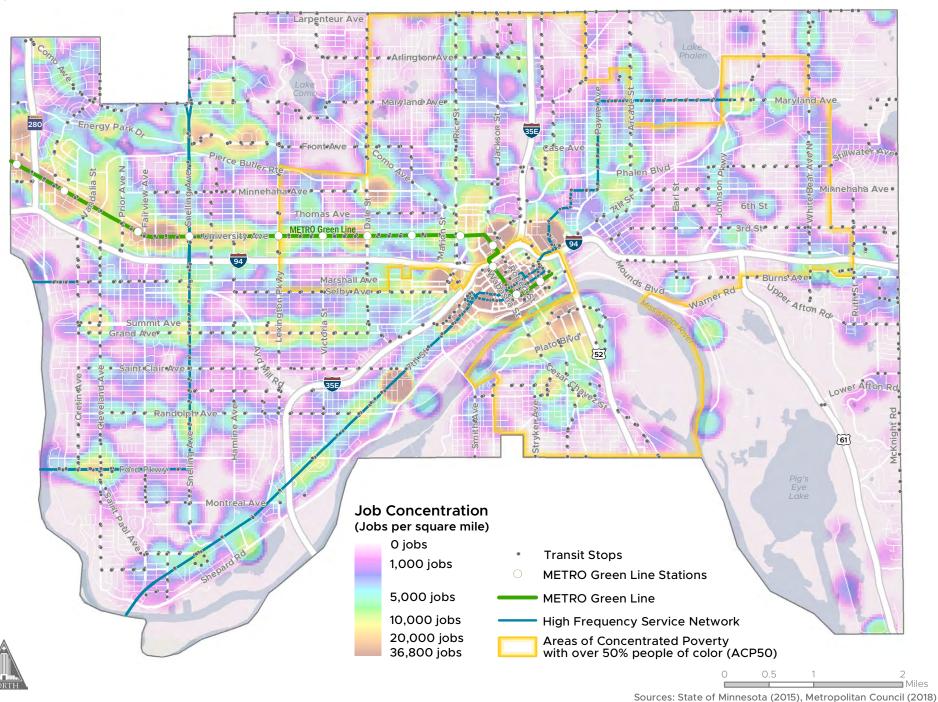
Map T-3: Bikeways



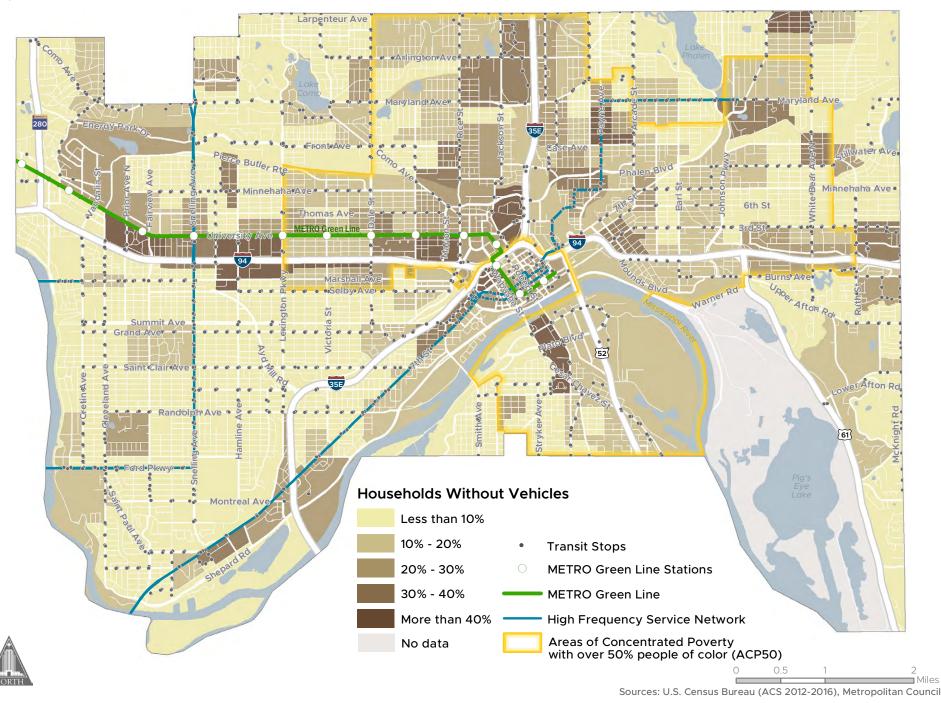
Map T-4: Regional Bicycle Transportation Network



Map T-5: Job Concentrations and Transit



Map T-6: Households without Vehicles and Transit Network

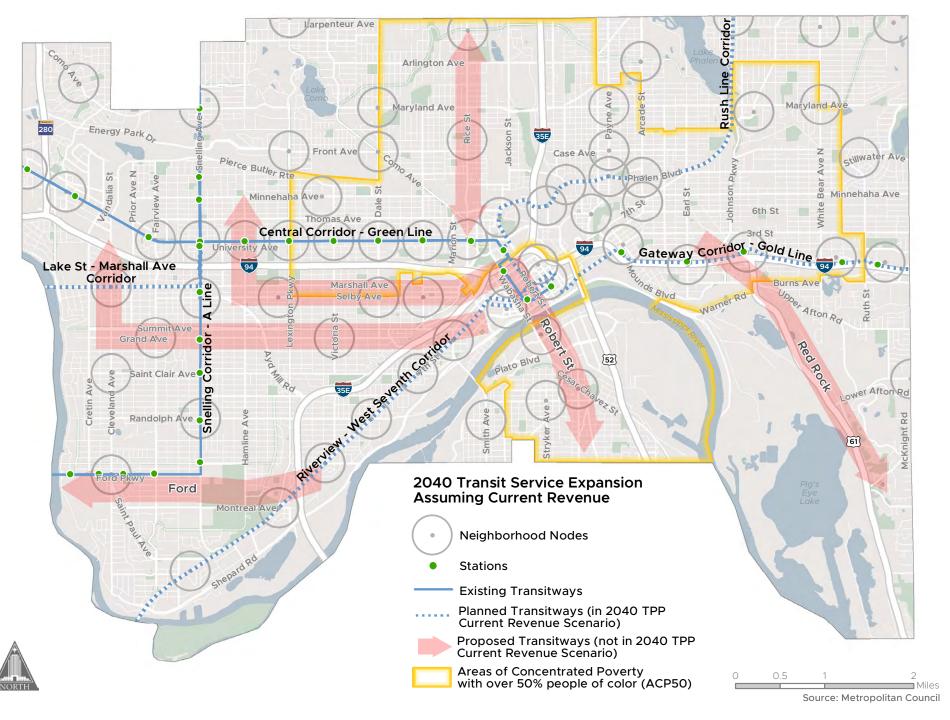


Map T-7: Existing Transitways

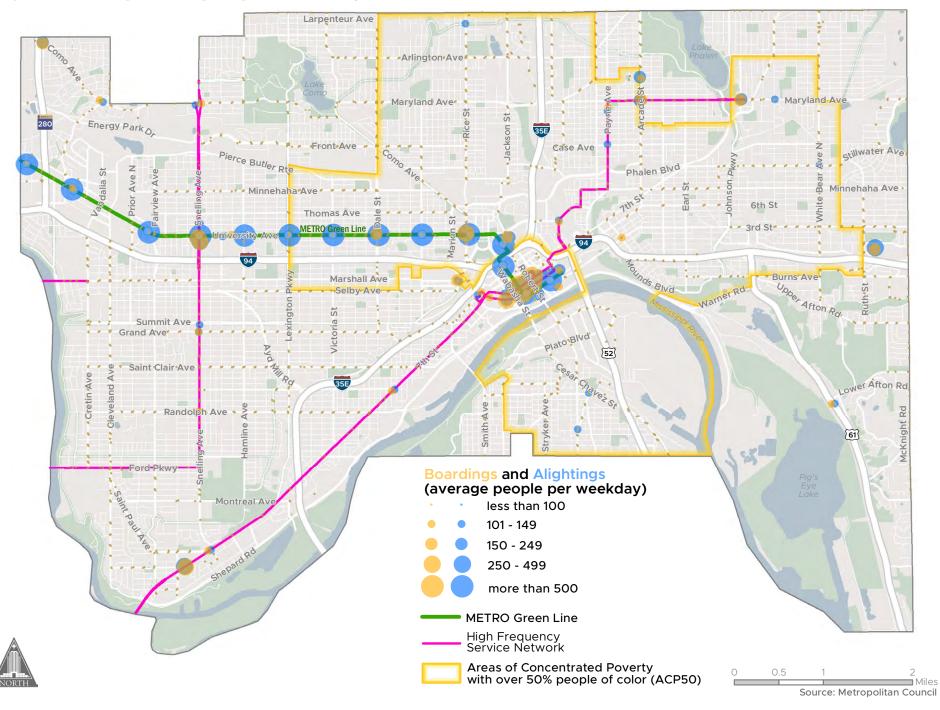


68 TRANSPORTATION | Appendix A Public Hearing Draft - November 2, 2018

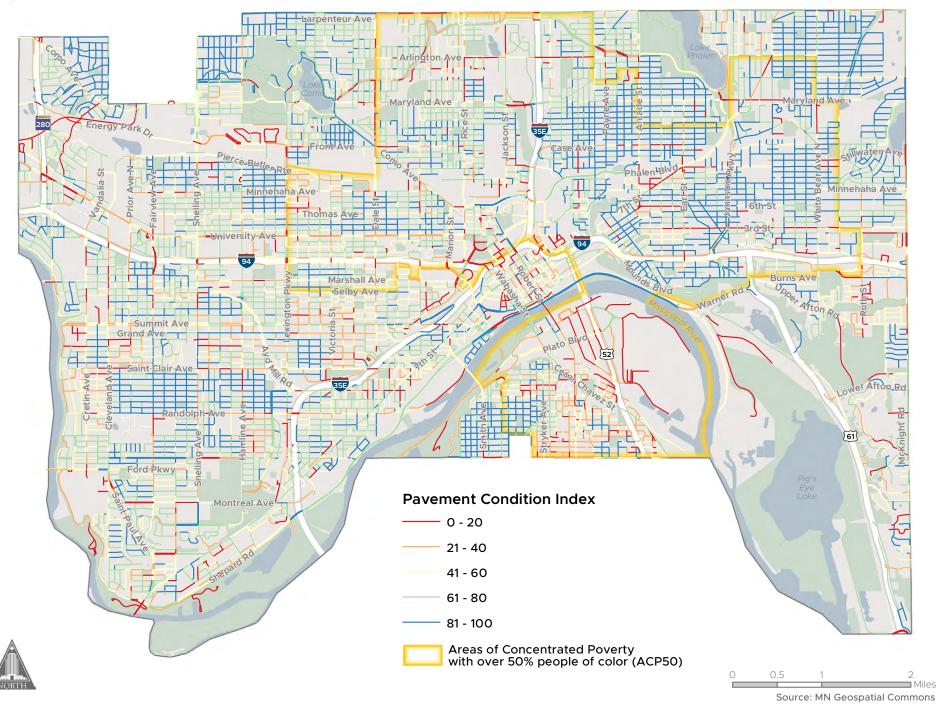
Map T-8: Planned/Potential Transitways



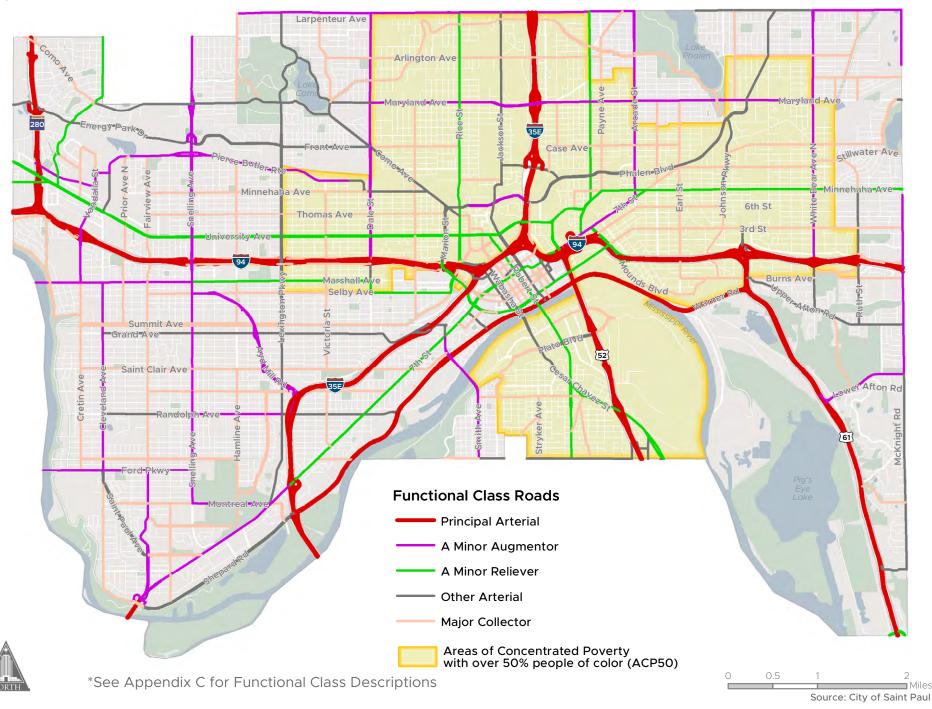
Map T-9: Boardings and Alightings on Transit System



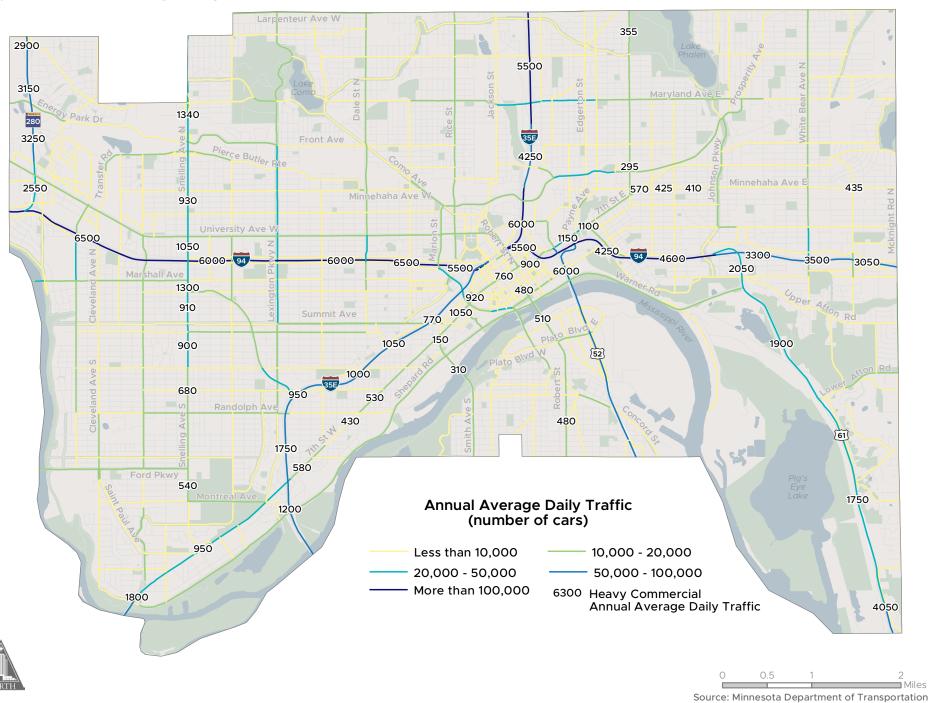
Map T-10: Pavement Condition Index



Map T-11: Functional Road Classification\*



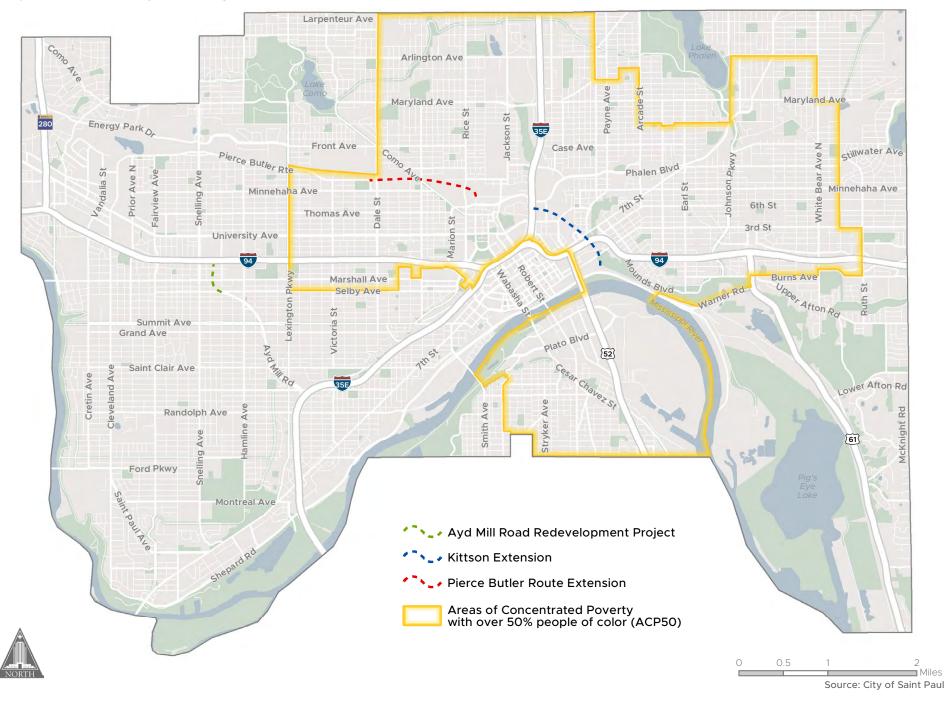
Map T-12: Annual Average Daily Traffic (ADT)



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



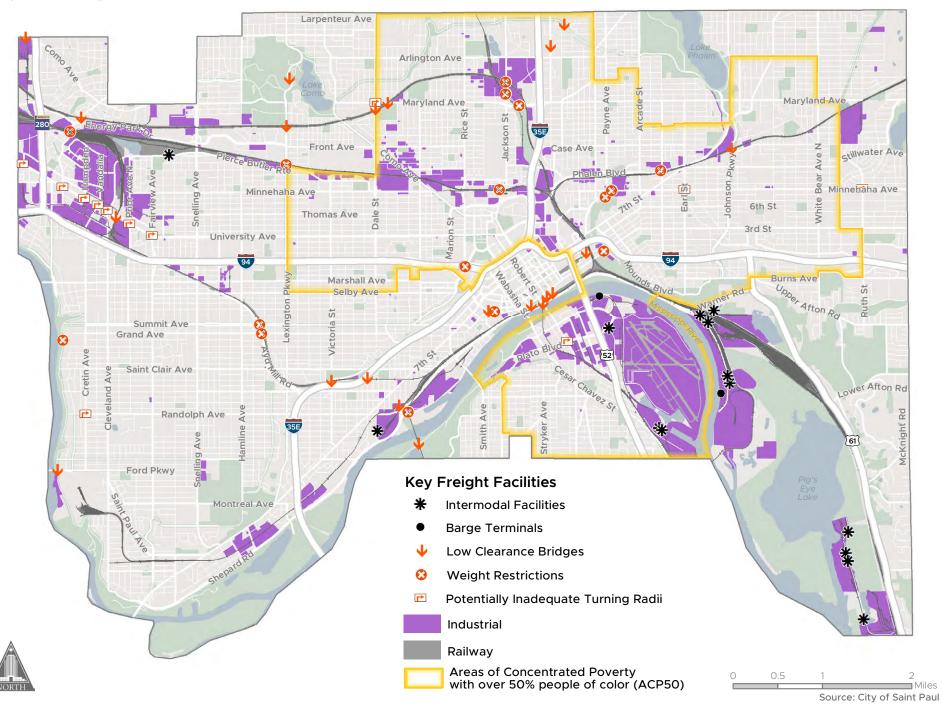
Map T-14: Future Right of Way Needs



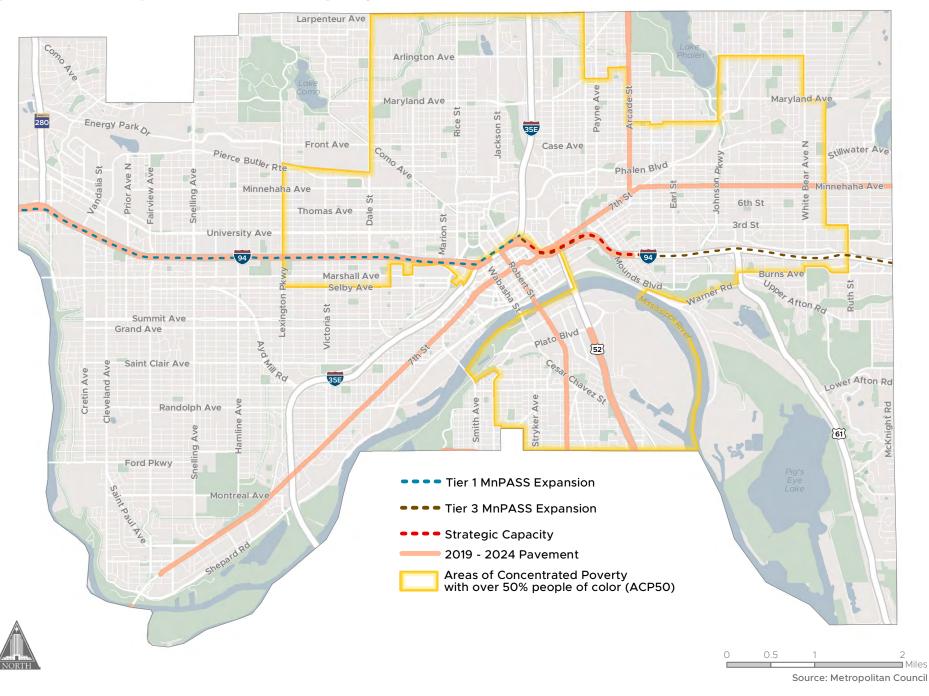
Public Hearing Draft - November 2, 2018

Appendix A | TRANSPORTATION 75

Map T-15: Freight Corridors and Facilities



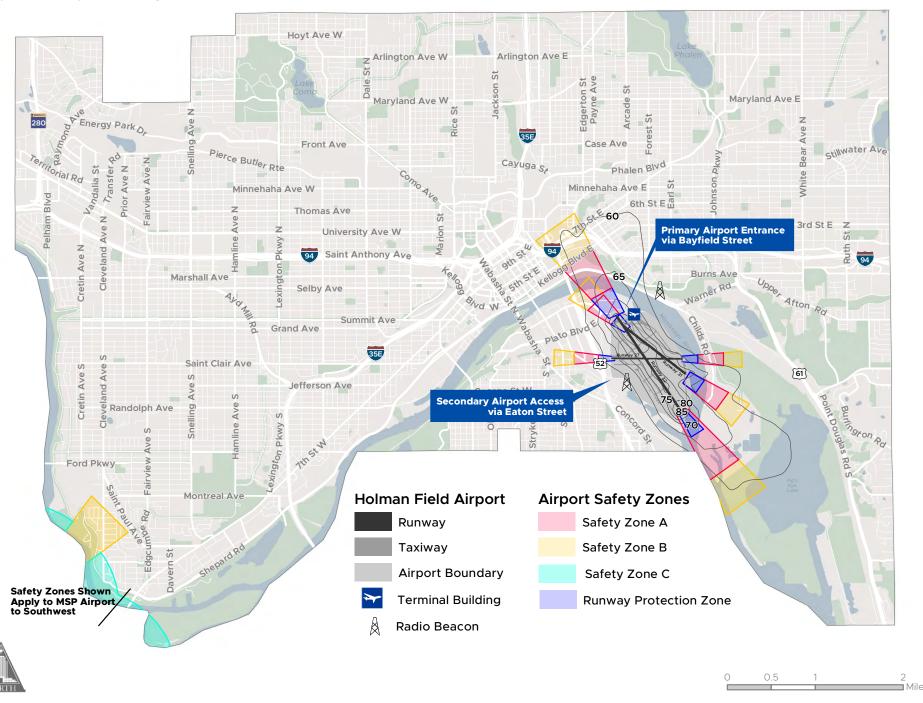
Map T-16: Planned Improvements to Metro Highways



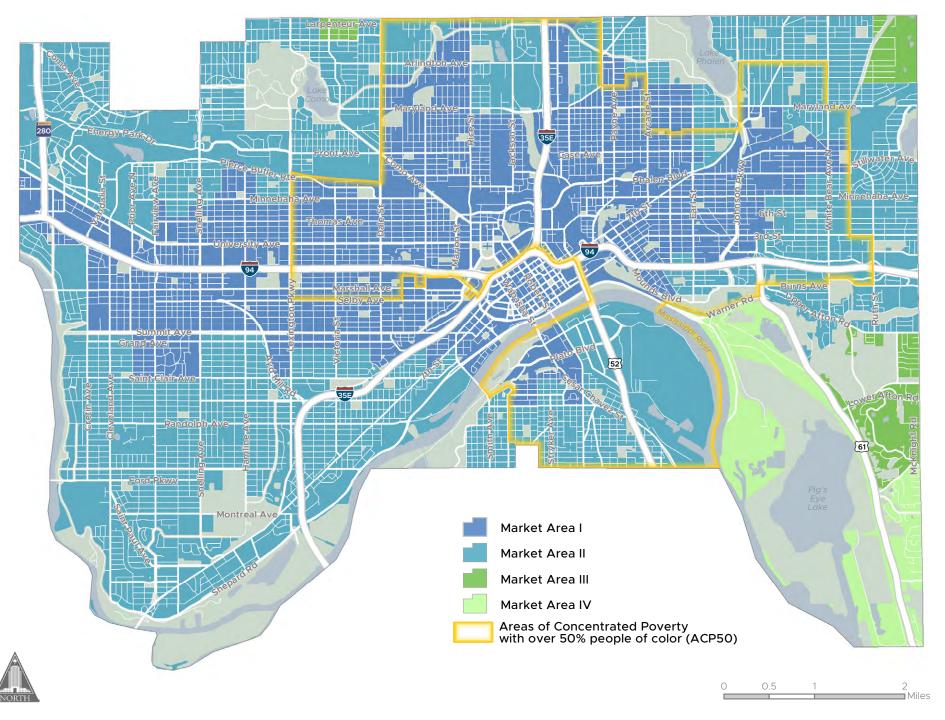
Public Hearing Draft - November 2, 2018

Appendix A | TRANSPORTATION 77

Map T-17: Airport Safety Zones and Noise Contours



Map T-18: Transit Market Areas



Public Hearing Draft - November 2, 2018

#### Appendix B

#### **List of Potential Projects**

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

#### **Projects**

Conversions of four-lane roadways to three-lane roadways

Intersection improvements for safety

Pedestrian facilities

Bicycle facilities

Bridge improvements to safely accommodate all users, over interstates, rivers, railways, and other obstacles to connectivity

Dale Street Bridge over I-94

Kellogg Boulevard/3rd Street Bridge reconstruction

West Midway (Vandalia/Ellis/280/I-94/University) trucking improvements

Kittson extension

Pierce Butler Route extension

Ayd Mill redevelopment, subject to a Supplemental Environmental Impact Statement (EIS) process involving a community task force

Shepard, TH 5, and I-35E connection improvements

Midtown Greenway extension into Saint Paul

**Grand Round completion** 

Capital City Bikeway completion

4th Street and/or 5th Street pedestrian-oriented improvements to enhance the connection between Mears Park and Rice Park

Connect pedestrians to the river by opening new points of river access

Canadian Pacific Rail Spur (Ford Spur) conversion to other transportation uses

New transitways:

Riverview

Gold Line/Gateway

Rush Line

Robert Street

Modern streetcars

**Arterial Bus Rapid Transit** 

#### 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 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. Additional Transit Services

The Metropolitan Council provides Transit Link and Metro Mobility transit services throughout Saint Paul. Private/nonprofit transit services also operate in Saint Paul.

