

## Transportation Committee Staff Report

Committee date: 10/06/2014

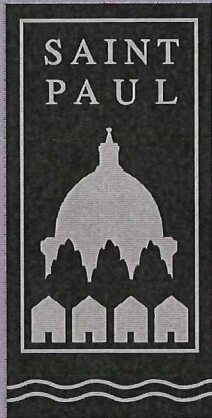
<b>Project Name</b>	<i>Saint Paul Bicycle Plan</i>
<b>Geographic Scope</b>	<i>Citywide</i>
<b>Ward(s)</b>	<i>All</i>
<b>District Council(s)</b>	<i>All</i>
<b>Project Description</b>	<i>Draft of the Saint Paul Bicycle Plan. The plan designates corridors for future development of bikeway and addresses other policies and topics related to bicycling.</i>
<b>Project Contact</b>	<i>Reuben Collins</i>
<b>Contact email/phone</b>	<i>651-266-6059</i>
<b>Lead Agency/Department</b>	<i>Department of Public Works</i>
<b>Purpose of Project/Plan</b>	<i>The plan designates corridors for future development of bikeways and provides recommendations regarding bikeway facility types for those corridors. The plan will be used by Public Works as an implementation guide.</i>
<b>Planning References</b>	<i>Comprehensive Plan, Bike Walk Central Corridor Action Plan</i>
<b>Project stage</b>	<i>Planning</i>
<b>General Timeline</b>	<i>Draft plan was released on 1/21/2014. This final version of the plan is recommended for adoption.</i>
<b>District Council position (if applicable)</b>	<i>None</i>
<b>Level of Committee Involvement</b>	<i>Involve</i>
<b>Previous Committee action</b>	<i>Presentations regarding this plan were presented to the Transportation Committee on 6/13/2011, 4/22/2013, 1/27/2014, and 5/12/2014.</i>
<b>Level of Public Involvement</b>	<i>Involve</i>
<b>Public Hearing</b>	<i>Yes, Date Unknown.</i>
<b>Public Hearing Location</b>	<i>Unknown</i>
<b>Primary Funding Source(s)</b>	<i>Unknown</i>
<b>Cost</b>	<i>Unknown</i>

<b>Staff recommendation</b>	<i>N/A</i>
<b>Action item requested of the Committee</b>	<i>Recommend Planning Commission release plan for public comment and set a public hearing date.</i>
<b>Committee recommendation</b>	<i>Recommend Planning Commission release plan for public comment and set a public hearing date.</i>
<b>Committee vote</b>	<i>7-0</i>

### Level of Committee Involvement

<b>INFORM:</b> Informational briefings	Projects that are in implementation phase; projects from other jurisdictions; policy documents from other agencies/jurisdictions
<b>ADVISE AND CONSENT:</b> Informational briefings with policy discussion, general directives to staff for follow-through	Project and program reviews primarily initiated by staff; or involvement with program development by others
<b>INVOLVE:</b> Discussions to develop directions for projects & programs	Policy involvement from inception through design, inc. policy development; environmental documentation
<b>DEVELOPMENT OF PROJECT/PROGRAM:</b> Discussion to form process; screening of ideas; development of recommendations; and managing outreach to the community	Committee has primary responsibility for concept development, and/or overseeing participation process, and/or making specific recommendations to Planning Commission, Mayor and/or City Council

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The Most Livable  
City in America

# Saint Paul Bicycle Plan

Saint Paul Bicycle Plan  
October 6th, 2014 DRAFT

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# Chapter 1: Introduction



Saint Paul  
Bicycle Plan



# 1.0 INTRODUCTION

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The Saint Paul Comprehensive Plan adopted in 2008 establishes a strong vision to increase the number of bicycle trips throughout the city. The plan set a goal to increase the bicycle mode share from 2% in 2000 to 5% in 2025 and increase the mode share of bicycling commuters from 0.6% to 2.5% during the same period. The plan states a vision to become a world-class bicycling city, accommodating cyclists of all skill levels for both transportation and recreation while encouraging bicycle use as a part of everyday life. The plan promotes the development and maintenance of a complete and connected bikeway system, encouraging and supporting bicycling as transportation.

## 1.1 Purpose

The purpose of this plan is to establish a framework that will allow Saint Paul to accomplish the goals in the Comprehensive Plan to increase the mode share of bicycling and establish a network of bikeways throughout the city. This plan establishes a vision for how and why bicycles will play an important role in the future of the city. To increase the number of people using bicycles, this plan outlines a wide range of policies, procedures, infrastructure improvements, and programs that will collectively create an environment conducive to bicycling.

The primary purpose of this plan is to provide a framework for the development of a bicycle network that allows all Saint Paul residents and visitors to safely and comfortably ride bicycles. This plan also provides a policy framework to aid in bicycle planning and development of facilities, provides recommendations regarding end-of-trip facilities such as bicycle parking and showers, and briefly outlines other bicycle programs.

## 1.2 Vision

Riding a bicycle is one of life's simplest pleasures. Bicycling is the easiest and most affordable way to travel around Saint Paul. Riding a bicycle allows residents to travel safely, conveniently, and efficiently as they go about daily business. Adults and children of all experience levels, skill levels, or preferences can comfortably travel by bicycle. Saint Paul is an attractive place to live and work for individuals and families who choose to reduce the number or frequency of trips made by automobile.





Bikeways in Saint Paul offer direct routes between important destinations, and the city ensures that bikeways are well maintained year-round. The bikeways in Saint Paul connect seamlessly with bikeways in surrounding communities, making regional bicycle travel attractive.

Downtown Saint Paul bikeways are connected elegantly with the surrounding neighborhoods. Bicycle facilities throughout downtown allow even the most casual of cyclists to access destinations downtown. Downtown is a critical hub where multiple trails and bikeways converge. Saint Paul residents know that riding a bicycle is the easiest, most convenient, and most affordable way to access downtown for leisure, for attending events, and for conducting business.