#### 5. 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. 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.

#### Appendix **D**

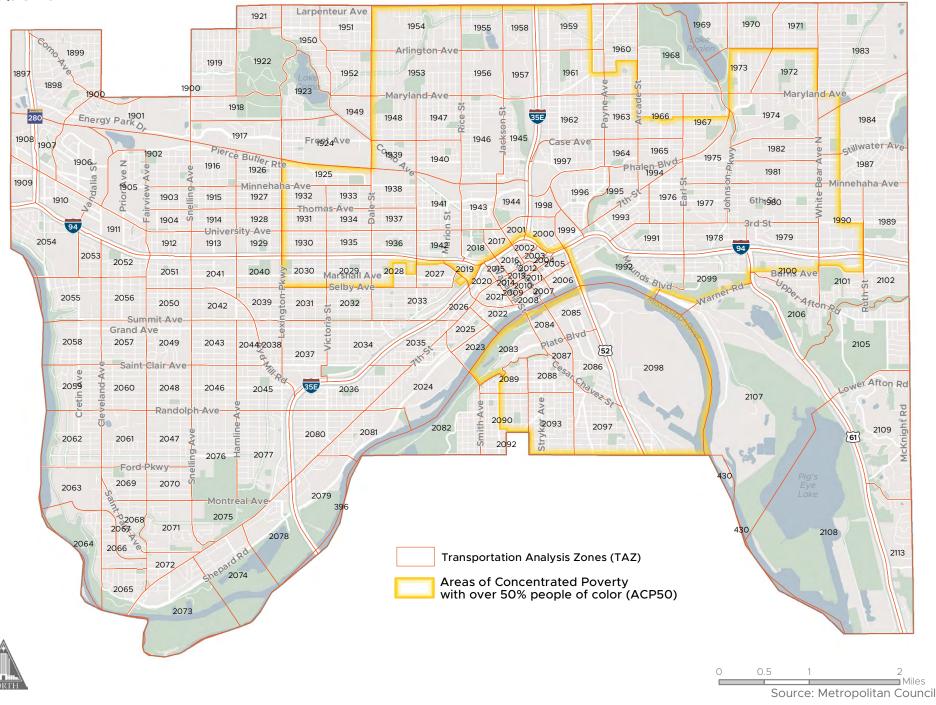


Figure T-1: Transportation Analysis Zone (TAZ) Estimates

| TAZ # | 2010 |     |      |      | 2020 |      |      | 2030 |      | 2040 |      |      |
|-------|------|-----|------|------|------|------|------|------|------|------|------|------|
| IAZ#  | POP  | HH  | EMP  | POP  | HH   | EMP  | POP  | HH   | EMP  | POP  | HH   | EMP  |
| 1897  | 2    | 1   | 608  | 0    | 0    | 583  | 0    | 0    | 654  | 3    | 3    | 722  |
| 1898  | 1616 | 671 | 838  | 1683 | 722  | 933  | 1692 | 727  | 913  | 1729 | 734  | 909  |
| 1899  | 1848 | 654 | 729  | 2081 | 825  | 729  | 2634 | 1073 | 752  | 3410 | 1369 | 773  |
| 1900  | 269  | 133 | 0    | 546  | 228  | 0    | 1241 | 521  | 0    | 2161 | 915  | 0    |
| 1901  | 868  | 422 | 1267 | 1086 | 477  | 2151 | 1199 | 512  | 2479 | 1312 | 542  | 2785 |
| 1902  | 1435 | 607 | 302  | 1546 | 622  | 266  | 1494 | 603  | 251  | 1471 | 593  | 240  |
| 1903  | 1286 | 554 | 92   | 1382 | 569  | 68   | 1338 | 554  | 63   | 1322 | 548  | 60   |
| 1904  | 872  | 481 | 4337 | 1211 | 499  | 4432 | 1164 | 484  | 4259 | 1129 | 470  | 4140 |
| 1905  | 719  | 304 | 3281 | 783  | 323  | 4192 | 766  | 318  | 3892 | 747  | 311  | 3640 |
| 1906  | 890  | 505 | 3186 | 1190 | 534  | 4068 | 1200 | 512  | 4734 | 1221 | 494  | 5400 |
| 1907  | 582  | 276 | 436  | 584  | 293  | 590  | 594  | 285  | 689  | 616  | 280  | 789  |
| 1908  | 601  | 171 | 2415 | 409  | 203  | 3246 | 507  | 240  | 3525 | 612  | 277  | 3797 |
| 1909  | 976  | 543 | 1369 | 1142 | 567  | 1682 | 1149 | 546  | 1829 | 1171 | 530  | 1973 |
| 1910  | 43   | 32  | 2106 | 264  | 149  | 3487 | 573  | 324  | 4094 | 842  | 468  | 4656 |
| 1911  | 975  | 475 | 3212 | 1428 | 633  | 3182 | 1385 | 649  | 3754 | 1372 | 669  | 4316 |
| 1912  | 876  | 388 | 1368 | 1025 | 485  | 1563 | 991  | 459  | 1825 | 978  | 438  | 2076 |
| 1913  | 0    | 0   | 1551 | 108  | 48   | 2158 | 533  | 253  | 3138 | 1262 | 620  | 4258 |
| 1914  | 1197 | 506 | 457  | 1511 | 553  | 573  | 1554 | 588  | 651  | 1623 | 627  | 722  |
| 1915  | 1100 | 437 | 77   | 1269 | 470  | 112  | 1266 | 485  | 135  | 1268 | 496  | 158  |
| 1916  | 1668 | 457 | 1238 | 2111 | 488  | 1229 | 2236 | 499  | 1194 | 2369 | 511  | 1190 |
| 1917  | 1225 | 730 | 4745 | 1526 | 773  | 4454 | 1625 | 775  | 4293 | 1747 | 780  | 4200 |
| 1918  | 1241 | 600 | 652  | 1453 | 642  | 551  | 1454 | 647  | 613  | 1478 | 654  | 672  |

Public Hearing Draft - November 2, 2018

Appendix D | TRANSPORTATION 83

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

| TAZ # |      | 2010 |      |      | 2020 |      |      | 2030 |      |      | 2040 |      |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| TAZ # | POP  | HH   | EMP  | POP  | НН   | EMP  | POP  | HH   | EMP  | POP  | НН   | EMP  |
| 1919  | 3232 | 1204 | 1100 | 3442 | 1291 | 1207 | 3503 | 1306 | 1334 | 3600 | 1329 | 1453 |
| 1921  | 1175 | 617  | 60   | 1491 | 660  | 109  | 1492 | 665  | 128  | 1519 | 672  | 148  |
| 1922  | 334  | 145  | 241  | 354  | 155  | 122  | 354  | 157  | 141  | 359  | 159  | 158  |
| 1923  | 642  | 272  | 18   | 777  | 292  | 46   | 770  | 290  | 38   | 769  | 289  | 30   |
| 1924  | 2215 | 1030 | 138  | 2959 | 1114 | 148  | 2965 | 1121 | 128  | 3001 | 1132 | 110  |
| 1925  | 1196 | 529  | 484  | 1789 | 634  | 789  | 1742 | 676  | 827  | 1696 | 717  | 865  |
| 1926  | 1071 | 453  | 205  | 1199 | 482  | 265  | 1246 | 489  | 259  | 1319 | 496  | 260  |
| 1927  | 1106 | 444  | 174  | 1300 | 475  | 88   | 1276 | 481  | 118  | 1247 | 480  | 147  |
| 1928  | 1042 | 413  | 91   | 1214 | 450  | 212  | 1241 | 476  | 245  | 1286 | 503  | 277  |
| 1929  | 1064 | 573  | 1777 | 1534 | 691  | 2348 | 1496 | 713  | 2750 | 1195 | 590  | 3118 |
| 1930  | 954  | 325  | 357  | 1165 | 367  | 413  | 1117 | 395  | 488  | 1074 | 423  | 562  |
| 1931  | 1320 | 435  | 260  | 1478 | 511  | 292  | 1431 | 520  | 310  | 1395 | 531  | 328  |
| 1932  | 1044 | 367  | 124  | 1227 | 424  | 123  | 1162 | 422  | 135  | 1106 | 421  | 149  |
| 1933  | 1487 | 453  | 20   | 1561 | 539  | 37   | 1560 | 566  | 47   | 1561 | 594  | 59   |
| 1934  | 1871 | 478  | 732  | 1744 | 603  | 673  | 1886 | 685  | 710  | 2034 | 774  | 745  |
| 1935  | 1472 | 472  | 638  | 1695 | 535  | 624  | 1619 | 575  | 729  | 1537 | 607  | 828  |
| 1936  | 964  | 397  | 351  | 1188 | 497  | 303  | 1398 | 603  | 354  | 1574 | 694  | 405  |
| 1937  | 1572 | 408  | 533  | 1527 | 502  | 492  | 1667 | 587  | 470  | 1827 | 683  | 450  |
| 1938  | 1663 | 451  | 501  | 1597 | 543  | 533  | 1685 | 611  | 510  | 1733 | 670  | 490  |
| 1939  | 331  | 120  | 741  | 416  | 141  | 630  | 458  | 157  | 594  | 516  | 177  | 560  |
| 1940  | 1502 | 516  | 630  | 1678 | 568  | 614  | 1678 | 575  | 581  | 1687 | 579  | 550  |
| 1941  | 2584 | 761  | 2068 | 2638 | 887  | 2126 | 2658 | 954  | 2042 | 2677 | 1021 | 1970 |
| 1942  | 1599 | 612  | 704  | 1770 | 694  | 1555 | 1835 | 733  | 1694 | 1746 | 717  | 1824 |
| 1943  | 484  | 194  | 3762 | 572  | 232  | 3370 | 635  | 260  | 3264 | 685  | 284  | 3240 |
| 1944  | 1820 | 604  | 77   | 1607 | 696  | 376  | 1739 | 793  | 372  | 1863 | 893  | 370  |
| 1945  | 1307 | 399  | 334  | 1339 | 445  | 382  | 1373 | 466  | 394  | 1415 | 487  | 408  |
| 1946  | 2709 | 847  | 623  | 2681 | 947  | 437  | 2758 | 997  | 455  | 2848 | 1045 | 476  |
| 1947  | 2254 | 699  | 302  | 2305 | 775  | 434  | 2334 | 792  | 411  | 2378 | 809  | 390  |

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

| T. 7. # | 2010 |      |      |      | 2020 |     |      | 2030 |     | 2040 |      |     |
|---------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| TAZ #   | POP  | HH   | EMP  | POP  | НН   | EMP | POP  | НН   | EMP | POP  | НН   | EMP |
| 1948    | 1696 | 590  | 653  | 1922 | 651  | 912 | 1933 | 662  | 870 | 1955 | 671  | 830 |
| 1949    | 931  | 468  | 180  | 1144 | 487  | 161 | 1093 | 477  | 176 | 1069 | 471  | 188 |
| 1950    | 1554 | 644  | 58   | 1605 | 683  | 99  | 1582 | 691  | 119 | 1596 | 703  | 138 |
| 1951    | 1801 | 760  | 18   | 1889 | 800  | 48  | 1842 | 800  | 71  | 1840 | 806  | 98  |
| 1952    | 1322 | 558  | 157  | 1383 | 588  | 124 | 1351 | 590  | 142 | 1353 | 596  | 158 |
| 1953    | 4129 | 1578 | 126  | 4276 | 1689 | 281 | 4315 | 1682 | 238 | 4413 | 1683 | 200 |
| 1954    | 3004 | 1305 | 1527 | 3552 | 1392 | 921 | 3575 | 1382 | 772 | 3642 | 1377 | 639 |
| 1955    | 1376 | 509  | 137  | 1322 | 556  | 185 | 1404 | 567  | 181 | 1494 | 579  | 180 |
| 1956    | 867  | 334  | 575  | 867  | 371  | 558 | 944  | 387  | 538 | 1034 | 406  | 530 |
| 1957    | 2    | 1    | 806  | 8    | 4    | 863 | 18   | 8    | 838 | 33   | 13   | 830 |
| 1958    | 2482 | 602  | 83   | 1690 | 724  | 67  | 2107 | 863  | 62  | 2536 | 996  | 60  |
| 1959    | 3970 | 1288 | 275  | 3813 | 1442 | 210 | 3992 | 1510 | 195 | 4196 | 1578 | 180 |
| 1960    | 2560 | 889  | 542  | 2581 | 986  | 655 | 2725 | 1037 | 630 | 2885 | 1084 | 610 |
| 1961    | 3737 | 1088 | 389  | 3316 | 1251 | 499 | 3616 | 1364 | 474 | 3952 | 1482 | 450 |
| 1962    | 4225 | 1266 | 548  | 4252 | 1448 | 587 | 4375 | 1533 | 563 | 4530 | 1621 | 550 |
| 1963    | 1975 | 536  | 1059 | 1844 | 626  | 970 | 1981 | 683  | 961 | 2115 | 738  | 959 |
| 1964    | 679  | 201  | 230  | 678  | 230  | 396 | 705  | 244  | 391 | 731  | 257  | 390 |
| 1965    | 1061 | 278  | 358  | 997  | 328  | 362 | 1079 | 361  | 340 | 1159 | 395  | 320 |
| 1966    | 2707 | 825  | 428  | 2845 | 932  | 494 | 2886 | 963  | 466 | 2927 | 994  | 440 |
| 1967    | 2512 | 805  | 15   | 2739 | 908  | 290 | 2843 | 953  | 507 | 2937 | 994  | 700 |
| 1968    | 1952 | 800  | 319  | 2091 | 889  | 356 | 2203 | 940  | 327 | 2341 | 987  | 300 |
| 1969    | 815  | 277  | 13   | 800  | 303  | 20  | 838  | 316  | 20  | 877  | 326  | 20  |
| 1970    | 2057 | 601  | 114  | 1767 | 678  | 90  | 1934 | 738  | 90  | 2111 | 794  | 90  |
| 1971    | 1759 | 728  | 298  | 2046 | 795  | 252 | 2112 | 821  | 255 | 2192 | 843  | 259 |
| 1972    | 2895 | 1050 | 42   | 2933 | 1150 | 40  | 3046 | 1193 | 48  | 3186 | 1234 | 59  |
| 1973    | 1368 | 414  | 55   | 1210 | 463  | 83  | 1315 | 500  | 81  | 1443 | 541  | 80  |
| 1974    | 4555 | 1520 | 735  | 4634 | 1650 | 760 | 4690 | 1700 | 728 | 4736 | 1748 | 710 |
| 1975    | 1755 | 496  | 155  | 1479 | 567  | 319 | 1643 | 624  | 339 | 1858 | 691  | 358 |

Public Hearing Draft - November 2, 2018

Appendix D | TRANSPORTATION 85

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

| TAZ # |      | 2010 |      |      | 2020 |      |      | 2030 |      |      | 2040 |      |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| IAZ#  | POP  | HH   | EMP  |
| 1976  | 2450 | 696  | 29   | 2289 | 784  | 72   | 2427 | 849  | 108  | 2588 | 920  | 147  |
| 1977  | 1924 | 574  | 105  | 1715 | 648  | 120  | 1858 | 698  | 133  | 2021 | 744  | 148  |
| 1978  | 2066 | 897  | 310  | 2587 | 979  | 393  | 2669 | 1001 | 416  | 2768 | 1016 | 437  |
| 1979  | 1577 | 509  | 358  | 1504 | 566  | 580  | 1607 | 605  | 562  | 1752 | 649  | 550  |
| 1980  | 2641 | 810  | 310  | 2411 | 906  | 301  | 2584 | 968  | 288  | 2783 | 1025 | 280  |
| 1981  | 1740 | 578  | 122  | 1676 | 631  | 138  | 1730 | 651  | 133  | 1801 | 667  | 130  |
| 1982  | 2394 | 849  | 366  | 2578 | 918  | 711  | 2597 | 941  | 691  | 2612 | 964  | 680  |
| 1983  | 4959 | 1764 | 317  | 5080 | 1935 | 388  | 5310 | 2008 | 382  | 5589 | 2076 | 380  |
| 1984  | 2527 | 893  | 415  | 2586 | 988  | 394  | 2783 | 1050 | 381  | 3026 | 1115 | 370  |
| 1987  | 3088 | 1218 | 78   | 3554 | 1359 | 86   | 3875 | 1460 | 77   | 4252 | 1563 | 70   |
| 1989  | 2585 | 1017 | 653  | 2717 | 1125 | 577  | 2914 | 1202 | 604  | 3143 | 1273 | 636  |
| 1990  | 2965 | 1189 | 355  | 3315 | 1320 | 688  | 3504 | 1377 | 556  | 3714 | 1427 | 430  |
| 1991  | 2482 | 746  | 123  | 2419 | 826  | 182  | 2487 | 867  | 226  | 2547 | 902  | 266  |
| 1992  | 1187 | 465  | 185  | 1146 | 510  | 35   | 1265 | 562  | 37   | 1431 | 630  | 40   |
| 1993  | 1715 | 606  | 1028 | 1906 | 670  | 1183 | 1980 | 700  | 1259 | 2042 | 720  | 1331 |
| 1994  | 35   | 11   | 116  | 36   | 11   | 322  | 37   | 12   | 502  | 36   | 11   | 663  |
| 1995  | 511  | 127  | 661  | 526  | 152  | 539  | 630  | 178  | 565  | 744  | 206  | 596  |
| 1996  | 1863 | 598  | 293  | 1843 | 684  | 439  | 1916 | 740  | 509  | 1965 | 791  | 573  |
| 1997  | 1696 | 530  | 1837 | 1700 | 607  | 1751 | 1753 | 645  | 1688 | 1811 | 684  | 1650 |
| 1998  | 353  | 3    | 526  | 366  | 4    | 481  | 397  | 4    | 455  | 380  | 5    | 430  |
| 1999  | 0    | 0    | 3892 | Ο    | 0    | 3923 | 0    | 0    | 3735 | 0    | 0    | 3560 |
| 2000  | 504  | 28   | 765  | 524  | 28   | 678  | 564  | 26   | 638  | 541  | 24   | 600  |
| 2001  | 3    | 1    | 5258 | 30   | 9    | 5455 | 141  | 42   | 5267 | 283  | 86   | 5180 |
| 2002  | 198  | 143  | 110  | 465  | 228  | 188  | 668  | 307  | 245  | 887  | 384  | 295  |
| 2003  | 373  | 186  | 52   | 577  | 282  | 127  | 762  | 349  | 164  | 919  | 396  | 197  |
| 2004  | 484  | 298  | 560  | 848  | 380  | 975  | 933  | 379  | 1137 | 984  | 373  | 1293 |
| 2005  | 819  | 585  | 1332 | 1451 | 750  | 1591 | 1353 | 769  | 1878 | 1154 | 789  | 2150 |
| 2006  | 538  | 360  | 322  | 1042 | 488  | 236  | 1181 | 520  | 289  | 1213 | 505  | 345  |

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

|      | 2010   |  |   | 2020  |   |  | 2030  |  |   | 2040   |  |
|------|--|--|---|---|---|--|---|--|---|--|--|
| POP  | HH   | EMP  | POP   | HH  | EMP   | POP  | HH  | EMP  | POP   | HH   | EMP  |
| 8    | 0  | 3536   | 61  | 14  | 4112  | 109  | 32  | 4220   | 177   | 56   | 3802   |
| 522  | 364  | 4394   | 1287  | 512   | 4628  | 1233   | 568   | 4656   | 811   | 543  | 4717   |
| 251  | 174  | 3743   | 607   | 241   | 3775  | 572  | 261   | 3720   | 364   | 242  | 3690   |
| 0    | 0  | 3302   | 72  | 23  | 2795  | 314  | 90  | 2813   | 677   | 188  | 2852   |
| 586  | 411  | 1868   | 1188  | 615   | 2683  | 1327   | 784   | 3156   | 1432  | 966  | 3601   |
| 366  | 257  | 2373   | 775   | 347   | 1903  | 917  | 372   | 2350   | 1051  | 397  | 2775   |
| 0    | 0  | 4878   | 67  | 21  | 5116  | 288  | 83  | 5143   | 615   | 171  | 5206   |
| 126  | 111  | 1980   | 374   | 158   | 2304  | 372  | 187   | 2316   | 226   | 192  | 2344   |
| 893  | 740  | 934  | 1389  | 818   | 984   | 1269   | 836   | 1160   | 1021  | 805  | 1321   |
| 918  | 641  | 1137   | 1748  | 1003  | 2276  | 1777   | 1073  | 2459   | 1437  | 976  | 2280   |
| 45   | 1  | 3275   | 53  | 0   | 3488  | 53   | 0   | 3532   | 55  | 5  | 3597   |
| 0    | 0  | 2023   | 0   | 0   | 2201  | 0  | 0   | 2240   | 0   | 0  | 2292   |
| 0    | 0  | 407  | 0   | 0   | 319   | 0  | 0   | 283  | 0   | 0  | 250  |
| 500  | 144  | 2285   | 728   | 185   | 3062  | 910  | 254   | 3555   | 1121  | 336  | 4018   |
| 22   | 15   | 5797   | 29  | 19  | 6662  | 40   | 26  | 6906   | 51  | 31   | 7183   |
| 1    | 1  | 2509   | 119   | 42  | 2537  | 180  | 62  | 2765   | 84  | 28   | 2994   |
| 1037 | 608  | 18   | 1451  | 651   | 43  | 1521   | 638   | 41   | 1599  | 628  | 40   |
| 866  | 377  | 1595   | 1239  | 455   | 1302  | 1438   | 503   | 1419   | 1627  | 545  | 1543   |
| 763  | 352  | 412  | 984   | 384   | 600   | 1049   | 383   | 956  | 1116  | 385  | 1315   |
| 206  | 161  | 6035   | 405   | 205   | 6030  | 504  | 251   | 5838   | 594   | 289  | 5780   |
| 861  | 464  | 655  | 1024  | 489   | 728   | 1050   | 485   | 720  | 1090  | 484  | 719  |
| 1654 | 701  | 951  | 1574  | 742   | 769   | 1623   | 740   | 761  | 1696  | 741  | 759  |
| 1991 | 817  | 91   | 2278  | 856   | 228   | 2247   | 845   | 222  | 2239  | 839  | 220  |
| 1568 | 572  | 49   | 1618  | 602   | 33  | 1601   | 595   | 31   | 1600  | 592  | 30   |
| 1447 | 565  | 406  | 1661  | 594   | 385   | 1643   | 588   | 373  | 1641  | 585  | 370  |
| 1727 | 797  | 401  | 2219  | 835   | 285   | 2189   | 824   | 274  | 2180  | 817  | 270  |
| 3170 | 1873   | 1149   | 3777  | 1958  | 1237  | 3575   | 1918  | 1222   | 3370  | 1887   | 1218   |
| 3107 | 1604   | 1269   | 3532  | 1679  | 1271  | 3469   | 1636  | 1204   | 3467  | 1608   | 1140   |
|      | 8<br>522<br>251<br>0<br>586<br>366<br>0<br>126<br>893<br>918<br>45<br>0<br>0<br>500<br>22<br>1<br>1037<br>866<br>763<br>206<br>861<br>1654<br>1991<br>1568<br>1447<br>1727<br>3170 | POP HH  8 0  522 364  251 174  0 0  586 411  366 257  0 0  126 111  893 740  918 641  45 1  0 0  0 0  500 144  22 15  1 1  1037 608  866 377  763 352  206 161  861 464  1654 701  1991 817  1568 572  1447 565  1727 797  3170 1873 | POP         HH         EMP           8         0         3536           522         364         4394           251         174         3743           0         0         3302           586         411         1868           366         257         2373           0         0         4878           126         111         1980           893         740         934           918         641         1137           45         1         3275           0         0         2023           0         0         407           500         144         2285           22         15         5797           1         1         2509           1037         608         18           866         377         1595           763         352         412           206         161         6035           861         464         655           1654         701         951           1991         817         91           1568         572         49 <tr< td=""><td>POP         HH         EMP         POP           8         0         3536         61           522         364         4394         1287           251         174         3743         607           0         0         3302         72           586         411         1868         1188           366         257         2373         775           0         0         4878         67           126         111         1980         374           893         740         934         1389           918         641         1137         1748           45         1         3275         53           0         0         2023         0           0         0         407         0           500         144         2285         728           22         15         5797         29           1         1         2509         119           1037         608         18         1451           866         377         1595         1239           763         352         412         984</td><td>POP         HH         EMP         POP         HH           8         0         3536         61         14           522         364         4394         1287         512           251         174         3743         607         241           0         0         3302         72         23           586         411         1868         1188         615           366         257         2373         775         347           0         0         4878         67         21           126         111         1980         374         158           893         740         934         1389         818           918         641         1137         1748         1003           45         1         3275         53         0           0         0         2023         0         0           0         0         407         0         0           500         144         2285         728         185           22         15         5797         29         19           1         1         2509         119<td>POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112           522         364         4394         1287         512         4628           251         174         3743         607         241         3775           0         0         3302         72         23         2795           586         411         1868         1188         615         2683           366         257         2373         775         347         1903           0         0         4878         67         21         5116           126         111         1980         374         158         2304           893         740         934         1389         818         984           918         641         1137         1748         1003         2276           45         1         3275         53         0         3488           0         0         2023         0         0         2201           0         0         407         0         319         500           144<td>POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109           522         364         4394         1287         512         4628         1233           251         174         3743         607         241         3775         572           0         0         3302         72         23         2795         314           586         411         1868         1188         615         2683         1327           366         257         2373         775         347         1903         917           0         0         4878         67         21         5116         288           126         111         1980         374         158         2304         372           893         740         934         1389         818         984         1269           918         641         1137         1748         1003         2276         1777           45         1         3275         53         0         3488         53           0         0</td><td>POP         HH         EMP         POP         HH         EMP         POP         HH           8         0         3536         61         14         4112         109         32           522         364         4394         1287         512         4628         1233         568           251         174         3743         607         241         3775         572         261           0         0         3302         72         23         2795         314         90           586         411         1868         1188         615         2683         1327         784           366         257         2373         775         347         1903         917         372           0         0         4878         67         21         5116         288         83           126         111         1980         374         158         2304         372         187           893         740         934         1389         818         984         1269         836           918         641         1137         1748         1003         2276         1777         107</td><td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112         109         32         4220           522         364         4394         1287         512         4628         1233         568         4656           251         174         3743         607         241         3775         572         261         3720           0         0         3302         72         23         2795         314         90         2813           586         411         1868         1188         615         2683         1327         784         3156           366         257         2373         775         347         1903         917         372         2350           0         0         4878         67         21         5116         288         83         5143           126         111         1980         374         158         2304         372         187         2316           893         740         934         1389         818         984         1269         <t< td=""><td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109         32         4220         177           522         364         4394         1287         512         4628         1233         568         4656         811           251         174         3743         607         241         3775         572         261         3720         364           0         0         3302         72         23         2795         314         90         2813         677           586         411         1868         1188         615         2683         1327         784         3156         1432           366         257         2373         775         347         1903         917         372         2350         1051           10         0         4878         67         21         5116         288         83         5143         615           126         111         1980         374         158         2304         372         187         2316</td><td>POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         BMP         POP         IH         EMP         POP         IH         BMP         POP         IH         AMP         POP         IH         AMP         POP         AMP         PAP         PAP         PAP</td></t<></td></td></td></tr<> | POP         HH         EMP         POP           8         0         3536         61           522         364         4394         1287           251         174         3743         607           0         0         3302         72           586         411         1868         1188           366         257         2373         775           0         0         4878         67           126         111         1980         374           893         740         934         1389           918         641         1137         1748           45         1         3275         53           0         0         2023         0           0         0         407         0           500         144         2285         728           22         15         5797         29           1         1         2509         119           1037         608         18         1451           866         377         1595         1239           763         352         412         984 | POP         HH         EMP         POP         HH           8         0         3536         61         14           522         364         4394         1287         512           251         174         3743         607         241           0         0         3302         72         23           586         411         1868         1188         615           366         257         2373         775         347           0         0         4878         67         21           126         111         1980         374         158           893         740         934         1389         818           918         641         1137         1748         1003           45         1         3275         53         0           0         0         2023         0         0           0         0         407         0         0           500         144         2285         728         185           22         15         5797         29         19           1         1         2509         119 <td>POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112           522         364         4394         1287         512         4628           251         174         3743         607         241         3775           0         0         3302         72         23         2795           586         411         1868         1188         615         2683           366         257         2373         775         347         1903           0         0         4878         67         21         5116           126         111         1980         374         158         2304           893         740         934         1389         818         984           918         641         1137         1748         1003         2276           45         1         3275         53         0         3488           0         0         2023         0         0         2201           0         0         407         0         319         500           144<td>POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109           522         364         4394         1287         512         4628         1233           251         174         3743         607         241         3775         572           0         0         3302         72         23         2795         314           586         411         1868         1188         615         2683         1327           366         257         2373         775         347         1903         917           0         0         4878         67         21         5116         288           126         111         1980         374         158         2304         372           893         740         934         1389         818         984         1269           918         641         1137         1748         1003         2276         1777           45         1         3275         53         0         3488         53           0         0</td><td>POP         HH         EMP         POP         HH         EMP         POP         HH           8         0         3536         61         14         4112         109         32           522         364         4394         1287         512         4628         1233         568           251         174         3743         607         241         3775         572         261           0         0         3302         72         23         2795         314         90           586         411         1868         1188         615         2683         1327         784           366         257         2373         775         347         1903         917         372           0         0         4878         67         21         5116         288         83           126         111         1980         374         158         2304         372         187           893         740         934         1389         818         984         1269         836           918         641         1137         1748         1003         2276         1777         107</td><td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112         109         32         4220           522         364         4394         1287         512         4628         1233         568         4656           251         174         3743         607         241         3775         572         261         3720           0         0         3302         72         23         2795         314         90         2813           586         411         1868         1188         615         2683         1327         784         3156           366         257         2373         775         347         1903         917         372         2350           0         0         4878         67         21         5116         288         83         5143           126         111         1980         374         158         2304         372         187         2316           893         740         934         1389         818         984         1269         <t< td=""><td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109         32         4220         177           522         364         4394         1287         512         4628         1233         568         4656         811           251         174         3743         607         241         3775         572         261         3720         364           0         0         3302         72         23         2795         314         90         2813         677           586         411         1868         1188         615         2683         1327         784         3156         1432           366         257         2373         775         347         1903         917         372         2350         1051           10         0         4878         67         21         5116         288         83         5143         615           126         111         1980         374         158         2304         372         187         2316</td><td>POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         BMP         POP         IH         EMP         POP         IH         BMP         POP         IH         AMP         POP         IH         AMP         POP         AMP         PAP         PAP         PAP</td></t<></td></td> | POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112           522         364         4394         1287         512         4628           251         174         3743         607         241         3775           0         0         3302         72         23         2795           586         411         1868         1188         615         2683           366         257         2373         775         347         1903           0         0         4878         67         21         5116           126         111         1980         374         158         2304           893         740         934         1389         818         984           918         641         1137         1748         1003         2276           45         1         3275         53         0         3488           0         0         2023         0         0         2201           0         0         407         0         319         500           144 <td>POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109           522         364         4394         1287         512         4628         1233           251         174         3743         607         241         3775         572           0         0         3302         72         23         2795         314           586         411         1868         1188         615         2683         1327           366         257         2373         775         347         1903         917           0         0         4878         67         21         5116         288           126         111         1980         374         158         2304         372           893         740         934         1389         818         984         1269           918         641         1137         1748         1003         2276         1777           45         1         3275         53         0         3488         53           0         0</td> <td>POP         HH         EMP         POP         HH         EMP         POP         HH           8         0         3536         61         14         4112         109         32           522         364         4394         1287         512         4628         1233         568           251         174         3743         607         241         3775         572         261           0         0         3302         72         23         2795         314         90           586         411         1868         1188         615         2683         1327         784           366         257         2373         775         347         1903         917         372           0         0         4878         67         21         5116         288         83           126         111         1980         374         158         2304         372         187           893         740         934         1389         818         984         1269         836           918         641         1137         1748         1003         2276         1777         107</td> <td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112         109         32         4220           522         364         4394         1287         512         4628         1233         568         4656           251         174         3743         607         241         3775         572         261         3720           0         0         3302         72         23         2795         314         90         2813           586         411         1868         1188         615         2683         1327         784         3156           366         257         2373         775         347         1903         917         372         2350           0         0         4878         67         21         5116         288         83         5143           126         111         1980         374         158         2304         372         187         2316           893         740         934         1389         818         984         1269         <t< td=""><td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109         32         4220         177           522         364         4394         1287         512         4628         1233         568         4656         811           251         174         3743         607         241         3775         572         261         3720         364           0         0         3302         72         23         2795         314         90         2813         677           586         411         1868         1188         615         2683         1327         784         3156         1432           366         257         2373         775         347         1903         917         372         2350         1051           10         0         4878         67         21         5116         288         83         5143         615           126         111         1980         374         158         2304         372         187         2316</td><td>POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         BMP         POP         IH         EMP         POP         IH         BMP         POP         IH         AMP         POP         IH         AMP         POP         AMP         PAP         PAP         PAP</td></t<></td> | POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109           522         364         4394         1287         512         4628         1233           251         174         3743         607         241         3775         572           0         0         3302         72         23         2795         314           586         411         1868         1188         615         2683         1327           366         257         2373         775         347         1903         917           0         0         4878         67         21         5116         288           126         111         1980         374         158         2304         372           893         740         934         1389         818         984         1269           918         641         1137         1748         1003         2276         1777           45         1         3275         53         0         3488         53           0         0 | POP         HH         EMP         POP         HH         EMP         POP         HH           8         0         3536         61         14         4112         109         32           522         364         4394         1287         512         4628         1233         568           251         174         3743         607         241         3775         572         261           0         0         3302         72         23         2795         314         90           586         411         1868         1188         615         2683         1327         784           366         257         2373         775         347         1903         917         372           0         0         4878         67         21         5116         288         83           126         111         1980         374         158         2304         372         187           893         740         934         1389         818         984         1269         836           918         641         1137         1748         1003         2276         1777         107 | POP         HH         EMP         POP         HH         EMP         POP         HH         EMP           8         0         3536         61         14         4112         109         32         4220           522         364         4394         1287         512         4628         1233         568         4656           251         174         3743         607         241         3775         572         261         3720           0         0         3302         72         23         2795         314         90         2813           586         411         1868         1188         615         2683         1327         784         3156           366         257         2373         775         347         1903         917         372         2350           0         0         4878         67         21         5116         288         83         5143           126         111         1980         374         158         2304         372         187         2316           893         740         934         1389         818         984         1269 <t< td=""><td>POP         HH         EMP         POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109         32         4220         177           522         364         4394         1287         512         4628         1233         568         4656         811           251         174         3743         607         241         3775         572         261         3720         364           0         0         3302         72         23         2795         314         90         2813         677           586         411         1868         1188         615         2683         1327         784         3156         1432           366         257         2373         775         347         1903         917         372         2350         1051           10         0         4878         67         21         5116         288         83         5143         615           126         111         1980         374         158         2304         372         187         2316</td><td>POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         BMP         POP         IH         EMP         POP         IH         BMP         POP         IH         AMP         POP         IH         AMP         POP         AMP         PAP         PAP         PAP</td></t<> | POP         HH         EMP         POP         HH         EMP         POP         HH         EMP         POP           8         0         3536         61         14         4112         109         32         4220         177           522         364         4394         1287         512         4628         1233         568         4656         811           251         174         3743         607         241         3775         572         261         3720         364           0         0         3302         72         23         2795         314         90         2813         677           586         411         1868         1188         615         2683         1327         784         3156         1432           366         257         2373         775         347         1903         917         372         2350         1051           10         0         4878         67         21         5116         288         83         5143         615           126         111         1980         374         158         2304         372         187         2316 | POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         EMP         POP         IH         BMP         POP         IH         EMP         POP         IH         BMP         POP         IH         AMP         POP         IH         AMP         POP         AMP         PAP         PAP         PAP |

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

| TA-7 # - | 2010 |      |      |      | 2020 |      |      | 2030 |      | 2040 |      |      |  |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| TAZ #    | POP  | HH   | EMP  | POP  | HH   | EMP  | POP  | HH   | EMP  | POP  | НН   | EMP  |  |
| 2035     | 1543 | 635  | 496  | 1822 | 706  | 449  | 1883 | 728  | 468  | 1954 | 748  | 488  |  |
| 2036     | 2371 | 1056 | 477  | 2696 | 1122 | 706  | 2711 | 1115 | 710  | 2782 | 1111 | 718  |  |
| 2037     | 2586 | 1240 | 972  | 2696 | 1306 | 1235 | 2664 | 1284 | 1176 | 2684 | 1273 | 1120 |  |
| 2038     | 881  | 484  | 1225 | 1147 | 514  | 1674 | 1139 | 513  | 1584 | 1148 | 515  | 1500 |  |
| 2039     | 1310 | 502  | 45   | 1229 | 550  | 40   | 1283 | 576  | 35   | 1355 | 605  | 30   |  |
| 2040     | 1021 | 272  | 700  | 1106 | 289  | 669  | 1103 | 289  | 623  | 1119 | 290  | 580  |  |
| 2041     | 363  | 172  | 647  | 411  | 184  | 580  | 411  | 185  | 544  | 419  | 188  | 510  |  |
| 2042     | 1405 | 662  | 141  | 1506 | 694  | 175  | 1464 | 686  | 191  | 1447 | 682  | 208  |  |
| 2043     | 1942 | 842  | 478  | 1960 | 901  | 542  | 1959 | 916  | 574  | 1992 | 936  | 606  |  |
| 2044     | 989  | 473  | 283  | 1070 | 497  | 321  | 1043 | 492  | 340  | 1034 | 491  | 358  |  |
| 2045     | 2008 | 996  | 182  | 2268 | 1043 | 167  | 2159 | 1021 | 188  | 2106 | 1007 | 208  |  |
| 2046     | 2192 | 980  | 202  | 2290 | 1055 | 240  | 2259 | 1072 | 264  | 2280 | 1096 | 287  |  |
| 2047     | 2192 | 953  | 474  | 2407 | 1010 | 458  | 2362 | 1014 | 449  | 2385 | 1021 | 450  |  |
| 2048     | 2192 | 912  | 209  | 2273 | 973  | 182  | 2233 | 987  | 190  | 2261 | 1003 | 199  |  |
| 2049     | 2337 | 512  | 1376 | 2499 | 548  | 1428 | 2636 | 567  | 1377 | 2736 | 585  | 1350 |  |
| 2050     | 1642 | 701  | 194  | 1592 | 755  | 165  | 1631 | 774  | 176  | 1691 | 795  | 188  |  |
| 2051     | 1381 | 591  | 520  | 1348 | 635  | 743  | 1378 | 649  | 769  | 1424 | 665  | 796  |  |
| 2052     | 1239 | 537  | 97   | 1233 | 571  | 149  | 1244 | 576  | 143  | 1272 | 583  | 140  |  |
| 2053     | 697  | 256  | 63   | 631  | 281  | 85   | 665  | 297  | 81   | 716  | 315  | 80   |  |
| 2054     | 908  | 392  | 209  | 948  | 435  | 210  | 988  | 462  | 203  | 1036 | 485  | 200  |  |
| 2055     | 3514 | 644  | 2162 | 3940 | 714  | 2360 | 4027 | 715  | 2247 | 4145 | 717  | 2170 |  |
| 2056     | 2069 | 838  | 228  | 1953 | 908  | 219  | 2022 | 942  | 207  | 2122 | 979  | 200  |  |
| 2057     | 2090 | 962  | 191  | 2135 | 1020 | 169  | 2115 | 1023 | 159  | 2132 | 1030 | 150  |  |
| 2058     | 1759 | 543  | 89   | 1695 | 586  | 131  | 1721 | 588  | 125  | 1757 | 593  | 120  |  |
| 2059     | 1728 | 677  | 100  | 1701 | 721  | 94   | 1721 | 744  | 91   | 1768 | 770  | 90   |  |
| 2060     | 2258 | 940  | 259  | 2377 | 977  | 266  | 2316 | 977  | 261  | 2275 | 980  | 260  |  |
| 2061     | 2043 | 458  | 1578 | 2120 | 481  | 1546 | 2189 | 484  | 1488 | 2248 | 488  | 1450 |  |
| 2062     | 2643 | 1322 | 969  | 3122 | 1384 | 1042 | 3086 | 1379 | 939  | 3124 | 1377 | 850  |  |

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

| TA7 # |      | 2010 |      |      | 2020 |      |      | 2030 |      |      | 2040 |      |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| TAZ # | POP  | HH   | EMP  |
| 2063  | 636  | 464  | 1312 | 2068 | 1031 | 2271 | 3770 | 1847 | 3254 | 5097 | 2428 | 4141 |
| 2064  | 380  | 166  | 2    | 635  | 316  | 91   | 811  | 397  | 162  | 790  | 377  | 243  |
| 2065  | 842  | 360  | 1952 | 973  | 382  | 952  | 952  | 374  | 981  | 950  | 368  | 1010 |
| 2066  | 736  | 337  | 26   | 831  | 356  | 113  | 805  | 348  | 133  | 800  | 342  | 156  |
| 2067  | 993  | 534  | 42   | 1305 | 564  | 120  | 1261 | 550  | 137  | 1250 | 541  | 156  |
| 2068  | 562  | 223  | 3    | 560  | 242  | 55   | 559  | 244  | 70   | 571  | 247  | 88   |
| 2069  | 1042 | 466  | 256  | 1143 | 494  | 693  | 1108 | 483  | 709  | 1100 | 476  | 728  |
| 2070  | 1187 | 474  | 115  | 1313 | 508  | 145  | 1342 | 519  | 157  | 1376 | 526  | 169  |
| 2071  | 1234 | 466  | 332  | 1364 | 505  | 289  | 1433 | 529  | 312  | 1524 | 556  | 337  |
| 2072  | 789  | 352  | 359  | 974  | 379  | 420  | 1010 | 393  | 440  | 1057 | 407  | 458  |
| 2073  | 2835 | 1336 | 306  | 2874 | 1510 | 502  | 3250 | 1626 | 872  | 3689 | 1748 | 1230 |
| 2074  | 1561 | 1033 | 796  | 2070 | 1169 | 934  | 2104 | 1269 | 1272 | 2172 | 1376 | 1609 |
| 2075  | 116  | 45   | 40   | 110  | 51   | 47   | 113  | 54   | 43   | 119  | 58   | 40   |
| 2076  | 1612 | 759  | 474  | 1780 | 808  | 454  | 1714 | 807  | 426  | 1692 | 811  | 400  |
| 2077  | 2675 | 1146 | 615  | 2696 | 1254 | 592  | 2707 | 1307 | 555  | 2774 | 1367 | 520  |
| 2078  | 797  | 512  | 966  | 1161 | 557  | 1352 | 1267 | 577  | 1733 | 1386 | 597  | 2102 |
| 2079  | 253  | 136  | 752  | 1005 | 383  | 1173 | 1215 | 491  | 1561 | 1478 | 573  | 1937 |
| 2080  | 2372 | 1002 | 319  | 2389 | 1073 | 342  | 2424 | 1093 | 339  | 2492 | 1112 | 339  |
| 2081  | 874  | 360  | 273  | 1480 | 623  | 559  | 1316 | 551  | 975  | 1194 | 497  | 1377 |
| 2082  | 1155 | 464  | 92   | 1309 | 500  | 104  | 1346 | 519  | 97   | 1406 | 537  | 90   |
| 2083  | 82   | 50   | 1120 | 139  | 72   | 1108 | 188  | 101  | 980  | 227  | 124  | 860  |
| 2084  | 0    | 0    | 2009 | 772  | 242  | 2177 | 886  | 280  | 2238 | 660  | 207  | 2309 |
| 2085  | 0    | 0    | 2942 | 0    | 0    | 3287 | 0    | 0    | 3485 | 0    | 0    | 3685 |
| 2086  | 1517 | 459  | 1848 | 1490 | 524  | 1871 | 1549 | 581  | 1915 | 1609 | 631  | 1962 |
| 2087  | 626  | 172  | 560  | 566  | 203  | 629  | 669  | 235  | 651  | 793  | 263  | 677  |
| 2088  | 1731 | 683  | 615  | 2222 | 726  | 609  | 2288 | 736  | 650  | 2376 | 748  | 685  |
| 2089  | 1072 | 409  | 8    | 1128 | 435  | 14   | 1153 | 441  | 21   | 1198 | 449  | 29   |
| 2090  | 2328 | 833  | 129  | 2288 | 881  | 146  | 2319 | 884  | 171  | 2377 | 887  | 198  |

Public Hearing Draft - November 2, 2018

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

| TA7 # | 2010 |      |      |      | 2020 |     |      | 2030 |     | 2040 |      |     |  |
|-------|------|------|------|------|------|-----|------|------|-----|------|------|-----|--|
| TAZ # | POP  | HH   | EMP  | POP  | НН   | EMP | POP  | HH   | EMP | POP  | HH   | EMP |  |
| 2093  | 2589 | 957  | 215  | 2635 | 1016 | 161 | 2687 | 1027 | 188 | 2782 | 1040 | 217 |  |
| 2097  | 3121 | 1010 | 142  | 3322 | 1105 | 163 | 3437 | 1142 | 222 | 3576 | 1176 | 284 |  |
| 2098  | 738  | 239  | 1299 | 815  | 282  | 873 | 909  | 320  | 575 | 1005 | 351  | 290 |  |
| 2099  | 1348 | 529  | 404  | 1354 | 569  | 480 | 1407 | 581  | 444 | 1478 | 594  | 410 |  |
| 2100  | 1687 | 649  | 259  | 1742 | 701  | 260 | 1798 | 717  | 250 | 1874 | 732  | 240 |  |
| 2101  | 1148 | 417  | 728  | 1240 | 502  | 628 | 1508 | 592  | 655 | 1764 | 670  | 685 |  |
| 2102  | 1996 | 1053 | 206  | 2260 | 1118 | 210 | 2232 | 1112 | 224 | 2176 | 1095 | 238 |  |
| 2105  | 2722 | 946  | 129  | 2744 | 1008 | 39  | 2798 | 1022 | 24  | 2834 | 1021 | 10  |  |
| 2106  | 485  | 183  | 2    | 493  | 213  | 15  | 569  | 241  | 13  | 645  | 266  | 10  |  |
| 2107  | 0    | 0    | 134  | 0    | 0    | 297 | 0    | 0    | 186 | 0    | 0    | 80  |  |
| 2108  | 0    | 0    | 500  | 0    | 0    | 600 | 0    | 0    | 650 | 0    | 0    | 700 |  |
| 2109  | 2938 | 1005 | 289  | 2965 | 1080 | 153 | 3011 | 1101 | 100 | 3062 | 1119 | 50  |  |
| 2113  | 625  | 213  | 132  | 1189 | 384  | 94  | 1860 | 603  | 97  | 2376 | 770  | 99  |  |

This page intentionally left blank.

This page intentionally left blank.



Public Hearing Draft - November 2, 2018

## 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 park system includes parks, parkways, recreation centers, public spaces and trails. 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. They foster public health by providing opportunities for physical fitness, and promoting mental and social well-being. Parks and Community Centers 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. It will be necessary to periodically evaluate how well the park system is meeting changing needs, challenges and opportunities.

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 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 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 to 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 upto-date, understandable and engaging.

#### PERCEPTIONS OF "PARK"

Parks mean different things to different people, and those differences are often linked to race and culture (Johnson & Bowker, 1999). For example, white people tend to favor a natural and less managed environment, while African Americans and Latin Americans prefer a more structured park landscape (Kaplan & Talbot, 1988; Ozguner, 2011).