Bicycling is a favorite pastime in the city as residents enjoy the many off-street trails, the Grand Round, and the network of low-stress bicycle boulevards.

### 1.3 Public Planning Process

A public planning process was designed to provide opportunities for city residents who don't already self-identify as bicyclists to participate and contribute to the development of this plan. From the beginning of this planning process, it has been understood that the key to encouraging additional bicycle ridership is to engage all city residents in a conversation about bicycling, including those who don't currently ride. The planning process occurred in two phases.

#### Phase I (2011-2013)

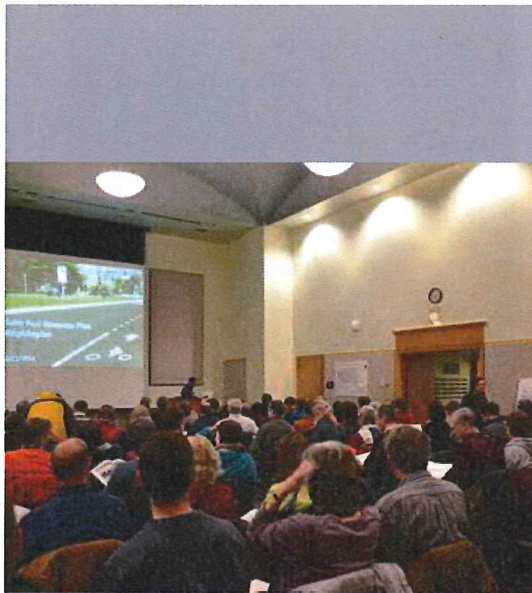
Phase I public involvement efforts began in 2011 with a concerted effort to understand how bicyclists were using the existing bicycle network and to gain a better understanding of what would encourage additional bicycle ridership. Phase I efforts included the following components:

- September 2011 Open House Events - Attendees of three open house events were asked to cartographically and verbally identify where they enjoyed riding a bicycle and what challenges they faced along the way. A summary of these meetings is presented in **Appendix A**.
- Fall 2011 Electronic Web-Based Survey - An electronic web-based survey was created in the fall of 2011 to gather input from the public about how they use the bicycle network. The city received 243 responses to the survey, which collected some general demographic in-



*Downtown Saint Paul is a critical hub where multiple trails and bikeways converge*





*Draft Bicycle Plan Open House in 2014*



*Question and answer session following the Draft Bicycle Plan Presentation in 2014*

formation. The survey asked respondents to identify their home zip code, workplace zip code, gender, and age. The survey asked respondents to identify why they ride bicycles and allowed respondents to provide feedback on what would encourage them to ride a bicycle more often. A summary of the survey is presented in **Appendix B**.

- April-November 2013 Open Saint Paul Questions - Three questions were posted on the city website using the Open Saint Paul engagement tool. Residents were asked questions regarding a vision for bicycling in Saint Paul, what key objectives should be included in this plan, where bicycle facilities are needed, what types of bicycle facilities they find attractive, and what concerns they have about riding in Saint Paul. A total of 114 comments were received and are presented in **Appendix C**.

Based on the results of the 2011 open houses, the 2011 web survey, and the information contained within the 2008 Comprehensive Plan, a set of criteria was developed to be used by city staff to create a draft network of proposed bikeways. The criteria established spacing guidelines for bikeways, as well as provided a list of the factors to be considered while identifying the draft bikeway network. The mapping criteria were posted to the city website and are presented in **Appendix D**.

#### Phase II (January – April 2014)

The draft plan was presented to the public in January 2014, and a deadline for receiving public comments on the plan was established for April 30 2014. Throughout these four months, city staff met with a number of neighborhood groups, advocacy groups, business groups and other organizations to gather feedback on the draft plan. A particular focus of Phase II was raising general awareness of the plan. Phase II efforts included the following components:

- February 2014 Open House Events – Four open house events were held to present the draft plan and request feedback. Attendees were encouraged to provide written comments. A total of 229 people attended the events and 60 statements were received.
- January – April 2014 Open Saint Paul Questions – Two questions on Open Saint Paul asked residents to respond to questions about the draft plan as well as to begin establishing priorities for implementation. A total of 173 statements were received.
- District Council Meetings – City staff presented an overview of the draft plan at formal meetings of 14 of the 17 District Councils throughout the city. Ten of the



District Councils submitted formal written comments to the city regarding the draft plan.

- January-April 2014 Emails Received – Residents were invited to send emails to city staff with any additional comments about the draft plan. A total of 144 emails were received.

A full summary of all Phase II involvement efforts and the statements received is presented in **Appendix E**.

### **Social Media and Newsletters**

Throughout the development of this plan, several methods were used to publicize the efforts and encourage participation. The city distributes a monthly Bicycling Saint Paul electronic newsletter via email to a list of nearly 2,000 subscribers. The newsletter reports on all new and ongoing efforts relating to bicycling throughout the city, including opportunities to participate in the public involvement efforts detailed here. In addition the Department of Public Works maintains a Facebook and Twitter account, and opportunities to participate were publicized through these channels.

## **1.4 Plan Scope and Use**

The development of the Saint Paul Bicycle Plan marks a key milestone in Saint Paul bicycling history. While numerous previous planning efforts have addressed bicycling in one form or another, this is the first citywide bicycle planning effort that attempts to comprehensively address policies, infrastructure, and procedures for bicycles on a citywide and cross-departmental basis.

This plan has been adopted by the City Council as an addendum to the Comprehensive Plan. The recommendations of this plan should be incorporated into the next update of the Comprehensive Plan, and should serve as the starting point for other planning efforts that reference bicycling.

This is a corridor-level planning document that identifies specific corridors for future investment in bikeway infrastructure. Each corridor recommended in this plan has been subjected to a basic feasibility analysis. However, the scope of this plan does not permit looking at each corridor with a level of detail sufficient to complete final design. The details of each of the corridor recommendations in this plan will require further analysis and development before implementation.



*A video encouraging participation in the development of the Draft Bicycle Plan was shared on social media*





*Bicyclists on Summit Ave*

This plan does not assess the current physical condition of existing bikeway facilities, though it does evaluate the appropriateness of each existing bikeway facility type within the larger bikeway network. It does not assess the need for small-scale improvements to existing bikeways (for example, a re-configuration of an intersection to address a safety concern).

As a corridor-level planning document, this plan can not anticipate the many small-scale connections throughout the city that potentially provide great value to the community. For example, the construction of a short trail spur connecting a neighborhood to an adjacent trail may not be identified in this plan, though it is clearly in the spirit of promoting bicycle travel throughout the city. Such proposals should be judged to be consistent with the intent of this plan.

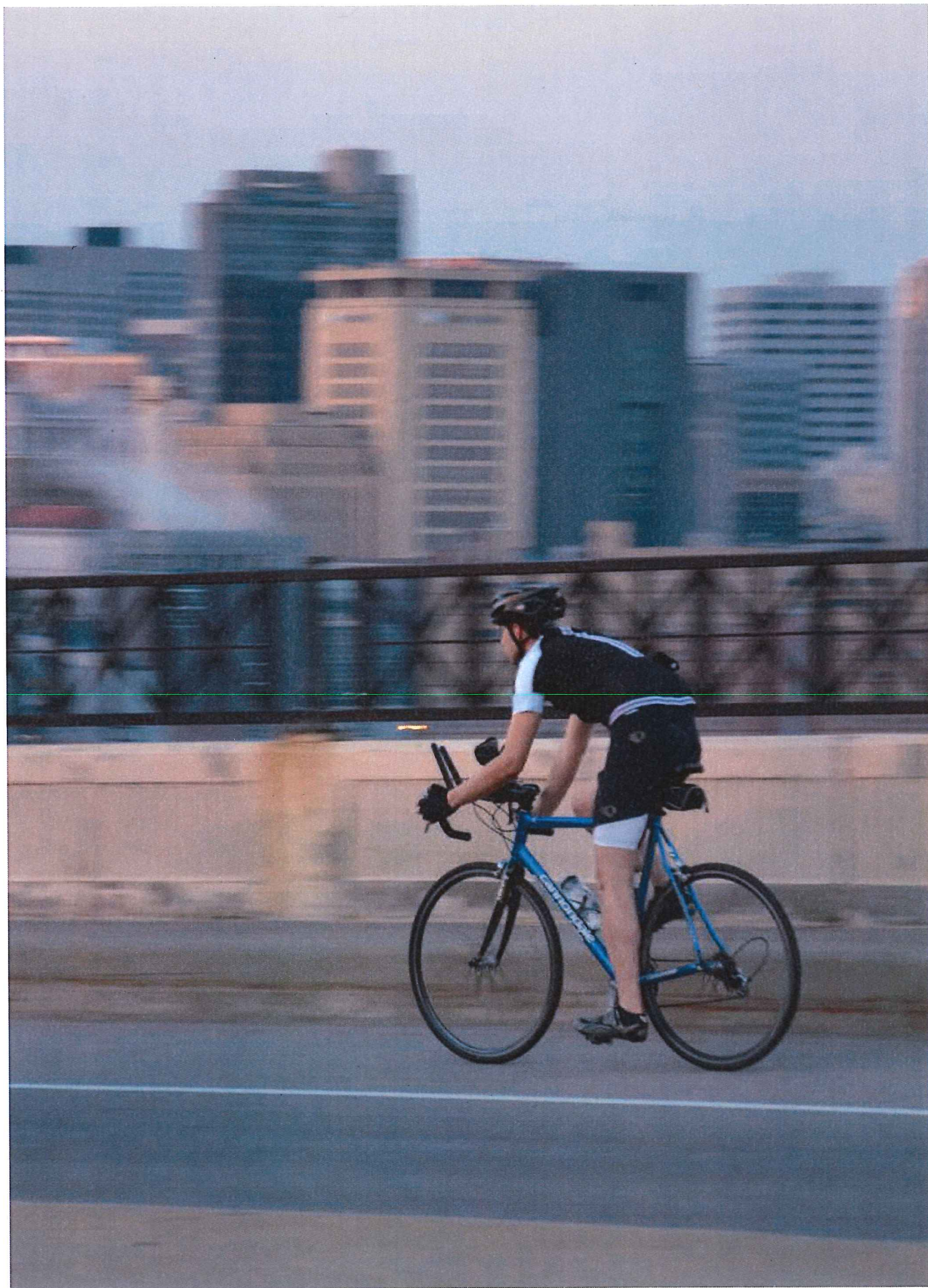
This plan should not be interpreted as a recommendation against providing bicycle facilities on any corridors. This plan does not identify any corridors where bicycle facilities would be inappropriate (beyond the corridors where bicycles are prohibited) or would not provide value and benefit to bicyclists. The corridors for which this plan does not make recommendations should be interpreted as corridors where this plan did not identify the development of bicycle facilities as a priority, either because of limited space, because there are other priorities for the corridor, or because the corridor was not recognized as integral to establishing a network of bikeways.

## 1.5 Future Plan Updates

As is the case with all planning documents, this plan will require future updates to remain useful and relevant. The current state of bicycle planning nationwide is rapidly evolving and U.S. cities are embarking on an age of experimentation with new bicycle facilities. Cities are beginning to design and build new types of bikeways that were relatively unknown as little as five years ago. It is anticipated that bicycle planning innovations will continue to accelerate.

It is recommended that this plan be updated approximately every 5-7 years to take advantage of new opportunities, new innovations, and new trends. It is likely that over the coming years, new priorities or strategies will emerge citywide, and new initiatives and programs will be desired.