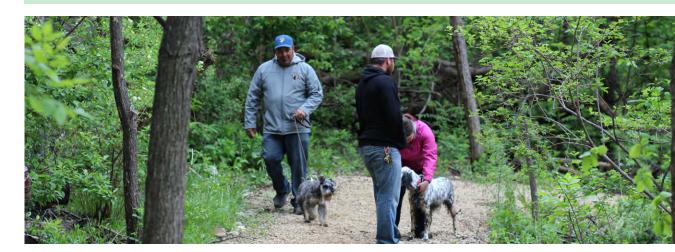
Parks staff have found that some recent immigrants perceive the natural areas of our parks as unwelcoming. It is for this reason that the phrase "open space" is included in the title of this chapter - to signal that the natural, less formal areas are also part of the park system and welcome to all.

The perception of barriers to parks also differs by race and culture. A report released by the Metropolitan Council in 2014 found the following differences in perceived barriers to park visitation by focus group:

| Rank | African American   | African<br>Immigrant | Asian American and<br>Asian Immigrant | Hispanic/<br>Latino/Latina | Diverse<br>Composition |
|------|--|----------------------|---------------------------------------|----------------------------|------------------------|
| 1 L  | _ack of Awareness  | Time                 | Lack of Awareness                     | Lack of Awareness          | Time                   |
| 2 T  | Transporation  | Lack of Awareness    | Language Barriers                     | Time                       | Lack of Awareness      |
| 3 .  | <ul><li>Fear/Safety</li><li>Map Challenges (tie)</li><li>Cultural Insensitivity/</li></ul> | Transportation       | Weather                               | Cost                       | Fear/Safety            |

Source: Metropolitan Council

As the demographics of the city change, it is important to understand and respond to changing perceptions so that the system is welcoming and accessible to all.



Public Hearing Draft - November 2, 2018

PARKS AND RECREATION 95

#### 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 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.

#### 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 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.

#### Goal 4: A healthy network of community partnerships

Policy PR-28. 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-29. Seek out partnerships with private entities to finance capital and maintenance costs of Parks and Recreation facilities without compromising good design solutions or over-commercializing the public realm.

Policy PR-30. 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-31. Support community gardens and private landscape beautification efforts where physically and financially feasible.

Poilcy PR-32. Encourage business partnerships that provide value-added services to park users, cover city costs, and generate revenue to enhance and expand programming.





Policy PR-33. 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-34. 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-35. Integrate parkways and trails with the city's broader transportation network to provide convenient and safe access to the park system.

Policy PR-36. Pursue strategic acquisitions to fill existing gaps and address changing needs in the parks system.

Policy PR-37. 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-38. Emphasize safety, convenience and comfort when designing new trails or rebuilding those that already exist.

Policy PR-39. Provide interpretive elements to educate users about unique aspects of the park system.

Policy PR-40. Provide consistent wayfinding signage in each project or park so that it is recognizable as part of the broader City system.

Policy PR-41. Involve staff from the Department of Parks and Recreation from the beginning of discussions regarding large-scale land redevelopment sites.

Policy PR-42. Address physical park encroachments that impair use through effective parkland management and protection.

## Appendix A

| Map P-1: Regional Parks and Trails1        | 100 |
|--|-----|
| Map P-2: Existing and Proposed Local Parks | 10  |
| Map P-3: Regional Trail Search Corridors   | 102 |

## Appendix B

Figure P-1: Park and Trail Inventory ...... 104

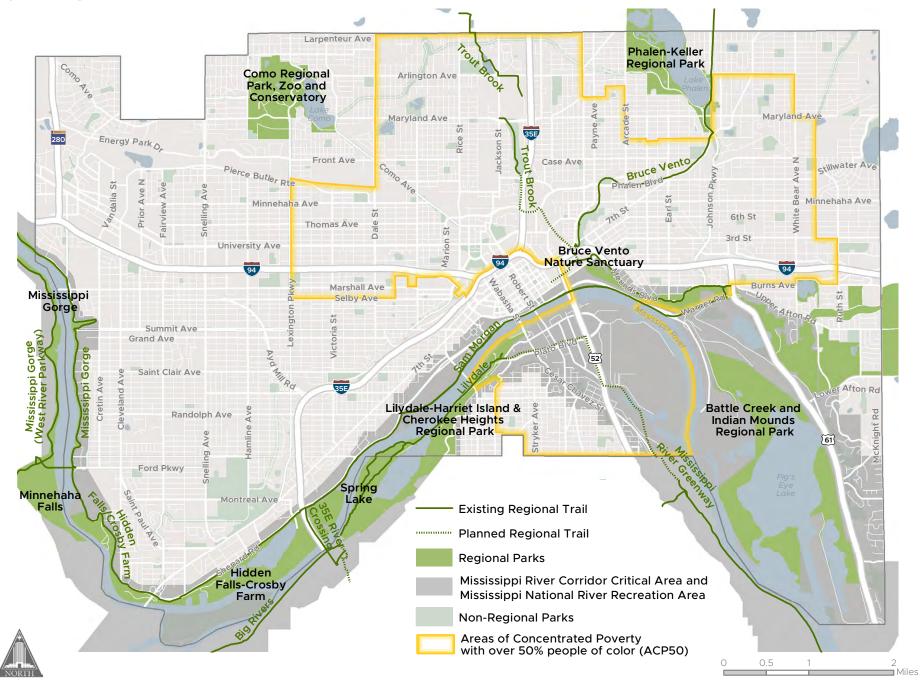
#### Notes:

- 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.

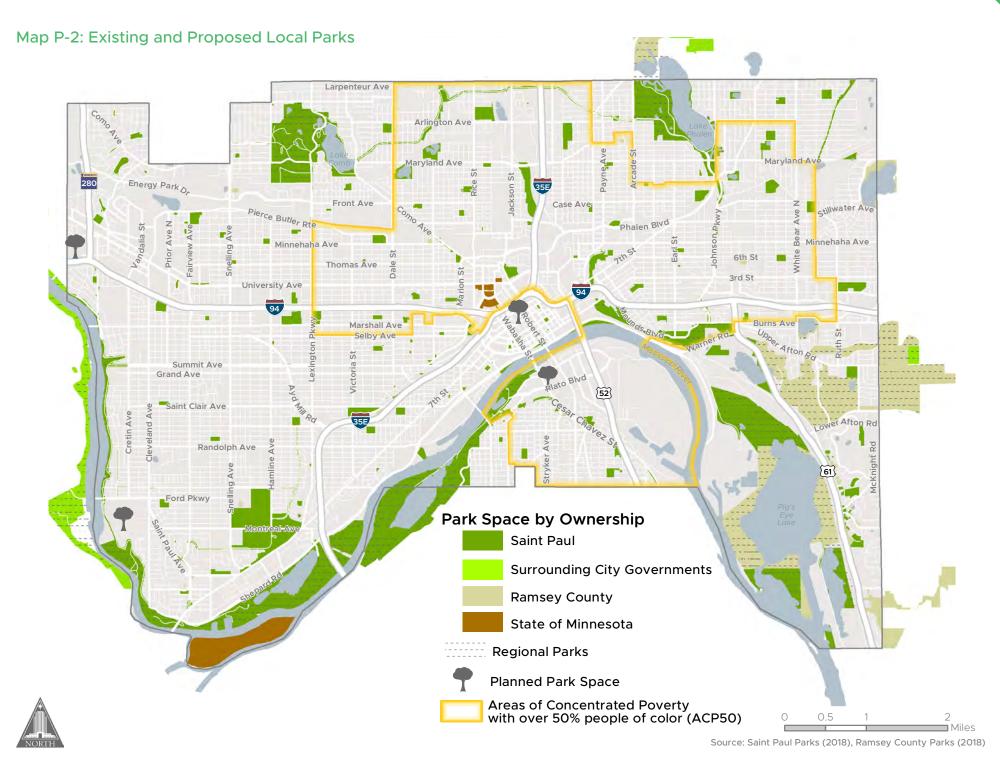
Public Hearing Draft - November 2, 2018

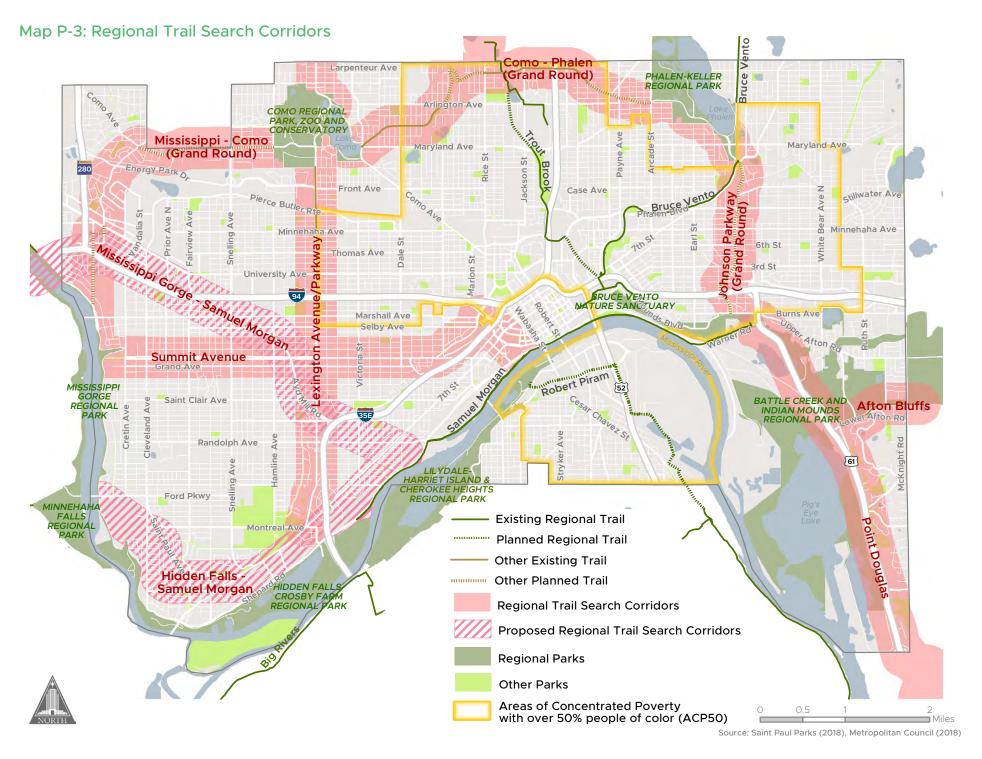
PARKS AND RECREATION 99

Map P-1: Regional Parks and Trails



Sources: Metropolitan Council, City of Saint Paul





#### **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.

Note: Local trails not associated with regional system are not included in this map 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.

## 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   |

#### Non-Regional Park and Trail Inventory

Note: Totals do not represent the entirety of City-owned and maintained park and open space land.

| 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   |  |

## Non-Regional Park and Trail 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    |

## Non-Regional Park and Trail 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    |

|  | Park Name                  | Acreage |  |
|--|----------------------------|---------|--|
|  | 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  |  |
|  |                            |         |  |

This page intentionally left blank.



### 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. Cities also have responsibilities to manage a complex set of issues around housing fairness, supply, choice, health, stability and affordability, all of which are tied to a City'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).

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

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<br>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, energyefficient 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.

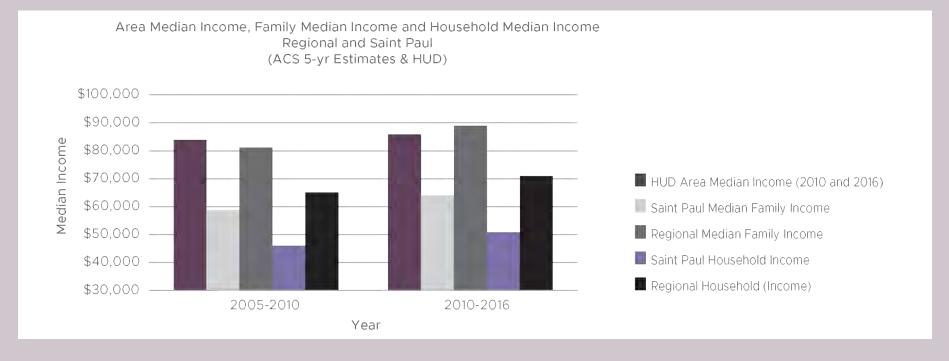
#### Area Median Income (AMI), Family Median Income and Household Median Income

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.



Public Hearing Draft - November 2, 2018 HOUSING 113

#### 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 Al.

### 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 or intentional steering to specific neighborhoods.

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 HRAsponsored down-payment assistance program and support partner organizations' downpayment assistance and first-time homebuyer mortgage programs to help homebuvers invest in Saint Paul.

Policy H-23. Collaborate with the lending community on development of culturallyappropriate 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.

### **Overview of Rent Subsidized Housing Programs**

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

#### **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.







116



#### Goal 5: Stable rental housing.

**Policy H-26.** Create awareness around tenant and landlord rights, responsibilities, best practices and resources to 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.

HOUSING

Public Hearing Draft - November 2, 2018

# 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 explore 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 incomerestricted 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 for affordable housing preservation and production.

**Policy H-43.** Encourage and support state and federal legislation that preserves existing programs and provides new funding for affordable ownership and rental housing.

**Policy H-44.** Strive to achieve the Metropolitan Council's affordable housing goals.

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

HOUSING 117

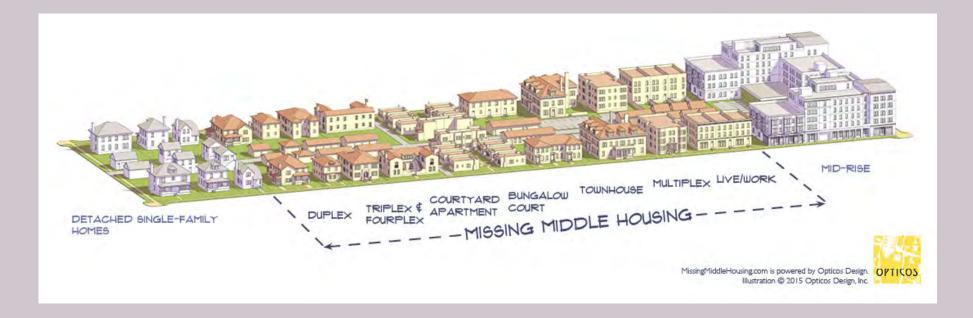
Public Hearing Draft - November 2, 2018

#### **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 compatible with the pattern and scale of the neighborhood, but 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 multifamily 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 Citysponsored 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.

Public Hearing Draft - November 2, 2018

This page intentionally left blank.

### Appendix A

| Housing Conditions and Trends Inventory 12 | 22 |
|--|----|
|--|----|

### Appendix **B**

### Appendix C

| Housing Implementation Toolkit 17- | 4 |
|------------------------------------|---|
|------------------------------------|---|

#### 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<sup>1</sup>. 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 renteroccupied 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<sup>2</sup>, as well as the construction of more multifamily rental housing within Saint Paul.

Table 1: Housing Units, Occupancy and Tenure

|             | Units   |         |  |  |
|-------------|---------|---------|--|--|
|             | Number  | Percent |  |  |
| Total Units | 119,625 | 100%    |  |  |

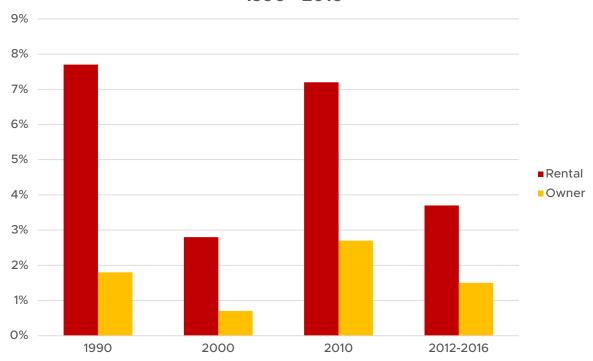
| Occupied/Vacant* |         |       |  |  |  |  |  |
|------------------|---------|-------|--|--|--|--|--|
| Occupied         | 112,571 | 94.1% |  |  |  |  |  |
| Vacant           | 7,054   | 5.9%  |  |  |  |  |  |

| 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

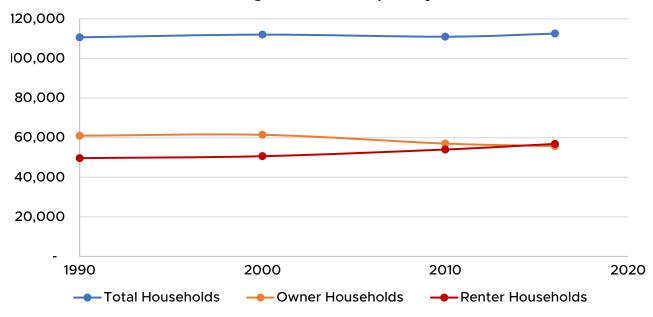


<sup>1</sup> The 2010 Census reported that the City had 120,795 housing units, while the most recent ACS 5-year estimate report 119,625 +/- 869 units. After reviewing demolition and building permits records, the City does not believe there was a decrease in the number of units from 2010 Census to the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

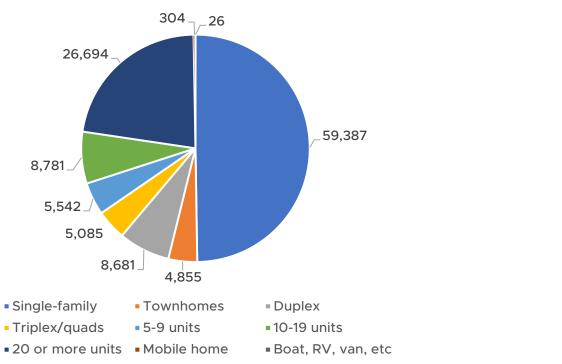
<sup>2</sup> Over the last eight years, the percentage of renters living in single-family homes rose from 10.6% to 14.7% (2009 - 2011 and 2012-2016 ACS 5-year estimates).

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.

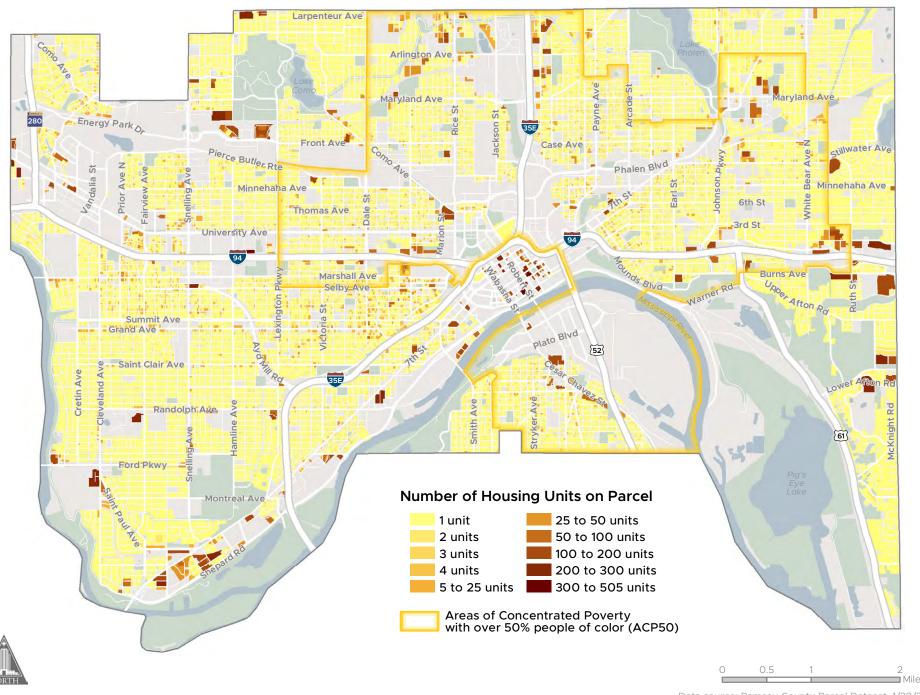
Chart 2: Housing Units, Occupancy and Tenure



**Chart 3: Type of Housing Units** 



Map 1: Housing Types



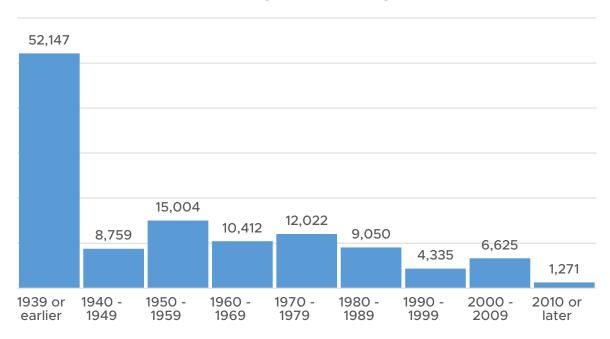
Data source: Ramsey County Parcel Dataset, 1/29/2018

# 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).

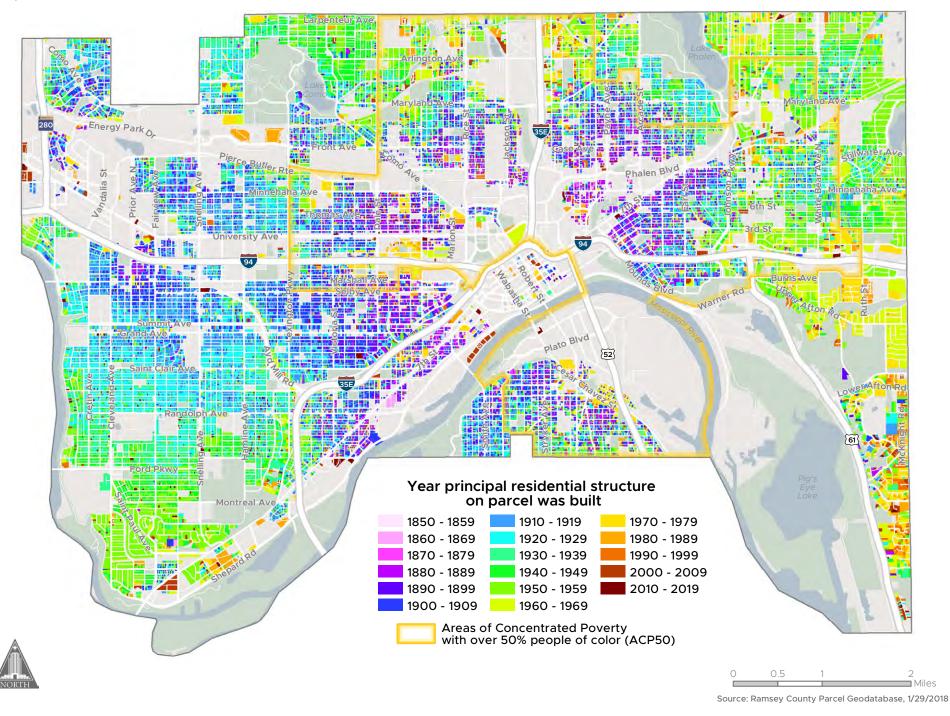
Map 2 shows the age distribution of residential structures throughout the city. The oldest of these structures form a ring around downtown and the Capitol area, and are found near other important historic commercial and industrial nodes. The early 1900s brought rapid expansion of single-family and small-scale 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**



HOUSING | Appendix A

Map 2: Decade Built



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 Truthin-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

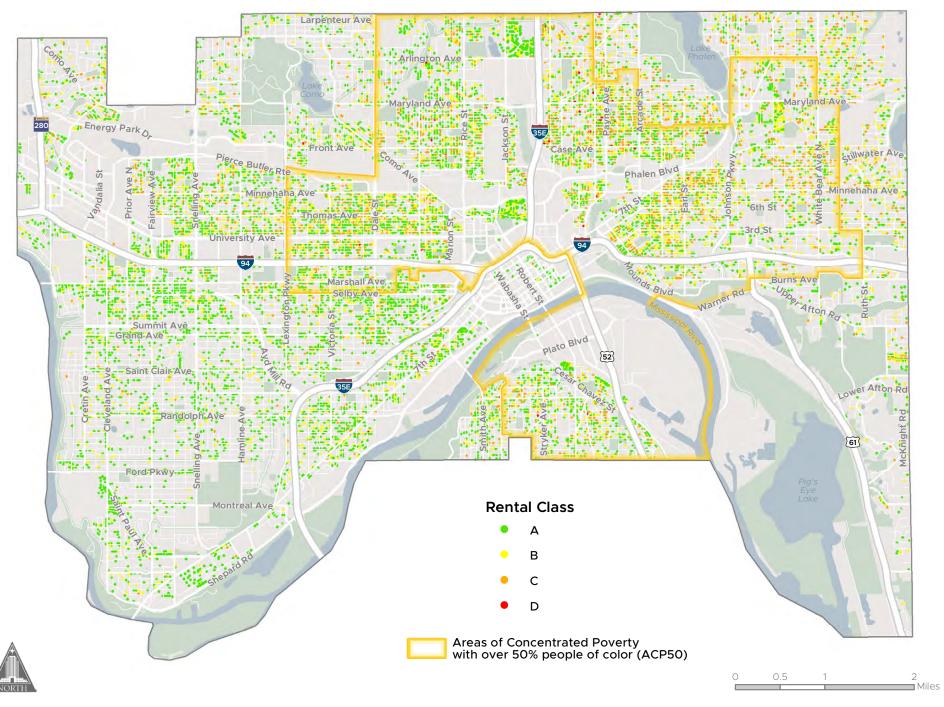
To ensure that residential rental buildings comply with applicable fire, building, housing and other relevant codes, non-owner-occupied one- and two-unit buildings, and all buildings with three or more units, must receive a fire Certificate of Occupancy (C of O). If violations are found during an inspection, 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.