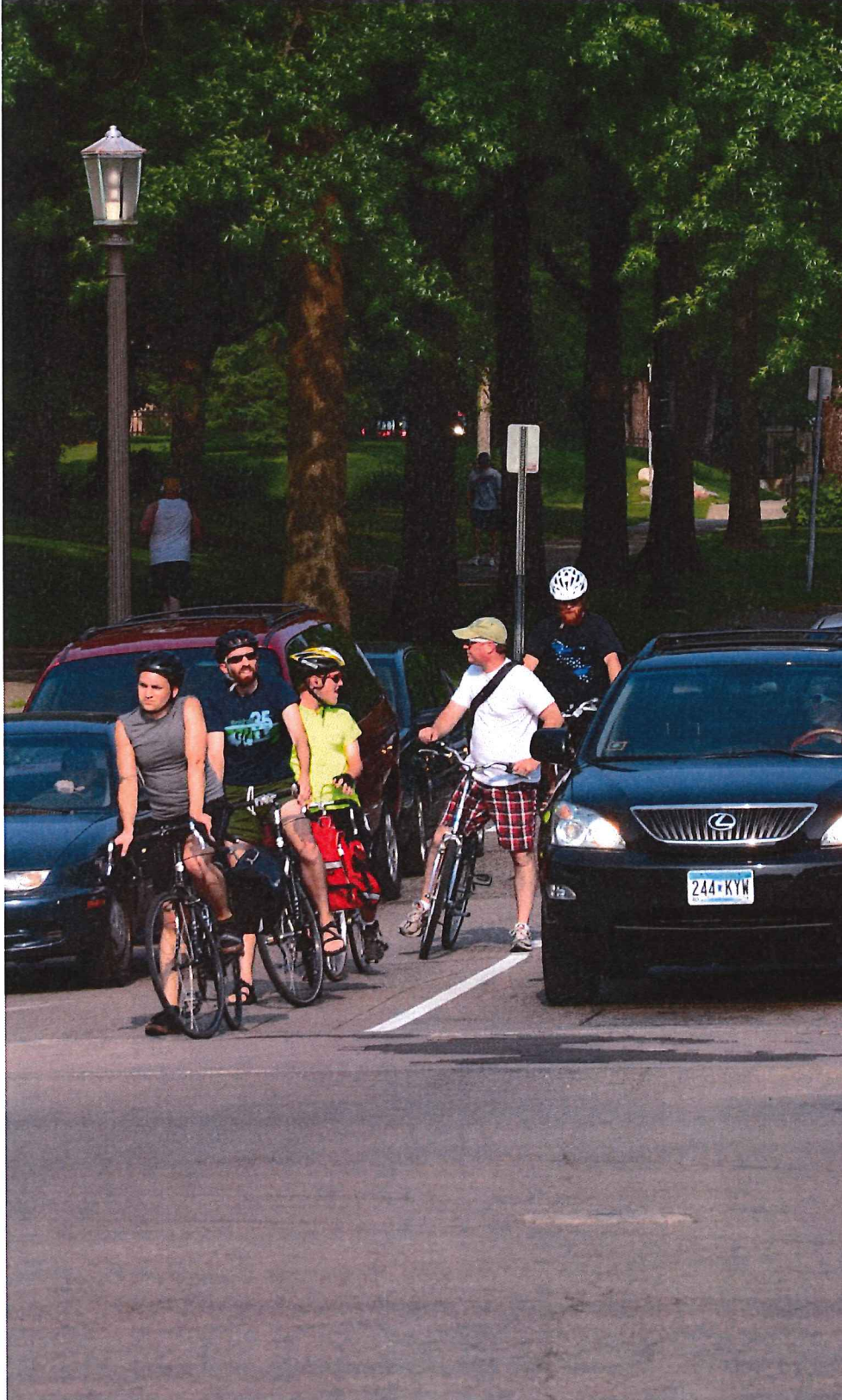


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## Chapter 2: Why Bicycling Matters



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# 2.0

## WHY BICYCLING MATTERS

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### 2.1 The Changing Landscape

#### Growth and Congestion

As Saint Paul continues to grow, population and redevelopment pressures will test our existing transportation infrastructure. According to the Metropolitan Council population forecasts, Saint Paul is projected to add an additional 45,000 residents by the year 2030<sup>1</sup>. As Saint Paul is fully developed within its boundaries, this growth will result in an increasingly dense built environment, and is likely to increase congestion on our streets and highways. Redevelopment pressures and increasing land values in the urban core will make automobile-oriented land uses increasingly difficult to accommodate, necessitating a flexible and multi-modal approach to transportation.

#### Behavior Change

A noted shift in transportation behavior is occurring nationwide. In the Twin Cities metropolitan area, motorized trips per household, motorized trips per person, and the total number of car trips have all declined since 2000. Similarly, licensed drivers per household, and vehicles per household have declined since 1970. Since 2000, the Twin Cities metropolitan mode share changes reflect a 6% decrease in driving, and a 13% increasing in bicycling.<sup>2</sup>

While a variety of factors contribute to these behavioral trends, considerations include: the cost of owning and operating an automobile, environmental and sustainability concerns, a desire for an active lifestyle, telecommuting and communication technology, the close proximity of employment and amenities in urban centers, the economic effects of the recession, and other time-competitive transportation modes.

### 2.2 Bicycling complements our existing transportation infrastructure

A safe and connected network of bicycle facilities will afford Saint Paul greater choice in transportation options. Providing practical transportation choices will maximize the efficiency of our current transportation system, providing options that better utilize the existing infrastructure. When paired with transit, for example, bicycling can effectively expand and enhance mo

1 U.S. Census Bureau, *Decennial Census*, "Metropolitan Council Annual Estimates, and Metropolitan Council Forecasts," January 2012. <http://stats.metc.state.mn.us/profile/detail.aspx?c=02396511>

2 Metropolitan Council, "The 2010 MSP Travel Behavior Inventory Report (TBI)," 2010. <http://metrocouncil.org/Transportation/Planning/Transportation-Resources/Transportation-Behavior-Inventory/Travel-Behavior.aspx>



bility, extending trip distances and better connecting people to their jobs, schools, medical facilities, recreation, and entertainment.