Table 2: Building C of O Ratings

| Rating | Number of Buildings |  |  |
|--------|---------------------|--|--|
| Α      | 8,335               |  |  |
| В      | 4,063               |  |  |
| С      | 2,781               |  |  |
| D      | 72                  |  |  |

Map 3: Certificate of Occupancy Rental Ratings



# 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 mixeduse 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.

#### **Definitions of Categories of Vacant Buildings**

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

#### Requirements for the Sale of Registered Vacant Buildings

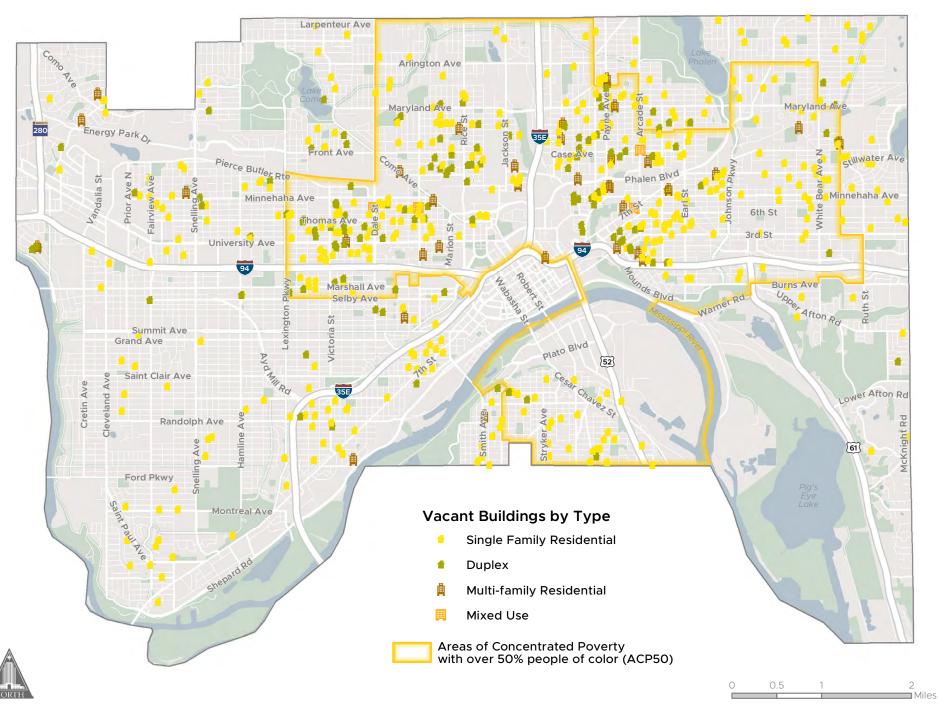
|  | Category 1 |   |  | Category 2   | Category 3     |   |  |
|--|------------|---|--|--|----------------|---|--|
| The seller<br>must:  |            | e buyer (and/or seller)<br>ust:   | Th   | e seller (or prospective buyer) must:  |                | ay not be sold unless one of the llowing are obtained:                                      |  |
| Obtain a<br>Truth-in-Sale<br>of Housing<br>report to<br>market the<br>property.* |            | Register or re-<br>register ownership<br>Pay outstanding fees<br>Comply with existing<br>or outstanding orders<br>for legal occupancy | <ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ol> | Register or re-register ownership Pay outstanding fees Obtain a code compliance report** 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 Submit proof of financial capability: e.g. performance bond, escrow account, or other proof accepted and approved by the City | 1.<br>2.<br>3. | Certificate of Occupancy<br>Certificate of Code Compliance<br>Fire Certificate of Occupancy |  |

Appendix A | HOUSING 131 Public Hearing Draft - November 2, 2018

<sup>\*</sup> 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 4: Registered Vacant Buildings by Building Type

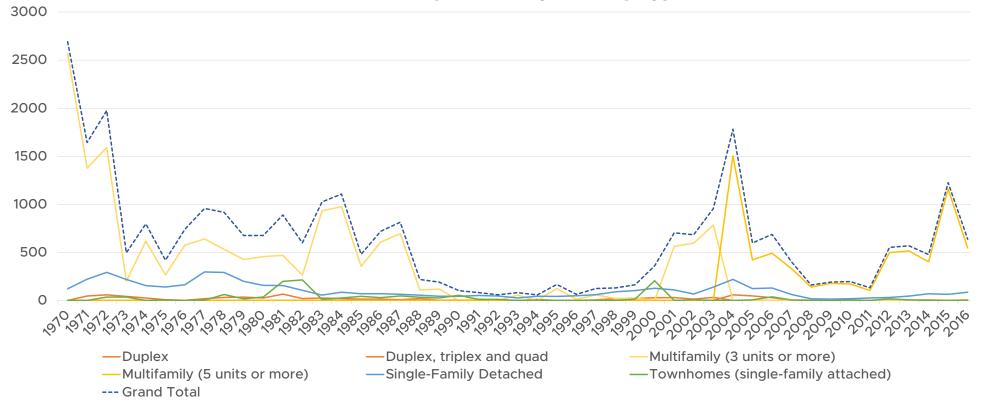


#### **New Residential Construction**

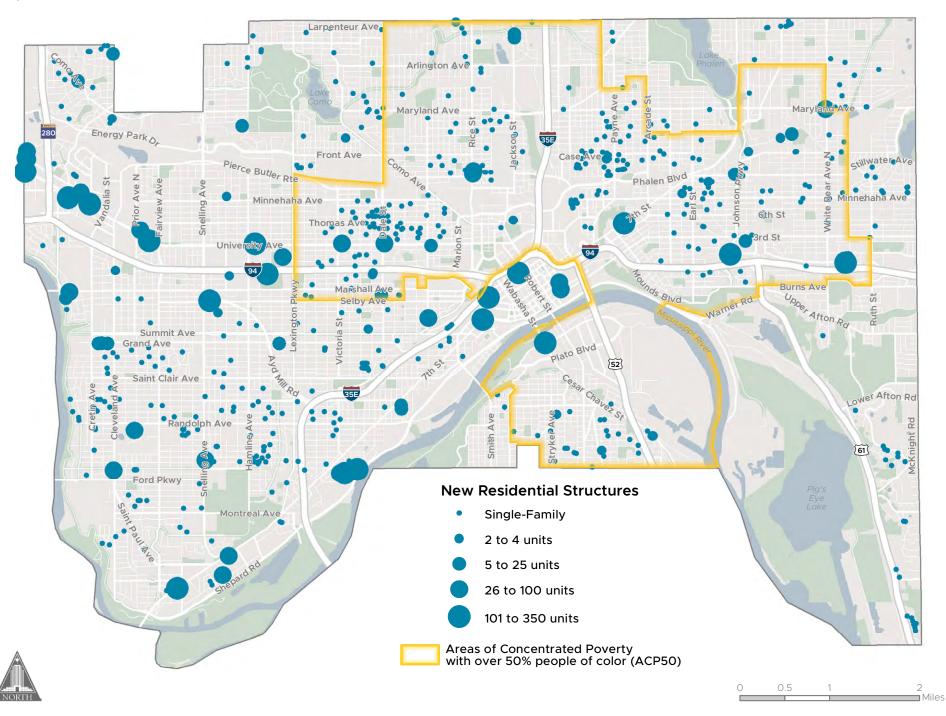
While new unit development has not reached pre-recession levels, construction of new units in Saint Paul began to pick up in 2012 and steadily increased through 2015. Building permits were down in 2016, and in 2017, City data shows 834 new units built. As in the in the 1970s, 1980s and early 2000s, multi-family 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.





Map 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

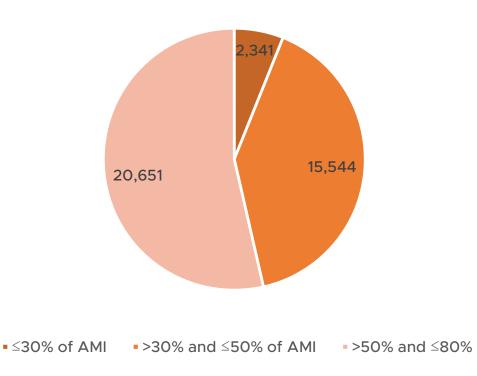
The Metropolitan Council developed a formula to determine the value of a house that is affordable to a household of four earning 80% of AMI. The formula takes into consideration the cost of a fixed-interest, 30-year mortgage; down payment; property taxes; and mortgage and homeowners insurance. In 2017, 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 fourperson 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

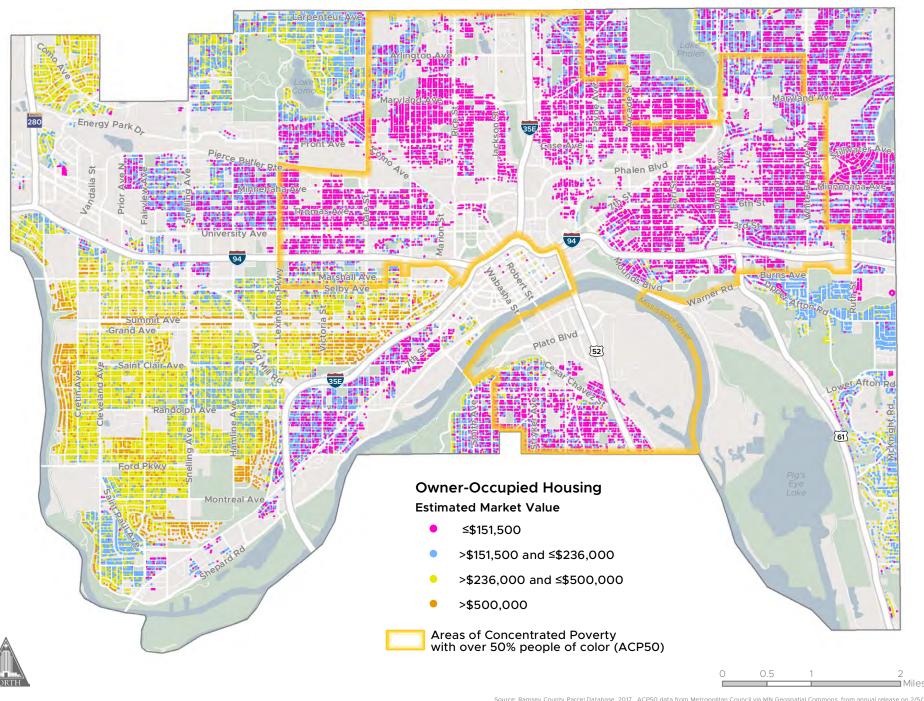
current value of the property, it does not take into consideration any deferred maintenance costs, condominium association fees or utility costs, all of which contribute to a household's ability to afford a unit.

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 6: Affordability of Owner-Occupied Housing



#### **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.

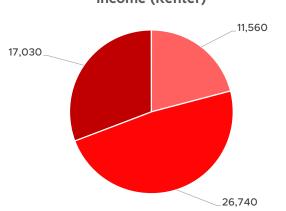
According to CHAS, 2010-2014, approximately 94% of all rental units are affordable to households earning 80% of AMI or less. Of those units. 21% are affordable to households earning 30% of AMI or less, 48% are affordable to households earning more than 30% and less than 50% of AMI, and 31% are affordable to households earning more than 50% and less than 80% of AMI. These counts include public housing and income-restricted and naturallyoccurring 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 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.

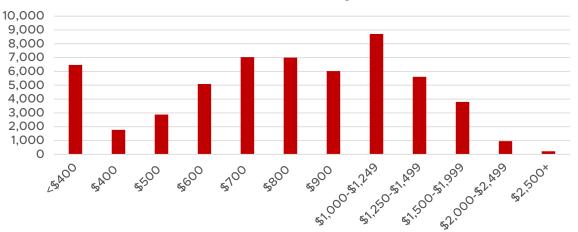
Table 3: Housing Tax Credit & Tax-Exempt Bond Income and Rent Limits (2017)

| Income - |       | Maximum Gross Rents by Bedroom Size (post 1989 |         |         |         |         |         |
|----------|-------|--|---------|---------|---------|---------|---------|
| % of AMI | 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)

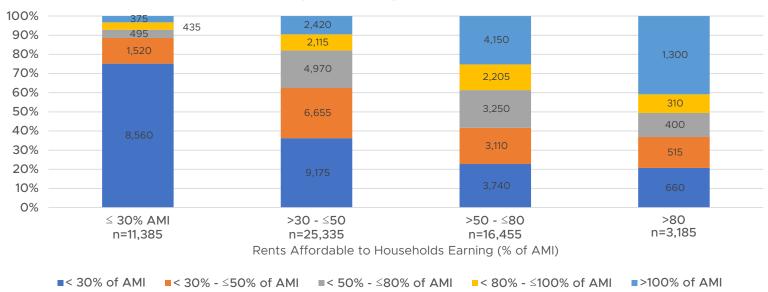


**Chart 8: Number of Unit by Gross Rent** 



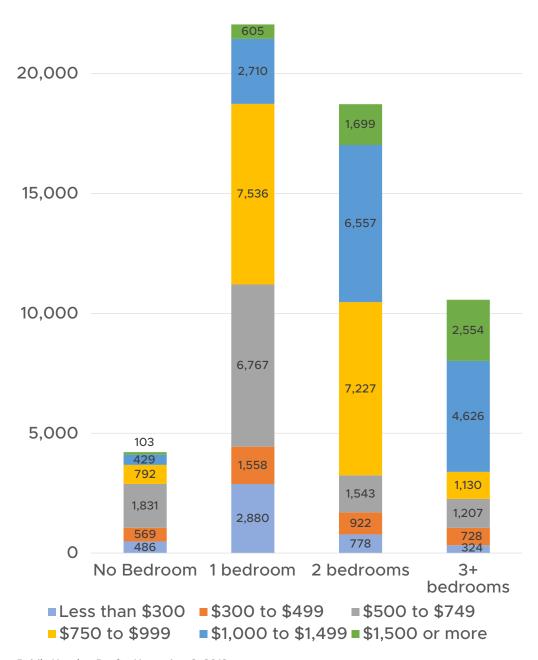
■ ≤30% of AMI ■ >30% and ≤50% of AMI ■ >50% and ≤80% of AMI

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

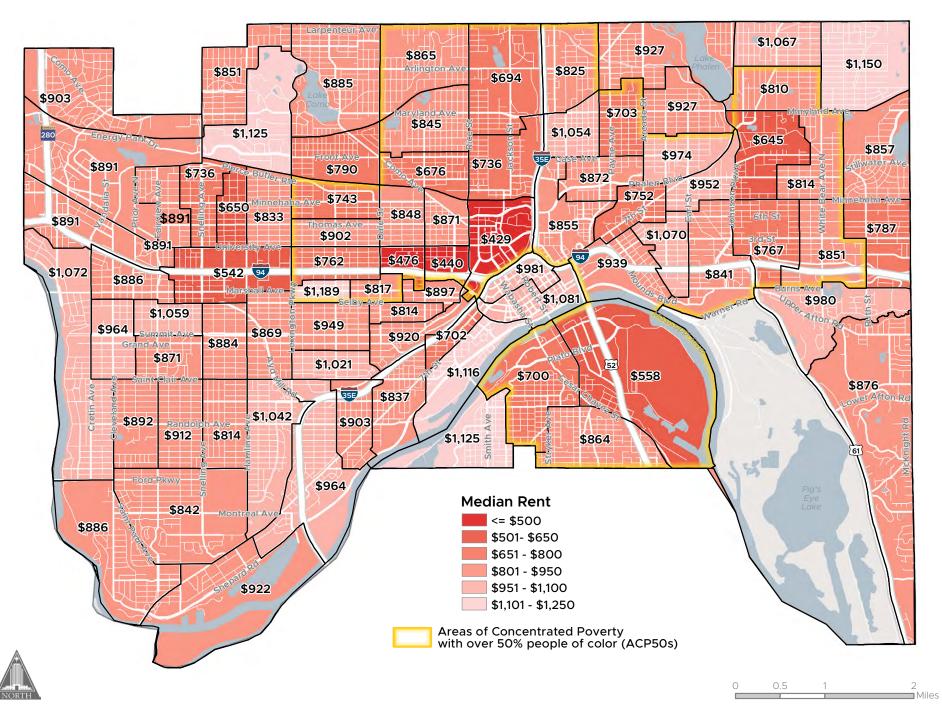


138 HOUSING | Appendix A

25,000



Map 7: Median Gross Rent by Census Tract



# 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.

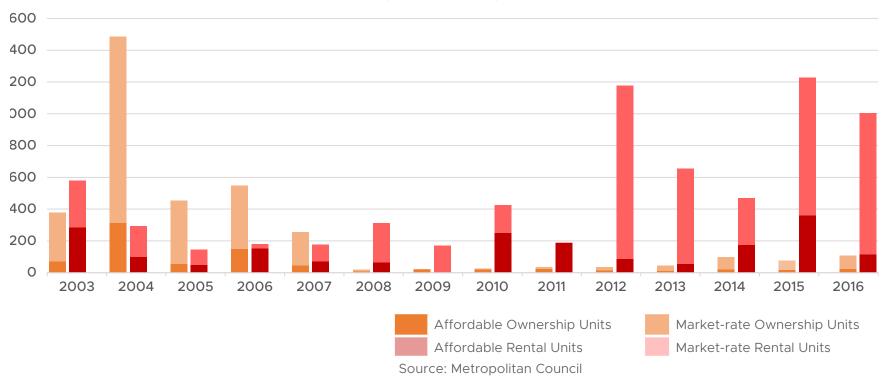
#### Preservation

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)



#### Income-to-Housing Cost

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

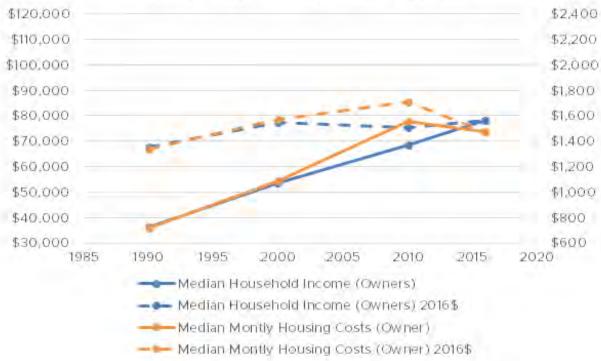
#### **Owner Households**

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

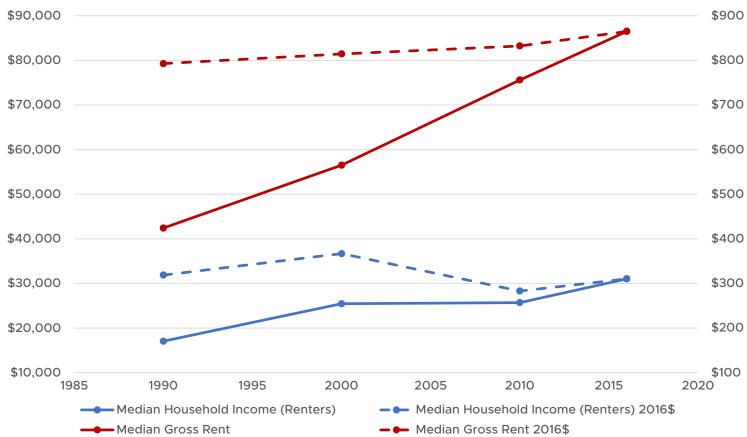
Median gross rents have increased at a faster rate than median renter household incomes over the last 25 years, with rent increasing by 104% and income by 82%. Adjusting for inflation, gross rent has increased by 9%, while renter household income has declined by 3%.





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 7 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)

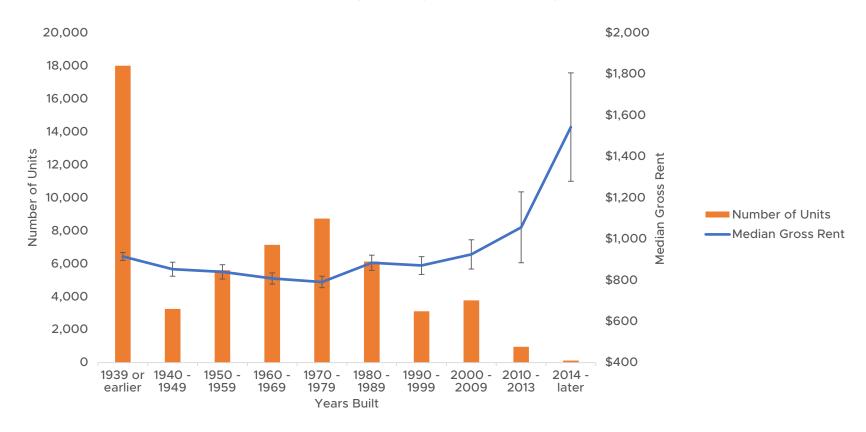


Chart 15: Cost Burden by Age of Structure Income ≤ 50% AMI

9,000

8,000

7,000

6,000

5,000 4,000

3,000

2.000

1.000

0

1939 or earlier

1940 - 1959

Income ≤ 50% AMI

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

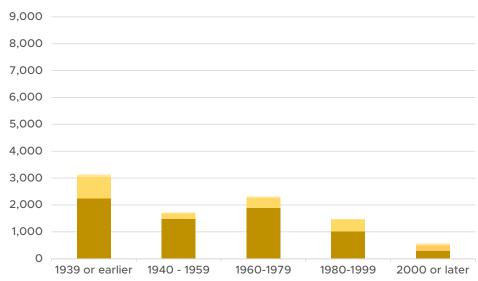
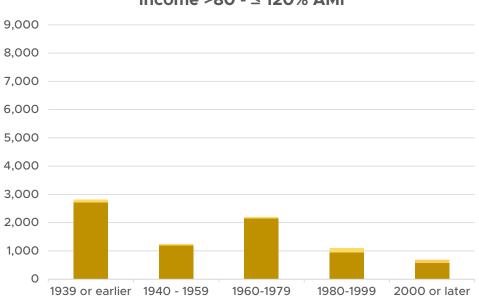


Chart 17: Cost Burden by Age of Structure Income >80 - ≤ 120% AMI

1960-1979

1980-1999

2000 or later



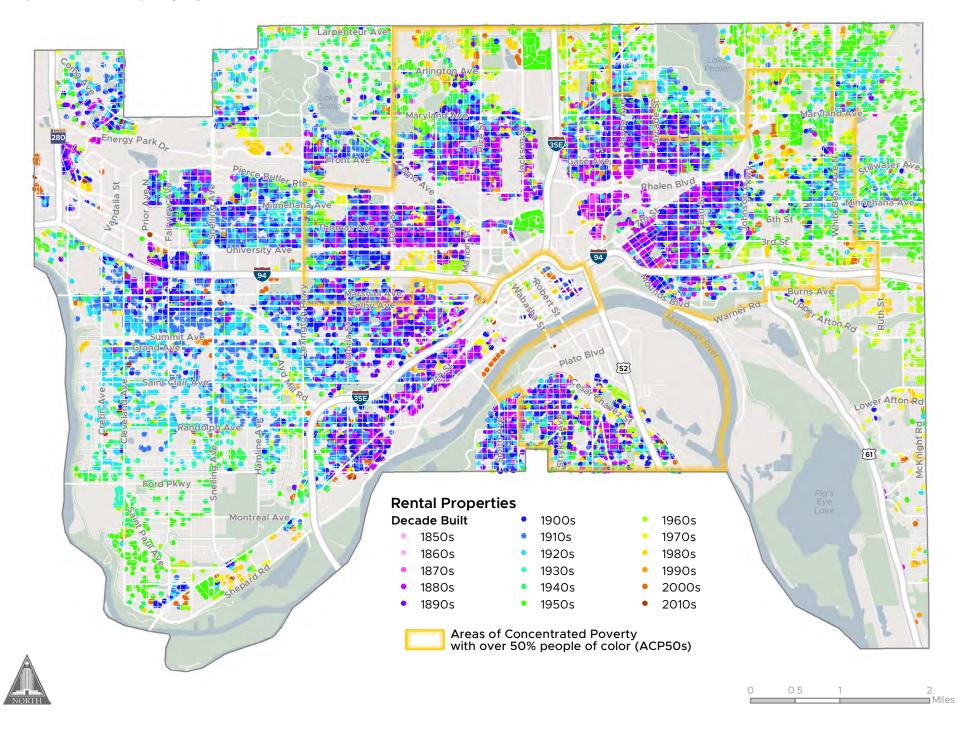
Not Cost-burdened (2010-2014)

Cost-burdened (2010-2014)

Severely Cost-burdened (2010-2014)

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

Map 8: Rental Property by Decade Built



146 HOUSING | Appendix A

# 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 scatteredsite 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 lowincome 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 vears. 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 incomerestricted 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:

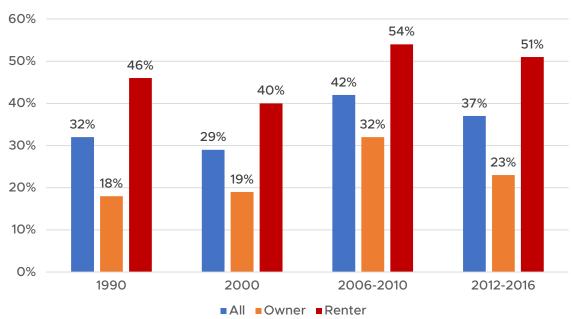
- 78% of households earning 30% of AMI or less (81% of owners and 77% of renters)
- 63% of households earning between 30% and 50% of AMI (58% of owners and 66% of renters)
- 32% of households earning between 50% and 80% of AMI (40% of owners and 25% of renters)
- 16% of households earning between 80% 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**



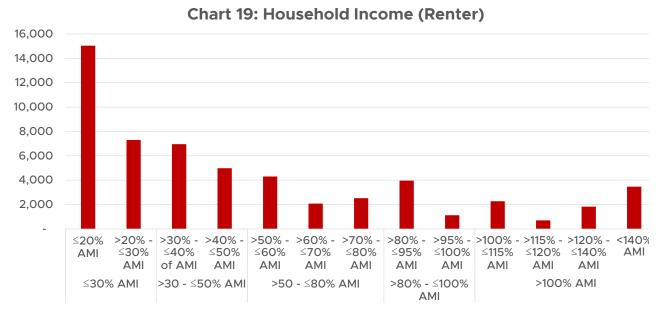
Source: U.S. Census, 1990 and 2000; ACS, 5-yr Estimates 2006-2010 and 2012-2016

148 HOUSING | Appendix A Public Hearing Draft - November 2, 2018

### 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. The following charts show the distribution of AMI within the standard HUD income bands for owner households and renter households.