### Green Line LRT

With the Green Line light rail transit (LRT) line opening in 2014, Saint Paul has a unique opportunity to enhance bicycle access to Green Line stations, increasing accessibility while supporting ridership along the line. The Central Corridor Action Plan adopted by the city in 2010 advocates for bicycle and pedestrian connections and facilities that create a safe and inviting environment around the LRT line and surrounding area.<sup>3</sup> Developing safe and accessible bicycle connections to the Green Line will increase mobility, enhance community livability and sustainability, and attract new transit riders.

### Nice Ride Minnesota

In 2011-2013, Nice Ride Minnesota, the non-profit bike-sharing program of the Twin Cities, made a significant expansion into Saint Paul.<sup>4</sup> Investing in bicycle facilities in Saint Paul will help capitalize on the existing network of Nice Ride stations, providing safe and connected bikeways that encourage utilization and promote Nice Ride as a practical and efficient solution for short trips within the Twin Cities.

### The Existing Bicycle Network

Greater connectivity within Saint Paul's existing bicycle network will significantly enhance mobility and convenience. A more connected and balanced network will encourage and promote bicycling as transportation, helping people more safely and effectively travel throughout the city. Locally, increased neighborhood accessibility will improve quality of life and create new economic opportunities. It will also promote multi-modal transportation options, providing the infrastructure to better connect bicyclists with other transportation modes and facilities. Connections to regional amenities like the Gateway State Trail and Samuel Morgan Regional Trail will encourage travel into the city, and support bicycling as a tool for both transportation and recreation.

## 2.3 Affordability and Equity

To distinguish Saint Paul as a vital place for people and economic development, equitable access to transportation is a

<sup>3</sup> City of Saint Paul, "Bike Walk Central Corridor Action Plan," May 2010. <http://www.stpaul.gov/index.aspx?nid=2842>

<sup>4</sup> Nice Ride Minnesota, "Our Story," [niceridemn.org/about](http://niceridemn.org/about), retrieved on October 19<sup>th</sup>, 2013. <https://www.niceridemn.org/about/>



*Nice Ride MN station in Saint Paul*





*When paired with transit, bicycling can increase trip distances and decrease travel time*



*The limited space requirements and high efficiency of bicycle facilities make a compelling case for further investment*

Saint Paul Bicycle Plan

necessity. With over 20,000 residents in Ramsey County without access to a vehicle, bicycling can provide enhanced mobility and access to those who rely on transit, shared rides, and walking for transportation.<sup>5</sup> According to the US Census American Community Survey data, roughly 15% of Saint Paul residents do not have vehicles available for daily use. As the costs of owning and maintaining a car continue to rise,<sup>6</sup> bicycling positions itself as a comparatively affordable transportation option while maintaining the independence and trip choice often associated with car ownership. When paired with transit, bicycling can increase trip distances and decrease travel time, better linking people with employment, education, and entertainment. Investing in bicycle facilities, particularly in low-income neighborhoods with high transit-dependent populations, will promote greater transportation equity and better connect Saint Paul residents with the services, jobs, and amenities they rely on.

## 2.4 The Benefits of Bicycling

### Practical and Competitive

Similar to the initial appearance of the bicycle in urban areas in the late 1800's, bicycling is once again emerging as a practical and efficient mode of transportation. Saint Paul's urban environment is conducive to bicycle travel, often providing competitive travel times on short-distance trips without the parking concerns associated with automobiles. While not immune to the realities of a northern climate, Saint Paul residents embrace the challenges of winter, aided by plowed and maintained bicycle facilities throughout the city. As automobile-oriented uses become increasingly difficult to accommodate, the limited space requirements and high efficiency of bicycle facilities make a compelling case for further investment. Changing demographics, attitudes, and lifestyles encourage multi-modal transportation options, while research continues to correlate bicycling with health, economic, safety, and environmental benefits.

### Bicycling is a convenient and affordable means of exercise

Bicycling is a fun and practical way of incorporating physical

5 Metropolitan Council, "Public Transit and Human Services Transportation Coordination Action Plan Twin Cities Metropolitan Area," February 2013. <http://www.metrocouncil.org/Transportation/Publications-And-Resources/Public-Transit-and-Human-Services-Transportation-C.aspx>

6 AAA, "Your Driving Costs, How much are you really paying to drive?," 2013. <http://exchange.aaa.com/wp-content/uploads/2013/04/Your-Driving-Costs-2013.pdf>



activity into your daily routine. Burning between 300 and 500 calories an hour, bicycling is an affordable and dependable mode of transportation that allows you to stay fit as you commute.<sup>7</sup>

#### **Bicycling helps reduce health risks associated with obesity**

Obesity is a national epidemic, and Minnesota is no exception. According to the Minnesota Department of Health, two out of every three Minnesotans are overweight or obese, due in part to insufficient physical activity.<sup>8</sup> The benefits of physical activity in decreasing obesity and enhancing overall health are well established, having proven to reduce the risk of heart disease, diabetes, high blood pressure, and other chronic illnesses. Active transportation can incorporate physical activity into daily routines, providing regular opportunities for exercise while bicycling and walking. The Minnesota Department of Health supports active transportation as a means to increase opportunities for physical activity, promote sustainable change in the overall health of the community, and decrease money spent towards health care.<sup>8</sup> A network of safe and well-connected bikeways will support active transportation in Saint Paul, allowing people of all ages and abilities to achieve daily physical activity and while increasing their physical and mental well being.

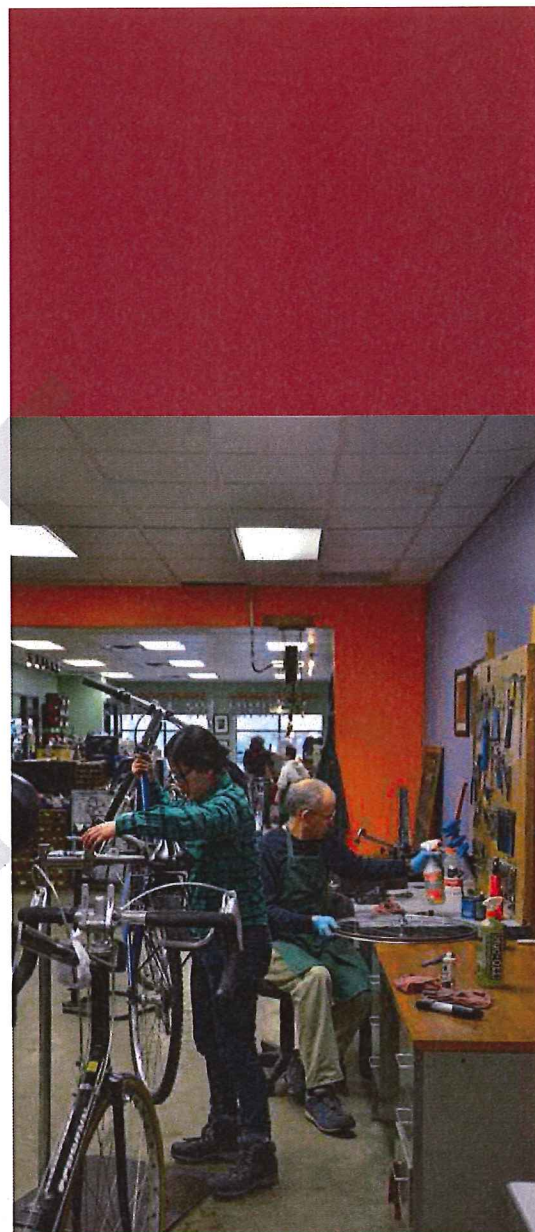
#### **Bicycling strengthens Saint Paul's economy**

Bicycling has an extensive and comprehensive impact on the local and regional economy. According to a recent study by the University of Minnesota, as the number of Nice Ride bike-sharing stations in the Twin Cities has grown, so has the economic activity in the areas surrounding them. The study estimated that cyclists spent \$150,000 more annually near bike sharing stations as a result of the Nice Ride program.<sup>9</sup> More directly, bicycling supports local Saint Paul bike shops, manufacturers and distributors, rental outlets, wholesalers, and non-profit organizations. These impacts are wholly positive, and represent a bicycling-specific local economy. While more difficult to assess, indirect economic considerations, like reduced personal and societal health care costs associated with regular physical activity, are also important considerations,

<sup>7</sup> 511.org, "Bike to Work – Commuting by Bike", retrieved October 17th, 2013. [http://bicycling.511.org/bike\\_work](http://bicycling.511.org/bike_work)

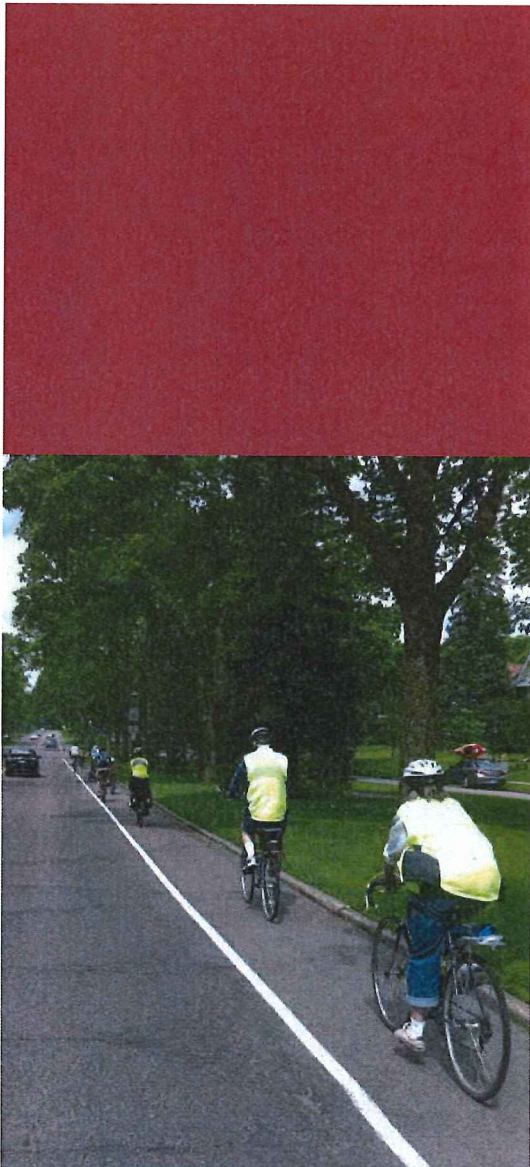
<sup>8</sup> Minnesota Department of Health, "Active Transportation, Promoting Active Transportation Fact Sheet," March 2012. <http://www.health.state.mn.us/divs/hpcd/chp/cdrr/physicalactivity/docs/promotingactivecommunitiesfactsheet.pdf>

<sup>9</sup> Schoner, Jessica, University of Minnesota Humphrey School of Public Affairs, "Sharing to Grow, Economic Activity associated with Nice Ride Bike Share Stations," May 2012. <http://www.cts.umn.edu/events/conference/2012/documents/presentations/24-schoner.pdf>



*Bicycling supports a diverse array of local businesses and organizations in Saint Paul (Pictured: Cycles for Change)*





*Emerging research suggests that crash rates decline as bicycle traffic increases*

and reflect the comprehensive impact of bicycling on the local economy.

### **Bicycling Promotes a Healthy Environment**

Traditional air pollutants from automobiles, such as fine particles, ozone and toxic air contaminants, contribute to serious health effects, particularly among the young and elderly and Minnesotans with heart and lung conditions.<sup>10</sup> The Minnesota State Legislature identifies increased bicycling as a statewide environmental goal for the transportation sector, promoting it as an energy-efficient, nonpolluting and healthy form of transportation.<sup>11</sup> Investing in improved bicycling infrastructure in Saint Paul will support this goal, reducing vehicle miles traveled, fine particle emissions, and greenhouse gas emissions through the replacement of automobile trips with bicycle trips.