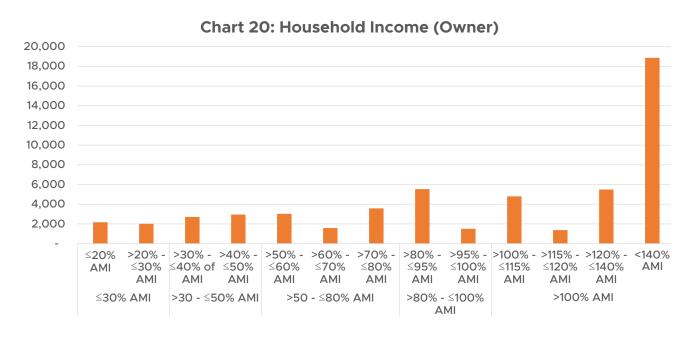


Table 4: Number of Cost-burdened, Severely Cost-burdened, and Total Cost-burdened Households at Various Levels of AMI

| Level of Cost Burden by Percent of |        | lumber of<br>ousehold |        |       | Percent by<br>Isehold Ty |       |       | ercent at<br>come Leve |       |            | Percent o |       |
|------------------------------------|--------|-----------------------|--------|-------|--------------------------|-------|-------|------------------------|-------|------------|-----------|-------|
| Income at Area Median Income (AMI) | 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%  | <b>7</b> % | 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                | ·      | 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 Race

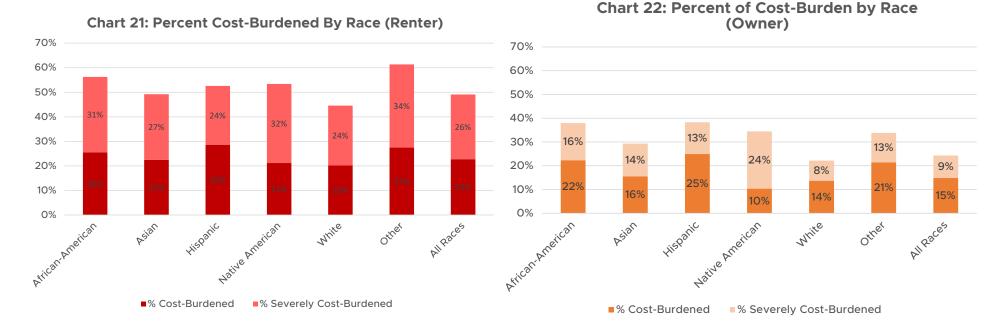
In Saint Paul, there is a racial disparity in homeownership and cost burdened households. Over the last 30 years, homeowners have been less likely to be cost-burdened, typically at about half the rate of renters, and experience it at a lesser degree (cost-burdened versus extremely cost-burdened). White 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 costburdened, 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.



### Key trends identified include:

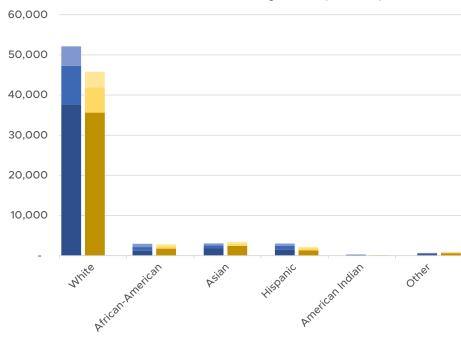
- The percent of cost-burdened owner households decreased across all races between the two reporting periods except for Native American households.<sup>1</sup>
- The number of renter households increased across all races except for Native American households.
- The percent of African American and Hispanic 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.

25,000
20,000
15,000
5,000

Antican Angelican Agent Ag

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.

**Chart 24: Cost Burden By Race (Owner)** 



|   | Not Cost-burdened (2010-<br>2014)     |  | Not Cost-burdened<br>(2010-2014)      |
|---|---------------------------------------|--|---------------------------------------|
|   | Cost-burdened<br>(2010-2014)          |  | Cost-burdened<br>(2010-2014)          |
|   | Severely Cost-burdened<br>(2010-2014) |  | Severely Cost-burdened<br>(2010-2014) |
| Source: CHAS, 2005-2009 and CHAS, 2010-2014 (Table 9) |                                       |  |                                       |

#### Definitions:

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

# 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)

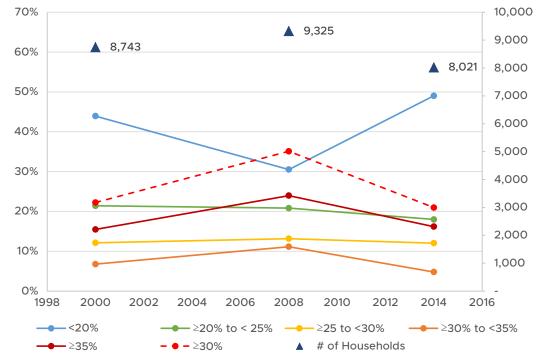


Chart 26: Householder 35-64 (Owner)

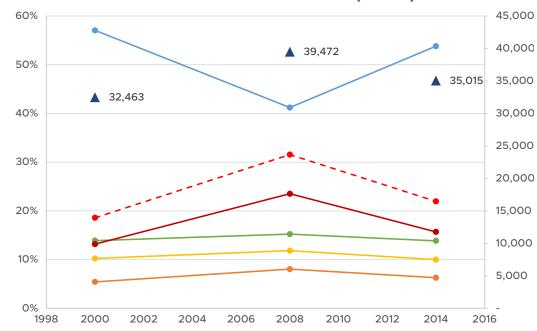


Chart 27: Householder 65 and over (Owner)

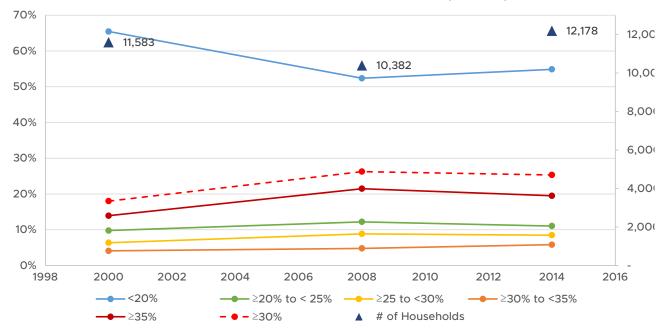


Chart 28: Householder 15 to 24 (Renter)

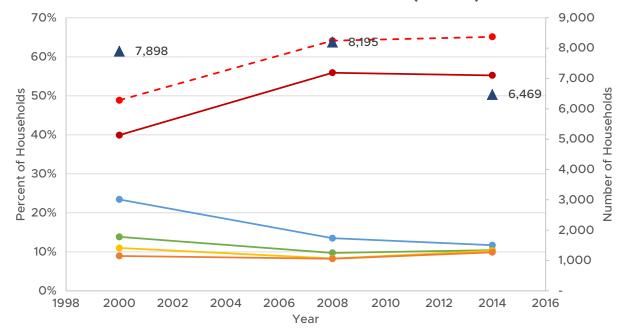


Chart 29: Householder 25 to 34 (Renter)

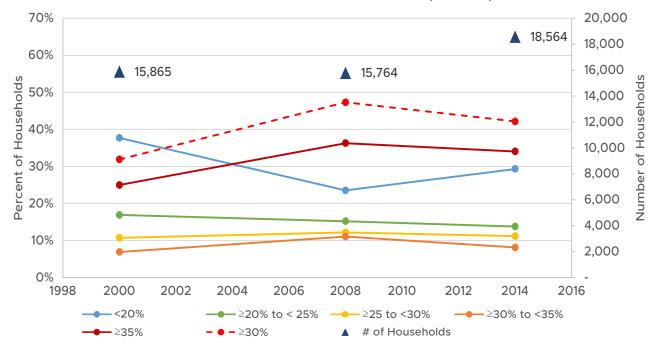
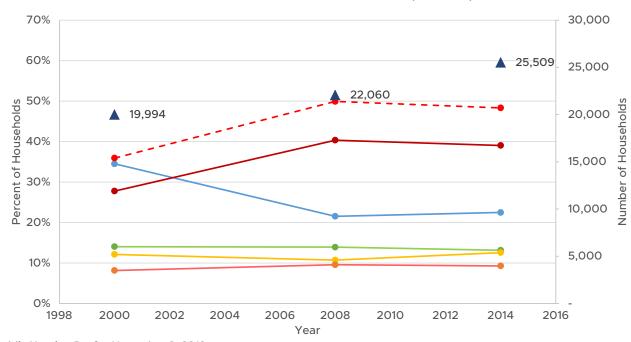
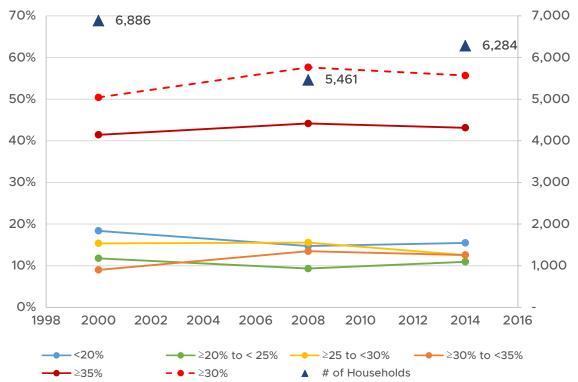


Chart 30: Householder 35 to 64 (Renter)



**Chart 31: Householder 65+ (Renter)** 



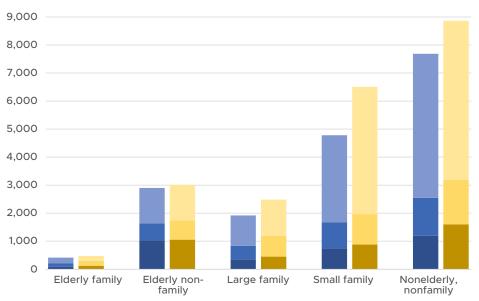
Source Charts 25-31: Census 2000 and ACS 5-year Estimates, 2006 - 20010 and 2012 - 2016

# 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 costburdened households within that household type.





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

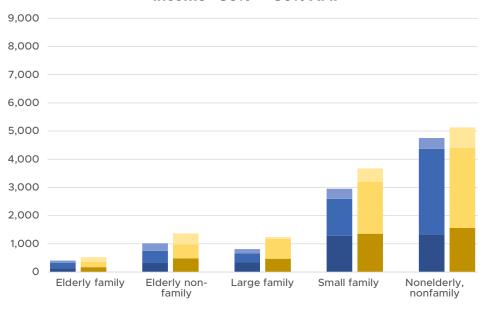
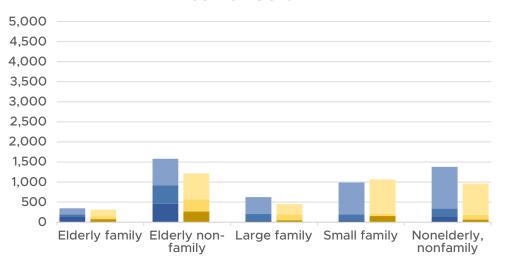


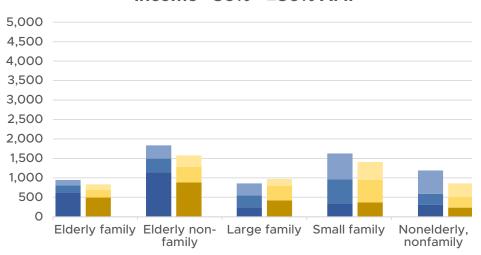
Chart 34: Cost Burden by Household Type (Renter) Income >50% -≤80% AMI

9.000 8.000 7,000 6,000 5,000 4,000 3.000 2.000 1.000 Elderly family Elderly non- Large family Small family Nonelderly, family nonfamily

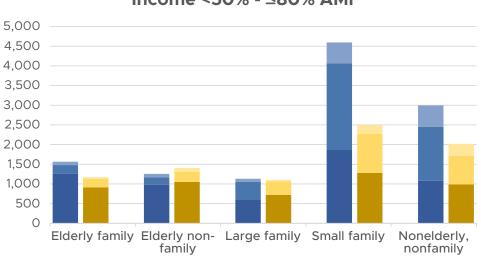
**Chart 35: Cost Burden by Household Type** (Owner) Income ≤30% AMI

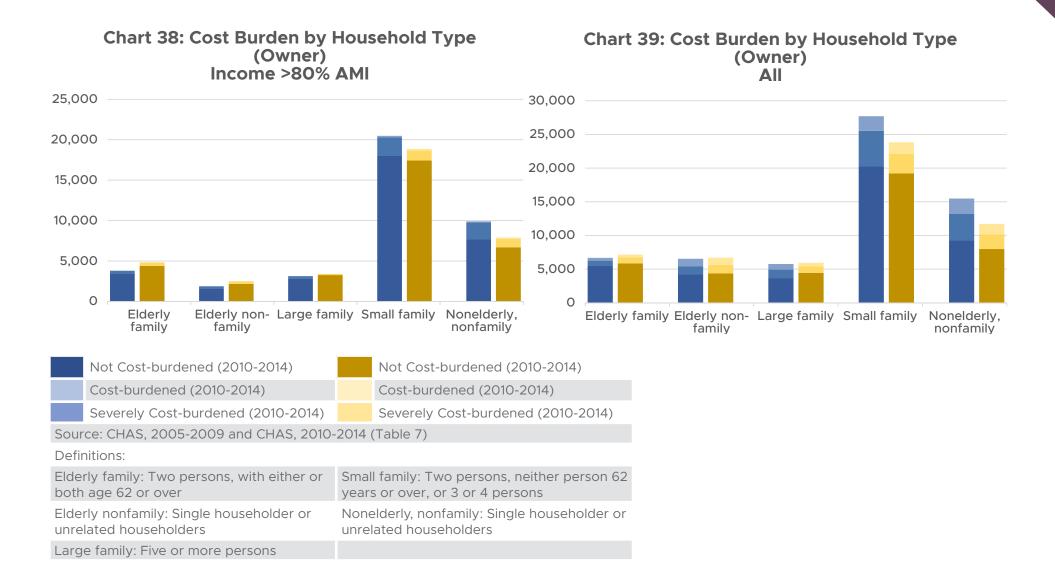


**Chart 36: Cost Burden by Household Type** (Owner) Income <30% - ≤50% AMI



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





### 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 39: Persons in Point-in-Time Count, 2014-2017



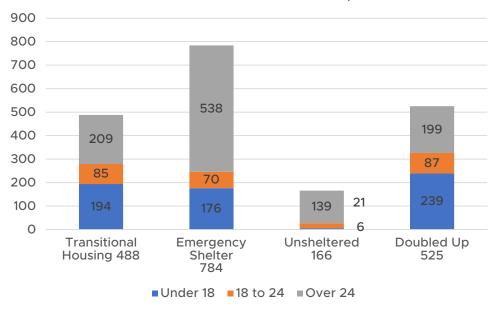
# Age

- 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 40: Ramsey County Homeless Person by Age Total Homeless Persons: 1,963



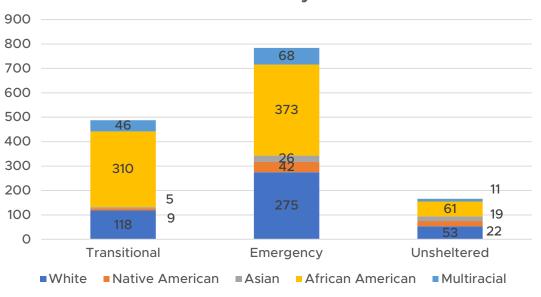
# Race

- 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 41: Homeless Persons by Race and Ethnicity



HOUSING | Appendix A

# 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 fourpronged 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.

Table 5: 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 lobby the State and Federal governments for additional resources to help offset housing costs for extremely low-income households, and to 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 multifaceted strategic plan that identifies short- and long-term steps to reduce impediments to fair housing in Saint Paul.

This page intentionally left blank.

# 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.

166 HOUSING | Appendix B

# 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  |
|--|--|--|--|
| <ul> <li>Provide City loans to finance housing improvements, upkeep, and emergency maintenance of owner-occupied structures.</li> <li>Provide City loans to finance improvements to non-owner-occupied small-scale rental properties.</li> <li>Investigate ways to develop culturally-appropriate lending products for City housing improvement loans.</li> <li>Encourage nonprofits and neighborhood organizations to apply for housing fix up grants through Neighborhood STAR and the CIP process.</li> </ul> | <ul> <li>Continue to ensure minimum health and safety in rental housing under the Fire Certificate of Occupancy Program.</li> <li>Continue to require code inspections of for-sale properties under the Truth-in-Sale of Housing program.</li> <li>Continue to enforce property maintenance codes</li> </ul> | <ul> <li>Continue to work with Ramsey<br/>County Public Health on lead paint<br/>abatement.</li> <li>Refer homeowners to Minnesota<br/>Homeownership Center.</li> <li>Refer owners of historic resources<br/>to organizations that can help<br/>them with potential State and<br/>Federal resources</li> </ul> | <ul> <li>Maintain up-to-date information on the City's website on City loan resources.</li> <li>Supply information to non-code compliant properties on City loan programs with a violation letter.</li> <li>Continue to make Truth-in-Sale of Housing reports available on the City's website.</li> <li>Continue to maintain access to Fire Certificate of Occupancy information on the City's website.</li> </ul> |
| City Funding Programs  | Plans/Official Controls/Programs   | Existing and Potential Partners  | Materials  |
| <ul> <li>Citywide Deferred<br/>Rehabilitation Loan</li> <li>Citywide Low-Interest<br/>Rehabilitation Loan</li> <li>Emergency Loan Fund</li> <li>Rental Rehab Program</li> </ul>  | <ul><li>Fire Certificate of Occupancy</li><li>Truth-in-Sale of Housing</li></ul>   | <ul><li>Minnesota Housing</li><li>Ramsey County</li><li>Historic Saint Paul</li><li>Preserve Frogtown</li></ul>  | <ul> <li>Provide information in consistent format.</li> <li>Develop handout/brochure with information and contact numbers.</li> </ul>  |
|  | Funding Sources:   | Potential Outside  | Funding Sources  |
| CDBG<br>HRA resources<br>Loan Returns<br>Sales Tax Revitalization Fund (STA  |  | Neighborhood loan programs<br>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  |
|---|---|---|--|
| <ul> <li>Facilitate access to capital for all residents by working with the lender community and advocating for culturally appropriate mortgage products.</li> <li>Continue to sell existing HRA-owned properties and provide gap financing for affordable ownership housing.</li> <li>Support grant applications to offset extraordinary costs (e.g. environmental cleanup, enhanced design) for ownership housing.</li> </ul> | <ul> <li>Decrease land costs for new ownership development by considering the following changes to the Zoning Code:</li> <li>Reduction of minimum lot size and per unit area requirements.</li> <li>Increase ability to build small units or cluster developments.</li> <li>Minimum lot area requirements for one-family dwellings in residential districts.</li> </ul> | <ul> <li>Refer potential buyers to the Minnesota<br/>Homeownership Center and local nonprofit<br/>resources.</li> <li>Encourage developers to build a range of<br/>ownership housing types, including single-<br/>family, townhomes, and condominiums.</li> </ul>   | <ul> <li>Support homebuyer pre- and post-purchase counseling.</li> <li>Continue to provide foreclose counseling to homeowners.</li> <li>Raise awareness within buyer community and developers of shared-equity models (land trusts and housing cooperatives) that can help to make ownership more affordable.</li> <li>Support translation of homeownership education materials for non-English speakers.</li> <li>Raise awareness that existing small "lots of record" are buildable lots.</li> </ul> |
| City Funding Programs   | Plans/Official Controls/Programs  | Existing and Potential Partners   | Materials  |
| Inspiring Communities   | Zoning Code   | <ul> <li>Minnesota Housing</li> <li>Minnesota Home Ownership Center</li> <li>Daytons' Bluff Neighborhood Housing<br/>Services</li> <li>Neighborhood Development Alliance</li> <li>NeighborWorks Home Partners</li> <li>Fair Housing Implementation Council</li> <li>Habitat for Humanity</li> <li>Rondo Community Land Trust</li> <li>Twin Cities Land Trust</li> </ul> | <ul> <li>Provide links to translated<br/>homeownership materials on City<br/>website.</li> <li>Develop a small lot development<br/>information sheet.</li> </ul>   |
| Potential Ci  | ty Funding Sources:   | Potential Outside Fu  | ınding Sources   |
| CDBG HRA resources HOME Land write down Sales Tax Revitalization fund   |   | Minnesota Housing Consolidated RFP<br>DEED, Metropolitan Council, and Ramsey Cour<br>Metropolitan Council LCDA/LCDA-TOD grants  | nty Brownfields Grants   |

168 HOUSING | Appendix B

# 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 and State funding for affordable housing (target incomes: ≤60% of AMI, with focus on ≤30% of AMI).

#### Financial Resources/Strategy

- 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 lowincome households that may not need support services.

#### Regulations/Agreements/Plans

- 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 projectbased 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.

#### Strategic Partnerships

- 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.

#### Education/Information

- 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.