### **Bicycling Improves Safety in Saint Paul**

A recent Minneapolis bike crash analysis revealed an emerging trend: corridors with more bicycle traffic tend to have lower crash rates.<sup>12</sup> The analysis notes that the increasing number of bicyclists themselves appear to be improving safety. Similar trends have been reflected in data from California and Portland studies, finding that crash rates decline as bicycling traffic increases.<sup>13,14</sup> Supporting bicycle infrastructure that increases the number of cyclists in Saint Paul will improve the safety of our streets.

Another pertinent consideration is the relationship between improved bicycling facilities and a safer cycling environment. Through context-sensitive design, bicycling infrastructure can improve safety for bicyclists, motorists, and pedestrians. These improvements employ a variety of design techniques and facility types, and consider factors such as traffic volumes, vehicle speeds, and road widths to guide appropriate facility design and improve safety.

<sup>10</sup> Minnesota Pollution Control Agency, "Air Quality in Minnesota: Emerging trends, 2009 Report to the Legislature," 2009. <http://www.pca.state.mn.us/index.php/view-document.html?gid=5658>

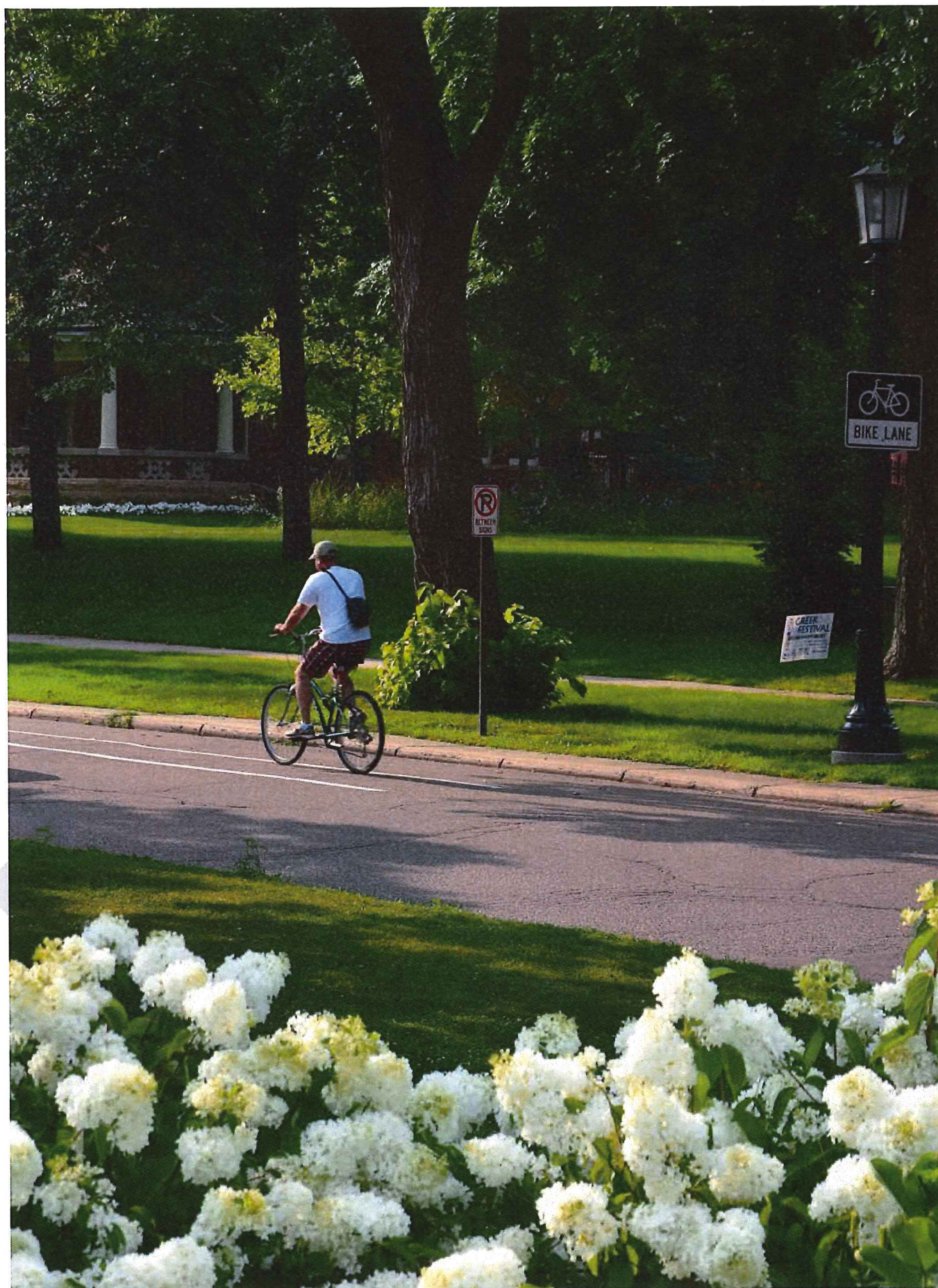
<sup>11</sup> Minnesota Department of Transportation, Minnesota Statewide Multimodal Transportation Plan, "Minnesota Statewide Transportation Goals," MN Statutes Chapter 174, Subd. 2. September 2012. <http://www.dot.state.mn.us/minnesotago/pdf/mn-legislative-goals.pdf>

<sup>12</sup> Blenski, Simon, City of Minneapolis, "Understanding Bicyclist-Motorist Crashes in Minneapolis, MN," January 2013. <http://www.ci.minneapolis.mn.us/bicycles/data/safety>

<sup>13</sup> Jacobsen, P.L., "Safety in Numbers: more walkers and bicyclists, safer walking and bicycling," September 2003. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1731007/pdf/v009p00205.pdf>