169

# Need: Affordable Rental Housing (2 of 2)

| Financial Resources/Strategy  | Regulations/Agreements/Plans   | Strategic Partnerships   | Education/Information   |
|---|--|--|---|
|   | <ul> <li>Analyze market conditions to<br/>determine if regulatory tools<br/>can support the development of<br/>affordable housing.</li> </ul>  |  |   |
|   | <ul> <li>Reduce land costs for<br/>development of affordable<br/>rental housing by considering<br/>Zoning Code amendments that<br/>reduce or eliminate minimum lot<br/>area per unit requirements in<br/>residential districts.</li> </ul> |  |   |
| City Funding Programs   | Plans/Official Controls/Programs   | Existing and Potential Partners  | Materials   |
| 9% Tax Credit RFP     Rental Rehab Loan Program   | <ul> <li>Comprehensive Plan Future Land<br/>Use Map</li> <li>Neighborhood, station area, and<br/>small area plans</li> <li>Zoning code</li> <li>Development agreements</li> </ul>  | <ul> <li>Saint Paul Public Housing</li> <li>Minnesota Housing</li> <li>Other public housing providers</li> <li>Affordable housing providers</li> <li>Affordable housing advocates</li> <li>HUD</li> <li>MN Department of Employment and Economic Development</li> <li>Metropolitan Council</li> <li>District Councils</li> <li>Land Trusts</li> <li>LISC</li> <li>Family Housing Fund</li> </ul> | <ul> <li>Updated Area Plan Guidelines</li> <li>Yearly affordable housing production report</li> </ul> |
| Potential City F  | 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 I<br>DEED and Metropolitan Council Brow<br>Metropolitan Council LCDA/LCDA-TO   | Metropolitan Council<br>nfields Grants  |

170 HOUSING | Appendix B

### 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  |
|---|--|---|--|
| <ul> <li>Lobby for additional State and Federal resources directed towards reducing homelessness.</li> <li>Encourage non-City funding sources to continue to provide resources for supportive and homeless housing.</li> <li>Create and capitalize an emergency repair fund to remedy rental property lifesafety defects to prevent tenant displacement.</li> </ul> | <ul> <li>Develop and implement an Emergency Housing Plan to support tenants who are displaced due to non-code compliance.</li> <li>Study and complete legal analysis around tenant protections, such as advance notice of sale, right to counsel, just-cause evictions and condemnation assessment.</li> </ul> | <ul> <li>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.</li> <li>Continue City/HRA involvement in the Saint Paul/Ramsey County Funders Council and the Heading Home Advisory Board.</li> <li>Participate with Ramsey County Committee regarding State-funded Family Homelessness Prevention Assistance Program.</li> <li>Participate on Minnesota Housing Stewardship Committee.</li> </ul> | <ul> <li>Advocate for use of best practices for tenant screening to reduce housing insecurity for those with low credit scores, past evictions or criminal convictions.</li> <li>Work with Ramsey County Continuum of Care Governing Board to continually raise community awareness about issues around homelessness.</li> </ul> |
| City Funding Programs   | Plans/Official Controls/Programs   | Existing and Potential Partners   | Materials  |
| <ul> <li>HUD Emergency Solutions<br/>Grant</li> <li>9% Tax Credit RFP</li> <li>Emergency Repair Fund</li> </ul>   | Emergency Housing Plan   | <ul><li>Saint Paul Public Housing Agency</li><li>Minnesota Housing</li><li>Ramsey County</li></ul>  | To be determined   |
| Potential City  | Funding Sources:   | Potential Outside Funding So  | Irces  |
| 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   | arraining Jourees.   | 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/<br>Strategy  | Regulations/Agreements/Plans   | Strategic Partnerships  | Education/Information   |
|---|--|---|---|
| Support grant applications to offset extraordinary costs (e.g. environmental cleanup, enhanced design) for new housing. | <ul> <li>Guide land at sufficient densities to accommodate the City's allocation of regional housing growth. (See Future Land Use Map in this document.)</li> <li>Require all neighborhood, station area, and small area plans to include goals, policies and/or recommendations to accommodate new housing in the study area.</li> <li>Ease regulatory requirements that unduly burden development of smaller units by considering amendments to: <ul> <li>Lot area per unit requirement for multi-family</li> <li>Minimum dimensional requirements for one-family dwellings</li> </ul> </li> <li>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.</li> </ul> | Work with Mayor's Advisory<br>Committee on Aging and other<br>stakeholders to identify ways<br>to expand housing choice to<br>promote aging in community. | <ul> <li>Raise awareness in the housing development community around alternative housing types, such as intentional communities and cohousing.</li> <li>Review Minneapolis' Developer 101 course outcomes and evaluate need for similar training in Saint Paul</li> <li>Continue to monitor and report housing trends.</li> </ul> |
| City Funding Programs   | Plans/Official Controls/Programs   | Existing and Potential Partners   | Materials   |
|   | Comprehensive Plan Future Land Use Map   | Housing developers  | • MarketWatch   |
|   | • Neighborhood, station area, and small area plans.  | District Councils   |   |
|   | Zoning code  | Advisory Committee on Aging   |   |
|   | Potential City Funding Sources:  | Potential Outside F   | unding Sources  |
| City/HRA funds on a case  | -by-case basis.  | DEED, Metropolitan Council Brown<br>Metropolitan Council LCDA/LCDA-   |   |

172 HOUSING | Appendix B

# 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<br>Program Evaluation Tool when<br>allocating City/HRA resources<br>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<br>Fair Housing Implementation<br>Council to coordinate efforts<br>to affirmatively further fair<br>housing throughout the<br>metropolitan area housing<br>market. | <ul> <li>Expand the Fair Housing<br/>Training program for<br/>property managers and<br/>landlords as part of the City's<br/>Landlord 101 program.</li> <li>Maintain and update the<br/>citywide Fair Housing<br/>webpage.</li> <li>Develop a Fair Housing<br/>dashboard to track and<br/>report outcomes.</li> </ul> |
| City Funding Programs   | Plans/Official Controls/Programs  | Existing and Potential Partners   | Materials  |
|   | Fair Housing Strategic Plan   | Fair Housing Implementation<br>Council  | <ul><li>City's Fair Housing web page</li><li>Fair Housing dash board</li></ul>   |
| 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<br>Resources   | 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.  |
| (Continued)   | 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<br>Financial Resources   | 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.   |
| <ul> <li>Supported Uses:</li> <li>Property rehabilitation</li> <li>Affordable rental and ownership housing</li> <li>Housing for the homeless</li> </ul> | 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.  |
| New market-rate<br>housing  | 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.  |

176 HOUSING | Appendix C

| Type of Tool   | Specific Tool  |
|--|--|
| Direct Assistance<br>Programs                                    | 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.  |
| Supported Uses: • Home   | 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.  |
| maintenance/<br>rehabilitation                                   | 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.  |
| Homeownership<br>and foreclosure<br>counseling                   | 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.   |
| Referrals  |  |
| Regulatory Tools and Policy                                      | 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.  |
| Supported Uses:  | Zoning Regulation Changes: The zoning code regulates the overall use and intensity of use of land. The City will consider  |
| Housing choice   | 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.  |
| <ul> <li>Reduction of<br/>housing cost</li> </ul>                | Truth in Sale of Housing: The City will continue to require pre-sale inspections of housing units.   |
| Housing safety   | 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). |
| Other Supported Uses: • Affordable                               | 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.  |
| rental and<br>ownership  | 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.  |
| <ul><li>housing</li><li>Fair housing</li><li>Education</li></ul> | 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.   |
| audda(ioii   | 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.   |

Public Hearing Draft - November 2, 2018

This page intentionally left blank.



Public Hearing Draft - November 2, 2018

# 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 is blessed by a drinking water system that 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. Most of the city was developed before the impacts of stormwater runoff on water resources, particularly surface water quality, were well understood. 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 is critical to both meeting the needs of current citizens and accommodating new demand as the city continues to grow.

# 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.

#### **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-ofway 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.





#### **Best Management Practices**

When dealing with stormwater, a Best Managemetht 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).

**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.

# Goal 4: Rehabilitated and upgraded gray stormwater infrastructure.

Policy WR-19. 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-20.** Rehabilitate existing gray stormwater infrastructure to protect the previous significant public investment.

**Policy WR-21.** Respond to changing precipitation patterns and ensure the adequacy of existing gray stormwater infrastructure and stormwater management regulations.

#### 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 aguifers are hundreds of feet underground. An individual water molecule entering a bedrock aquifer at a recharge zone (where surface or other groundwater enters the aguifer, typically close to the surface) may remain in the aquifer for thousands of years. Four levels of bedrock aguifers separated from each other by layers of lesspermeable 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.

# Goal 5: Sustainable wastewater conveyance and treatment infrastructure.

**Policy WR-22.** Continue to reinvest in critical sanitary collection and conveyance infrastructure by rehabilitating the existing system.

**Policy WR-23.** Continue I&I identification and correction efforts for municipal sanitary conveyance systems and connecting private infrastructure.

Policy WR-24. 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-25.** Reduce reliance on individual sewage treatment systems where financially feasible.

**Policy WR-26.** Continue to reduce non-compliant Individual Sewage Treatment Systems (ISTS) and ensure maintenance of compliant systems.

**Policy WR-27.** Discourage new ISTSs where public sanitary conveyance infrastructure is available.

Policy WR-28. Prohibit new community treatment systems where public sanitary conveyance infrastructure is available.

Policy WR-29. 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 plans 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.



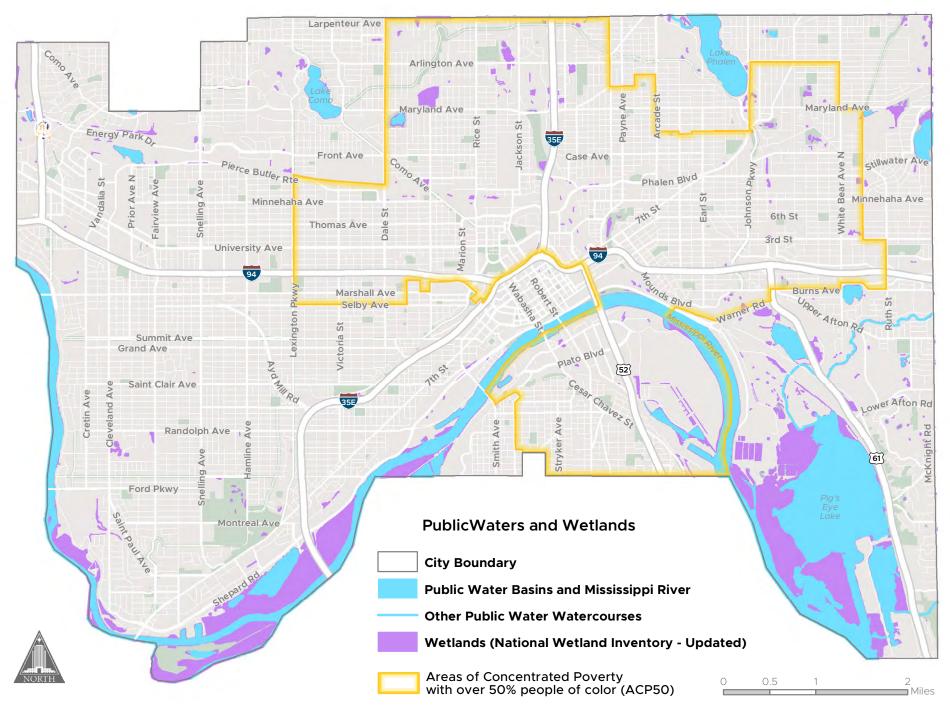
This page intentionally left blank.

# Appendix A

| Map WR-1: Public Waters and Wetlands                    | 187 |
|---|-----|
| Map WR-2: Interceptors, Service Basins and Lift Sations | 188 |
| Map WR-3: Storm Sewer and Green Infrastructure          | 189 |
| Appendix B  Local Surface Water Management Plan         | 190 |
| Appendix C Water Supply Plan                            | 191 |
| Appendix D Wastewater Component                         | 192 |

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

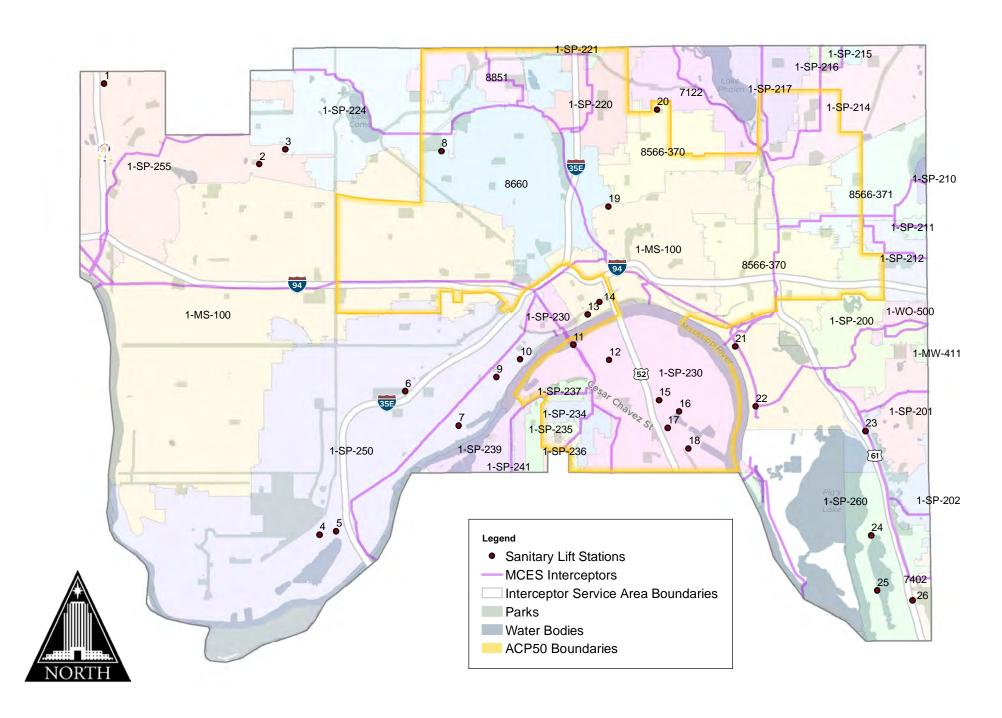
#### Map WR-1: Public Waters and Wetlands



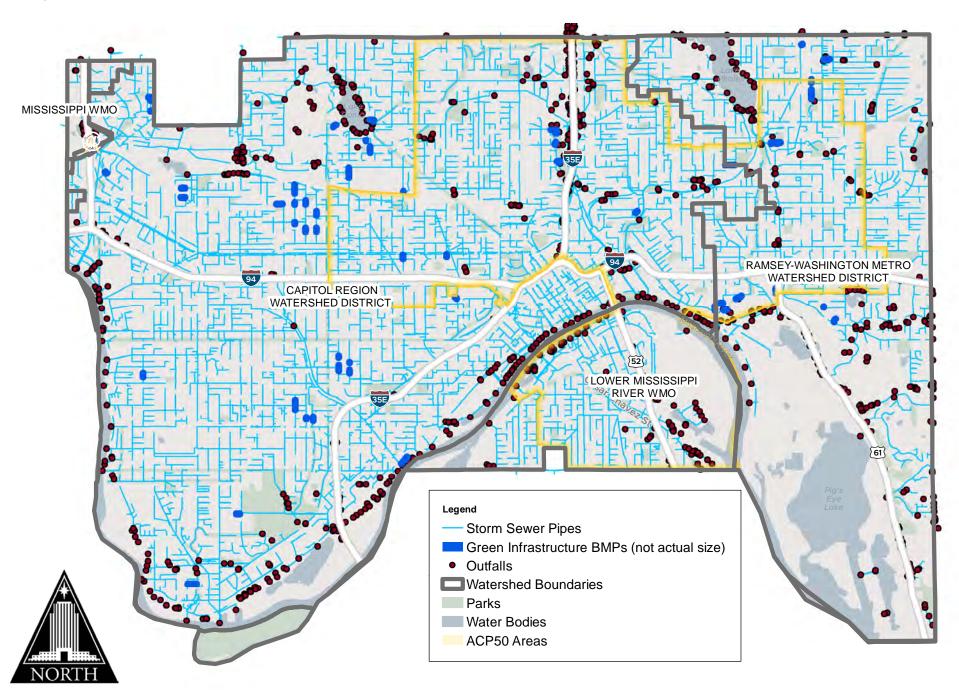
Public Hearing Draft - November 2, 2018

WATER RESOURCES MANAGEMENT 18

Map WR-2: Interceptors, Service Basins and Lift Sations



Map WR-3: Storm Sewer and Green Infrastructure



## 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.

## Appendix D

#### **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 Table 1.

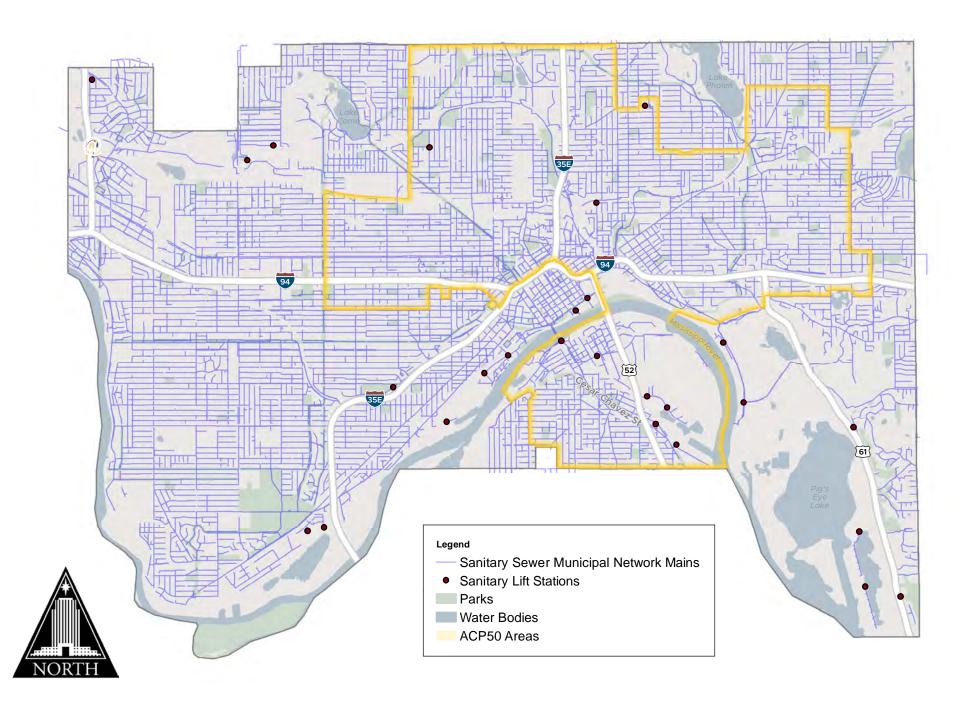
Table 1: Forecasted Population, Households, and Employment for Unsewered Portion of Saint Paul

|     | Decade |      |      |  |
|-----|--------|------|------|--|
|     | 2020   | 2030 | 2040 |  |
| Pop | 199    | 0    | 0    |  |
| НН  | 79     | 0    | 0    |  |
| Emp | 0      | 0    | 0    |  |

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

| Interceptor  |         | 2020   |        |         | 2030   |        |         | 2040   |        |
|--------------|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| Service Area | POP     | HH     | EMP    | POP     | HH     | EMP    | POP     | HH     | EMP    |
| 1-MS-100     | 103,499 | 39,489 | 69,542 | 108,084 | 42,103 | 73,869 | 112,719 | 44,487 | 77,965 |
| 1-SP-200     | 5,872   | 2,333  | 1,352  | 6,420   | 2,516  | 1,236  | 6,959   | 2,676  | 1,123  |
| 1-SP-201     | 4,056   | 1,484  | 166    | 4,130   | 1,508  | 108    | 4,192   | 1,528  | 54     |
| 1-SP-212     | 3,325   | 1,420  | 633    | 3,518   | 1,498  | 665    | 3,725   | 1,565  | 700    |
| 1-SP-214     | 13,665  | 5,140  | 1,315  | 14,105  | 5,310  | 1,290  | 14,615  | 5,480  | 1,280  |
| 1-SP-216     | 493     | 513    | 200    | 63      | 528    | 205    | 65      | 543    | 210    |
| 1-SP-217     | 4,293   | 1,640  | 253    | 4,618   | 1,765  | 255    | 4,978   | 1,870  | 255    |
| 1-SP-220     | 7,140   | 2,690  | 1,570  | 7,630   | 2,880  | 1,510  | 8,180   | 3,070  | 1,460  |
| 1-SP-224     | 16,580  | 6,800  | 3,500  | 16,470  | 6,830  | 3,800  | 16,650  | 6,890  | 4,090  |
| 1-SP-230     | 12,847  | 4,934  | 37,935 | 13,826  | 5,511  | 38,368 | 13,703  | 5,657  | 38,627 |
| 1-SP-234     | 3,227   | 1,205  | 331    | 3,294   | 1,214  | 371    | 3,409   | 1,230  | 408    |
| 1-SP-237     | 2,443   | 901    | 281    | 2,491   | 904    | 310    | 2,575   | 918    | 339    |
| 1-SP-239     | 1,652   | 632    | 116    | 1,697   | 652    | 119    | 1,768   | 674    | 113    |
| 1-SP-250     | 57,650  | 25,900 | 34,030 | 58,440  | 26,410 | 37,120 | 59,660  | 26,850 | 40,370 |
| 1-SP-255     | 13,720  | 6,040  | 27,340 | 15,740  | 6,820  | 29,560 | 18,220  | 7,690  | 31,840 |
| 1-SP-260     | 0       | 0      | 340    | 0       | 0      | 230    | 0       | 0      | 130    |
| 7122         | 3,963   | 1,494  | 721    | 4,152   | 1,569  | 798    | 4,368   | 1,638  | 866    |
| 7402         | 1,390   | 450    | 120    | 2,130   | 690    | 120    | 2,660   | 870    | 130    |
| 8566-370     | 28,753  | 10,473 | 5,838  | 29,964  | 10,964 | 5,749  | 31,353  | 11,476 | 5,729  |
| 8566-371     | 7,985   | 3,075  | 730    | 8,590   | 3,275  | 715    | 9,320   | 3,470  | 700    |
| 8660         | 19,560  | 7,200  | 12,870 | 20,550  | 7,620  | 12,580 | 21,630  | 8,040  | 12,470 |
| 8851         | 4,870   | 1,950  | 1,100  | 4,980   | 1,950  | 950    | 5,130   | 1,960  | 820    |

Figure 1: Sanitary Sewer System



#### Area Served by the Regional Sanitary Sewer System

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. Table 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 Table 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 wetweather 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

#### 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 lessintrusive 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)

Saint Paul Legislative Code, Chapter 41: Banning and Requiring Disconnect of Storm Drainage from Sanitary System.

Table 3: Sanitary Sewer Pump Station Capacity

|                         | Location No. (Map WR-2)   | Design Capacity (MGD) | Expected Discharge* (MGD) |
|-------------------------|---------------------------|-----------------------|---------------------------|
| Como & Eustis           | 1                         | 600                   | -                         |
| Energy Park             | 2                         | 700                   | 920                       |
| Brewster                | 3                         | 200                   | 240                       |
| Jessamine &<br>Mackubin | 8                         | 320                   | -                         |
| Bush & DeSoto           | 19                        | 550                   | 660                       |
| Phalen Arena**          | 20                        | 150                   | -                         |
| Glen Terrace            | 4                         | 210                   | -                         |
| Elway South             | 5                         | 320                   | _                         |
| Pleasant<br>Arena**     | 6                         | 142                   | -                         |
| James***                | 7                         | -                     | 690                       |
| Sherman                 | 10                        | 800                   | -                         |
| Sibley**                | 13                        | 300                   | 350                       |
| Broadway                | 14                        | 1300                  | 1384                      |
| Plato                   | 12                        | 1450                  | -                         |
| Robie                   | 17                        | 1200                  | 1300                      |
| Airport**               | 15                        | 425                   | -                         |
| Southport**             | 18                        | 100                   | 120                       |
| Peller                  | 26                        | 100                   |                           |
| Red Rock<br>South**     | 25                        | 200                   | -                         |
| Red Rock<br>North**     | 24                        | 1000                  | 1100                      |
| Childs Road<br>South**  | 22                        | 650                   | -                         |
| Childs Road<br>North**  | 21                        | 200                   | 250                       |
| Highbridge**            | 9                         | 250                   | -                         |
| Riverview               | 11                        | 4000                  | 4720                      |
| MCES L-12               | 23                        | 5300                  | -                         |
| MAC**                   | 16                        | 500                   | -                         |
| * Expected disch        | parge hased on numn curve |                       |                           |

<sup>\*</sup> Expected discharge based on pump curve

<sup>\*\*</sup> No or minimal upstream users

<sup>\*\*\*</sup> Design capacity unknown; expected discharge based on pump curve

This page intentionally left blank.



# 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.

## The following goals guide the Heritage and Cultural Preservation chapter:

- 1. 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 cultural and historic resources that reflect broader City priorities
- 5. Broad stakeholder understanding and application of heritage and cultural preservation planning tools and resources

Goal 1: 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:

- 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
- 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.

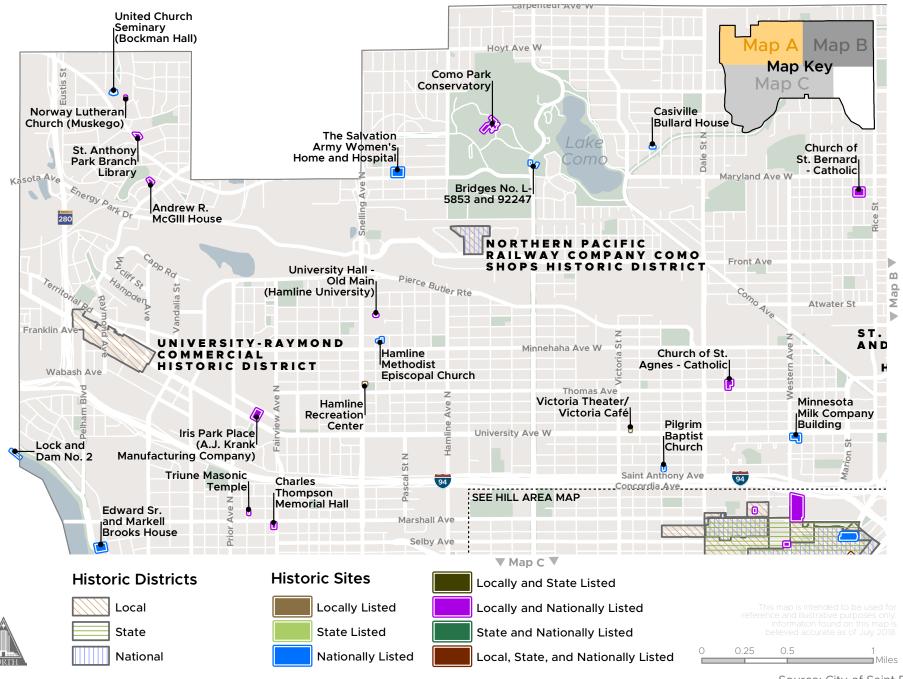
Restoration: Accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. Reconstruction: Depicting, by means 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.

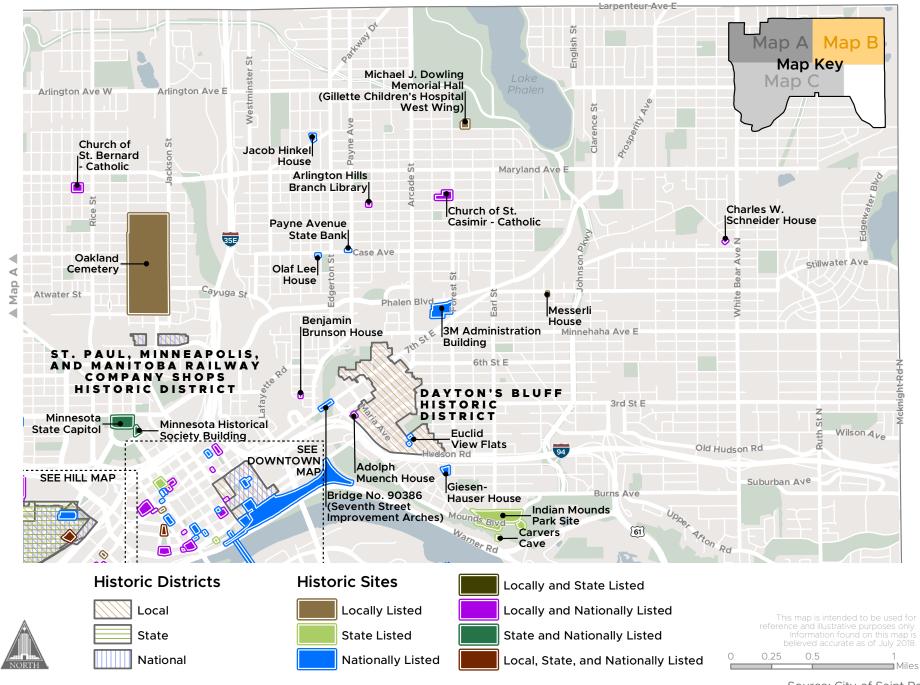
# Appendix A

| Figure HP-1: Historic Districts and Sites - Map A - Northwest Saint Paul | 207 |
|--|-----|
| Figure HP-2 Historic Districts and Sites - Map B - Northeast Saint Paul  | 208 |
| Figure HP-3: Historic Districts and Sites - Map C - Souhwest Saint Paul  | 209 |
| Figure HP-4: Historic Districts and Sites - Downtown Map                 | 210 |
| Figure HP-5: Historic Districts and Sites - Hill Area Map                | 211 |

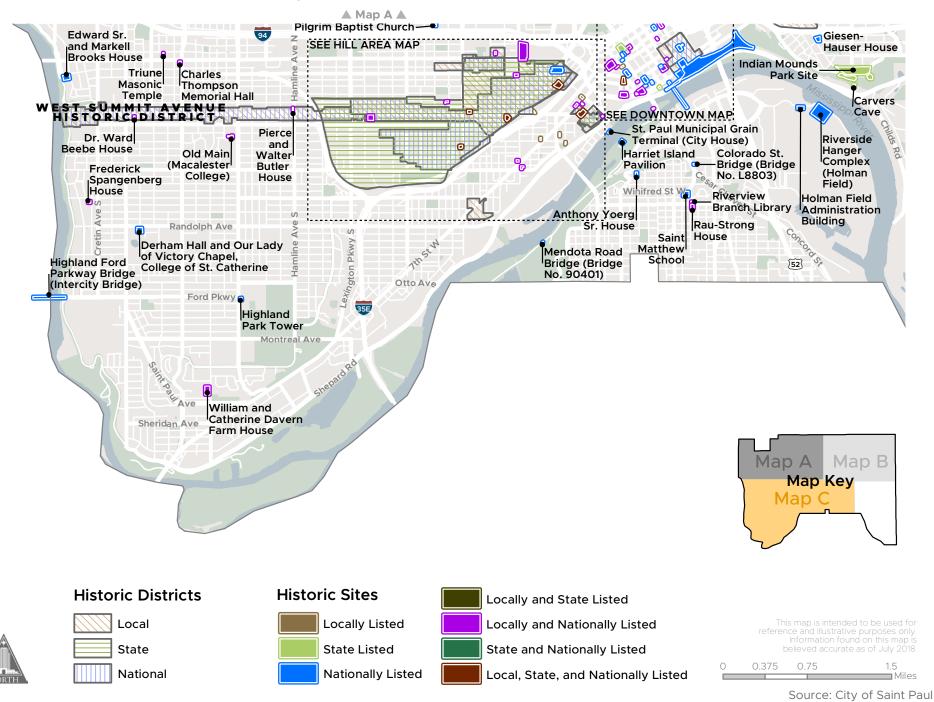
Map HP-1: Historic Districts and Sites - Map A - Northwest Saint Paul



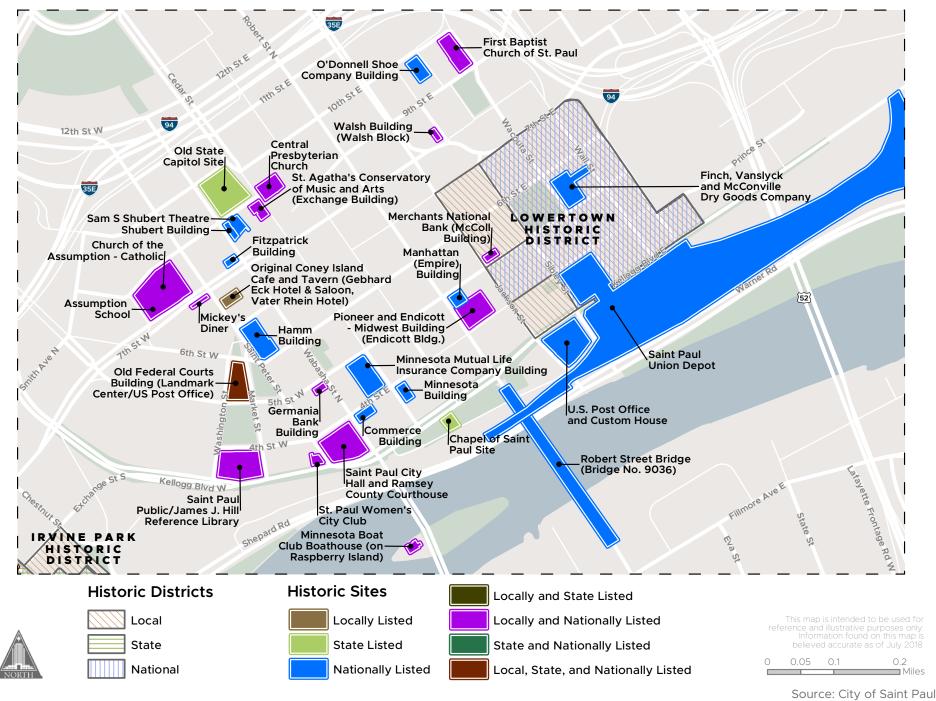
Map HP-2: Historic Districts and Sites - Map B - Northeast Saint Paul



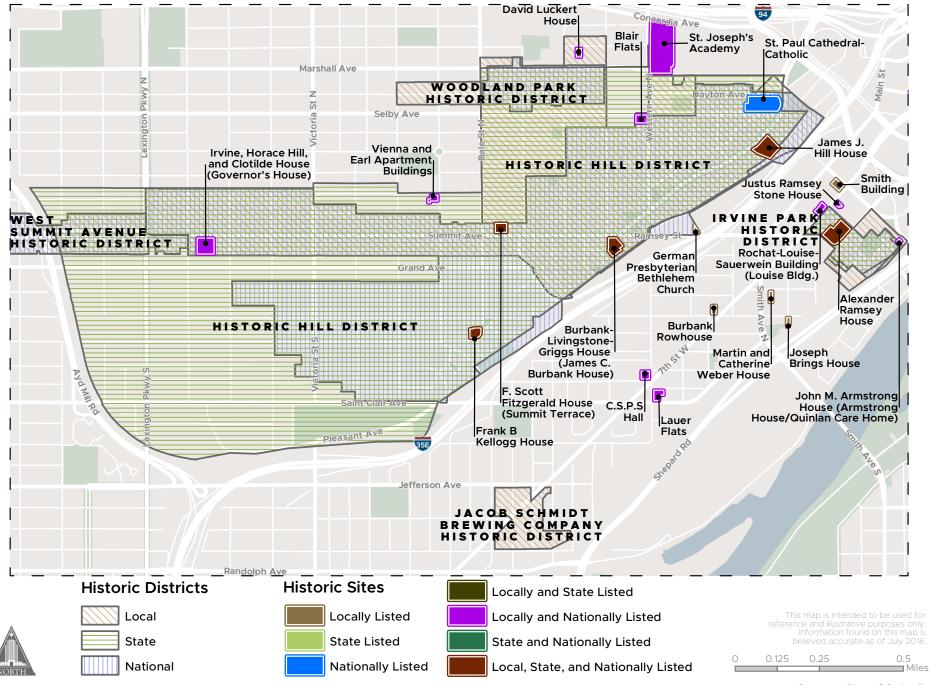
Map HP-3: Historic Districts and Sites - Map C - Southwest Saint Paul



Map HP-4: Historic Districts and Sites - Downtown Map

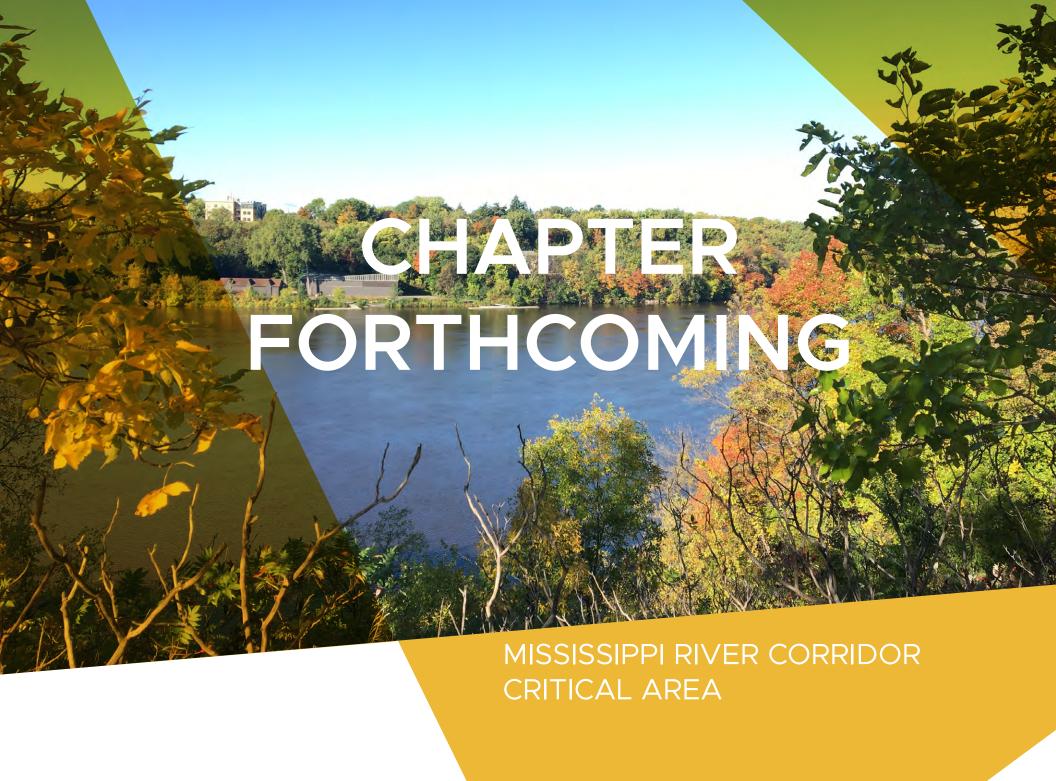


Map HP-5: Historic Districts and Sites - Hill Area Map



Source: City of Saint Paul

This page intentionally left blank.



This page intentionally left blank.



# 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 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;
- 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; and
- communicate with outside agencies, developers, community organizations and other members of the public who can drive implementation.

The City will also analyze existing Comprehensive Plan addenda for conformance with the 2040 Comprehensive Plan and pursue any necessary revisions.

#### 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 Bonds (CIB), which provide the most basic funding for yearly investment in capital facility improvements;
  - (Capital improvements focused on Public Works are contained in a Five-Year Capital Plan adopted annually by the Mayor and City Council. The most recent Five-Year Capital Plan is provided in Appendix I-A.)
- 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 I-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   |
|--------|----|---|------------|---|
|        | 1  | Work with the Saint Paul Port Authority to identify potential future light industrial business centers.   | Ongoing    | Department of Planning and Economic<br>Development budget |
|        | 2  | Support the Site Assembly state legislation and seek other sources of patient capital for acquisition and assembly of redevelopment sites.  | Ongoing    | <ul><li>Special allocations</li><li>Grant funds</li></ul> |
|        | 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.           | Short-Term |   |
|        | 5  | Re-convene Joint Airport Zoning Board (JAZB) in partnership with<br>the Metropolitan Airports Commission to develop and implement an<br>Airport Zoning Ordinance for Saint Paul Downtown Airport.         | Short-Term |   |
| ld Use | 6  | Complete Station Area Plans for planned stations along the Riverview Corridor transit route.  | Short-Term |   |
| Land   | 7  | Conduct a feasibility study of commercial land trusts.  | Short-Term |   |
|        | 8  | Conduct a zoning study of home occupation standards to allow start-<br>up businesses that reflect innovations in the business sector, while<br>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 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 |   |

General Timeline Guidelines: Short-Term (0-5 years) Medium-Term (5-10 years) Long-Term (10+ years)

Public Hearing Draft - November 2, 2018

IMPLEMENTATION 217

Figure I-1: Land Use Chapter Implementation (Continued)

|      |    | Item   | Timeline    | Funding Sources   |
|------|----|--|-------------|---|
|      | 13 | Systematically review and modify the Zoning Code to remove unnecessary hurdles to small-scale commercial and residential development.                          | Short-Term  | <ul> <li>Department of Planning and Economic<br/>Development budget</li> <li>Special allocations</li> </ul> |
|      | 14 | Complete and implement Climate Action Plan.  | Short-Term  | Grant funds   |
|      | 15 | 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  |   |
| Use  | 16 | Participate in the development of coordinated design guidelines for<br>the geography shared by Prospect Park, St. Anthony Park, CEZ and<br>Towerside.          | Short-Term  |   |
| Land | 17 | Study the creation of "Planned Manufacturing Districts" that preserve industrial land.   | Medium-Term |   |
|      | 18 | Study the economic development impact and market demand for<br>'maker space and small scale or custom production'.   | Medium-Term |   |
|      | 19 | Conduct a zoning study of commercial design standards.   | Medium-Term |   |
|      | 20 | Identify and study areas of the city where lack of stormwater infrastructure is a barrier to redevelopment.  | Medium-Term |   |
|      | 21 | 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)

218 IMPLEMENTATION

## Figure I-2 Transportation Chapter Implementation

The Transportation Chapter [insert link] 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  |
|----------------|----|--|-------------|--|
|                | 1  | Build City-led road construction projects consistent with the 2040 Comprehensive Plan.   | Ongoing     | Saint Paul Streets Fund (SPS) (street improvement bonds)   |
|                | 2  | Inform Ramsey County mill and overlay, restriping and reconstruction projects.   | Ongoing     | <ul> <li>Minnesota State Aid (MSA) (City share of<br/>State fuel taxes)</li> </ul>   |
|                | 3  | Inform Minnesota Department of Transportation roadway reconstruction and maintenance projects, including "Reimagine I-94."   | Ongoing     | Right-of-Way Maintenance Assessment<br>Funds     Cide and the Interfall Program and the Interfall Program and the Interfall Program and Interfall Progra |
|                | 4  | Participate in Metro Transit's Service Improvement Plan process, which occurs every five years.  | Ongoing     | Sidewalk Infill Program, which addresses<br>standalone sidewalk projects   |
|                | 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     | <ul> <li>MnDOT Cooperative Agreement Program</li> <li>Regional Solicitation for federal<br/>transportation funds (administered biennially<br/>by the Metropolitan Council)</li> </ul>  |
| Transportation | 6  | Use the Bicycle Plan, Pedestrian Plan and Street Design Manual to guide implementation of the bicycle network, pedestrian network and complete streets.                      | Ongoing     | <ul> <li>Regional Solicitation for the federal Highway<br/>Safety Improvement Program (HSIP)<br/>(administered biennially by MnDOT)</li> </ul>   |
| Transc         | 7  | Continue to collaborate with Ramsey County and other municipalities to implement the Ramsey County Pedestrian and Bicycle Plan and complete the Connected Ramsey Communities | Ongoing     | Transportation Economic Development<br>(TED) (administered by MN DEED)   |
|                |    | Network.   | Chart Tarre | Other MnDOT funds, such as Local Road<br>Improvement Program, Safe Routes to   |
|                | 8  | Analyze and consider revisions to the Bicycle Plan, Pedestrian Plan and Street Design Manual.  | Short-Term  | School, and funds focusing on freight  |
|                | 9  | Adopt and implement a "Vision Zero" program.   | Medium-Term | movement, trunk highway safety or bridges  |
|                | 10 | Work towards increasing all (not just work commute) trips' mode share for non-single-occupant vehicles, aiming to surpass  | Long-Term   | <ul> <li>Right-of-Way Loan Acquisition Fund (RALF)<br/>(administered by the Met Council)</li> </ul>  |
|                |    | the following interim goals prior to 2040, as measured via the Metropolitan Council's Travel Behavior Inventory (TBI):   |             | Transportation Investment Generating<br>Economic Recovery (TIGER) grants   |
|                |    | • 25% walking  |             |  |
|                |    | • 20% public transit   |             |  |
|                |    | 8% bicycling   |             |  |
|                |    |  |             |  |

# Figure I-3: Parks, Recreation and Open Space Chapter Implementation

The Parks, Recreation and Open Space Chapter [hyperlink] sets broad policy to create an equitable, safe, connected and sustainable park system for all users

|                       |    | Item  | Timeline    | Funding Sources   |
|-----------------------|----|---|-------------|---|
|                       | 1  | Continue data collection and management efforts using new technology when available, and incorporate into decision-making tools.  | Ongoing     | <ul><li>Parkland dedication funds</li><li>Minnesota Legacy Amendment</li></ul>  |
|                       | 2  | Seek out customer and resident feedback on needs, satisfaction and trends, and incorporate into decision-making tools.  | Ongoing     | funds   |
|                       | 3  | Maintain accurate maps that show, at a minimum: service area, property boundaries, transit access and physical barriers.  | Ongoing     | <ul> <li>Environment and Natural Resources         Trust Fund (limited to high-quality natural areas)     </li> </ul> |
|                       | 4  | Complete projects that enhance the park system.   | Ongoing     | State bonding through Metropolitan  |
| (I)                   | 5  | Update the Parks and Recreation Vision Plan in response to the 2040   | Short-Term  | Council (for regional parks and trails)   |
| Space                 |    | Comprehensive Plan.   |             | • DNR Grants  |
| ds ue                 | 6  | Update the Parks and Recreation System Plan in response to the 2040 Comprehensive Plan.   | Short-Term  | Watershed District grants     Transportation Investment   |
| nd Open               | 7  | Update annually the Parks and Recreation Strategic Implementation Plan consistent with the 2040 Comprehensive Plan.   | Short-Term  | <ul> <li>Transportation Investment<br/>Generating Economic Recovery<br/>(TIGER) grants</li> </ul>                     |
| n ar                  | 8  | Update adopted master plans in response to the 2040 Comprehensive Plan.   | Short-Term  | ( ) 3 4 4   |
| ecreatio              | 9  | Review access and user fees to determine where increases are market-<br>appropriate and where raising or imposing fees would not significantly impact<br>access.        | Short-Term  |   |
| Parks, Recreation and | 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 | Develop a set of measurable performance standards for all Community Centers.  | Medium-Term |   |
|                       | 13 | 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 |   |
|                       | 14 | Coordinate across City departments to achieve city-wide tree canopy goals.  | Medium-Term |   |

# Figure I-4: Housing Chapter Implementation

The Housing Chapter [insert link] addresses the housing needs of all Saint Paul residents, from physical structure to fairness, choice, stability and affordability.

|         |   | Item  | Timeline   | Funding Sources   |
|---------|---|---|------------|---|
|         | 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 |
|         | 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    | current and future housing needs.                                 |
|         | 3 | Partner with financial and other institutions to explore alternative financing tools that improve access to housing capital across all income groups.   | Ongoing    |   |
| Housing | 4 | Update the City's Consolidated Plan and other housing-related planning documents in response to the 2040 Comprehensive Plan.  | Short-Term |   |
| Hon     | 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 |   |

#### Figure I-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  |
|------|---|---|------------|--|
|      | 1 | Address inflow and infiltration using tools, policies and strategies described in the Water Resources Chapter.                                  | Ongoing    | <ul><li>Watershed District grants</li><li>Minnesota Legacy Amendment</li></ul> |
| ater | 2 | Implement capital investment in water supply infrastructure as described in the Water Supply Plan.  | Ongoing    | funds  |
| Wa   | 3 | Carry out educational, operational, and other efforts related to surface water quality as described in the Local Surface Water Management Plan. | Ongoing    |  |
|      | 4 | Evaluate adequacy and efficiency of stormwater-related official controls, including consideration of changing precipitation patterns.           | Short-Term |  |

General Timeline Guidelines: Short-Term (0-5 years) Medium-Term (5-10 years) Long-Term (10+ years)

222 IMPLEMENTATION Public Hearing Draft - November 2, 2018

## Figure I-6: Heritage and Cultural Preservation Chapter Implementation

The Heritage and Cultural Preservation Chapter [hyperlink] 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   |
|-----------------------|----|--|-------------|---|
| 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     | <ul> <li>Arts and Cultural Heritage<br/>Fund</li> <li>Certified Local<br/>Government grants</li> </ul>                |
|                       | 2  | Develop an annual work plan for the Heritage Preservation Commission that prioritizes:  • survey and designation work;  • education; and  • stakeholder engagement.  | Ongoing     | <ul> <li>Federal Transportation<br/>Enhancement programs</li> <li>Federal Transit<br/>Enhancement programs</li> </ul> |
|                       | 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     | Federal Investment     Tax Credits, including     the Federal Historic     Preservation Tax                           |
| Itural Pr             | 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     | <ul><li>Incentives Program</li><li>Save America's Treasures program</li></ul>   |
| and Cu                | 5  | Produce and consistently update a list of outside preservation funding resources to provide to internal and external partners.   | Ongoing     | Preserve America<br>program   |
| Heritage a            | 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     | <ul> <li>State of Minnesota<br/>programs, including<br/>State Grants-in Aid,</li> </ul>                               |
| H                     | 7  | Establish an inter-departmental staff team advisory group to address City department applications and issues.  | Short-Term  | State Capital Projects Grants-in-Aid and State Historic Preservation Tax  |
|                       | 8  | Fund a City staff position to focus on grant-writing and resource allocation.  | Short-Term  | Incentives  |
|                       | 9  | Create a "Pocket Guide to Preservation in Saint Paul (and how the City can help)".   | Short-Term  | <ul> <li>Non-profit organizations,</li> </ul>   |
|                       | 10 | Develop a clearinghouse where information pertaining to heritage and cultural preservation can be collected and disseminated to City departments and the public.   | Short-Term  | such as Preservation<br>Alliance of Minnesota and   |
|                       | 11 | 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 | Historic Saint Paul   |

General Timeline Guidelines:

Short-Term (0-5 years)

Medium-Term (5-10 years)

Long-Term (10+ years)

# Figure I-7: Critical Area Chapter Implementation

The Critical Area Chapter [insert link] statement here.

|               |   | Item | Timeline | Funding Sources |
|---------------|---|------|----------|-----------------|
| Critical Area | 1 |      |          |                 |
|               | 2 |      |          |                 |
|               | 3 |      |          |                 |
|               | 4 |      |          |                 |
|               | 5 |      |          |                 |
|               | 6 |      |          |                 |
|               | 7 |      |          |                 |
|               | 8 |      |          |                 |
|               | 9 |      |          |                 |

# 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
- Public Works 5-Year Plan

|                    |                                    | 2018   | 2019  | 2020  | 2021                              | 2022           | 2023-2040     |  |  |
|--------------------|------------------------------------|--|---|---|-----------------------------------|----------------|---------------|--|--|
| Redevelopment Area | Ford Site                          | Site sold<br>to master<br>developer  | Alternative<br>Urban Area-<br>wide Review<br>(AUAR) | Infrastructure development begins               |                                   |                | Future phases |  |  |
|                    |                                    |  | Detailed development plan                           |   | First phase of development        |                |               |  |  |
|                    | West Side Flats                    | Wastewater infrastructure improved to facilitate crossing under the Mississippi River to support additional land use intensity |   |   |                                   |                |               |  |  |
|                    |                                    | Sites are redeveloped in phases  |   |   |                                   |                |               |  |  |
|                    | Snelling-Midway<br>(Soccer Stadum) | · ·  |   | Future phases                                   |                                   |                |               |  |  |
|                    | Hillcrest                          |  | Site sold<br>to master<br>developer                 | Alternative Urban<br>Area-wide Review<br>(AUAR) | Infrastructure development begins |                | Future phases |  |  |
|                    |                                    |  |   | Detailed development plan First phas            |                                   | First phase of | development   |  |  |