<sup>14</sup> City of Portland, Portland Bicycle Plan for 2030, "Making the Case for Investing in Bicycling," February 2010. <http://www.portlandoregon.gov/transportation/article/289122>



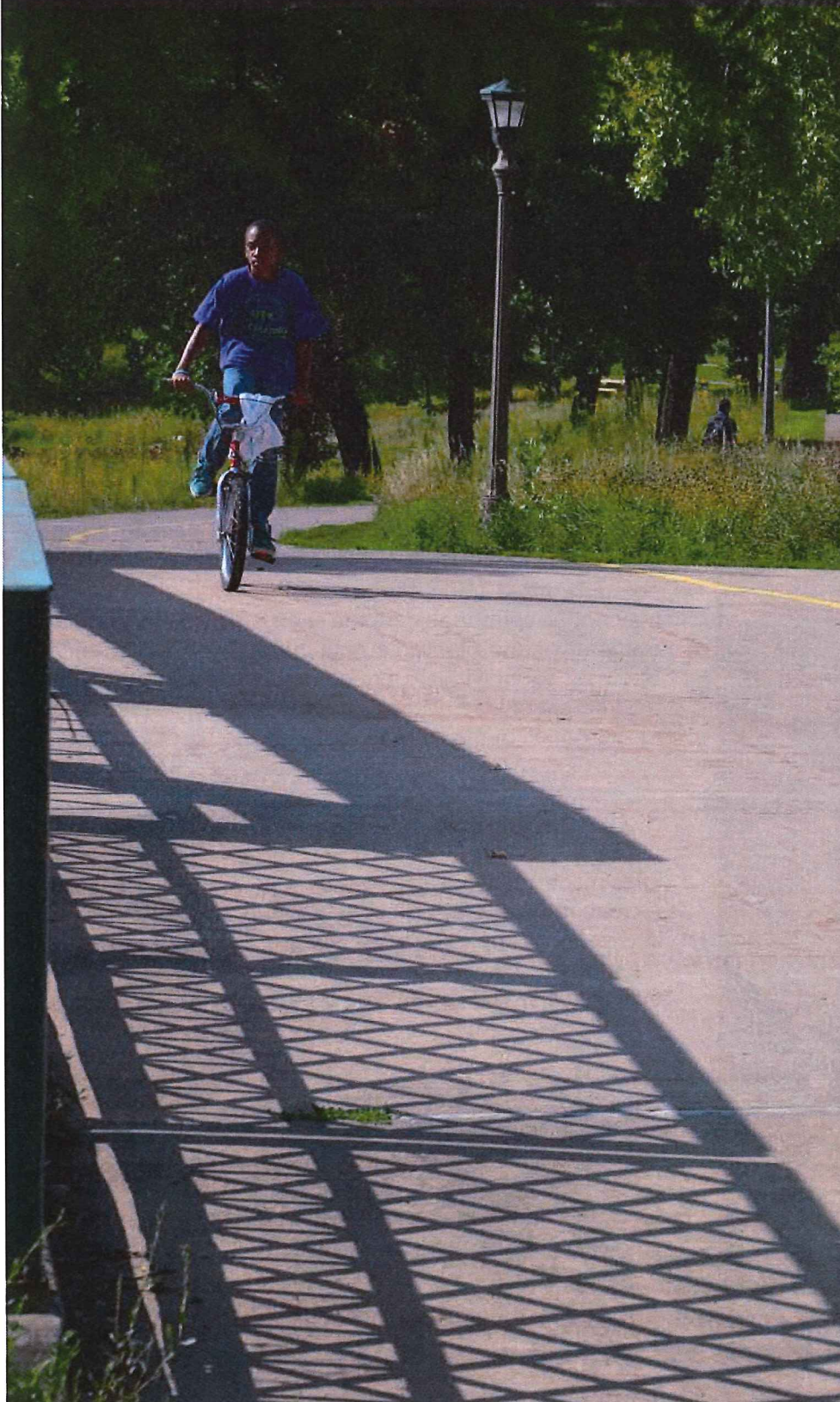


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## Chapter 3: **Bikeways Accessible to Everyone**



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# 3.0

## BIKEWAYS ACCESSIBLE TO EVERYONE

To become a truly world-class bicycling city, Saint Paul's bicycling network must accommodate cyclists of all levels, abilities, and preferences. Safety, both real and perceived, is essential in creating a network of bicycle facilities that are practical and convenient for all users.

### 3.1 Who are cyclists?

Many characteristics have been used by various agencies or organizations to classify bicycle riders, including age, gender, comfort level, physical ability, and trip purpose. These typologies can be a valuable tool in helping to understand how and why people choose to ride bicycles and the preferences of each type of cyclist.

While each of these typologies is useful and instructive in some circumstances, each of these systems fails to fully capture the diverse population and preferences of people who choose to ride bicycles. People rarely fit into a single category, and a cyclist's preferences may change by time of day, trip purpose, traffic conditions, travel companions, weather, or other factors. For example, a cyclist who is comfortable riding in mixed traffic during daytime hours on a weekend may not be comfortable on the same street during rush hour traffic or during nighttime hours when visibility is reduced. Likewise, an individual's preferences while commuting may be different on days when they carry a young child with them for part or all of the commute.

### 3.2 Trip Purpose

Trips made by bicycle can be described as either utilitarian or recreation. The term describes the purpose of the trip only, and does not imply any other characteristics about the trip or the preferences of the cyclists, including travel speed, cyclist experience, or the facility type used.

#### Utilitarian Trips

Utilitarian or nondiscretionary trips are needed as part of a person's daily activities. This includes commuting to work or school, work-related non-commute trips, shopping or errands, or taking a child to school or daycare. Utilitarian trips made by bicycle can replace or seamlessly link with other transportation modes such as transit or motor vehicle trips.





While many people choose to use a bicycle, others may use bicycles for utilitarian trips because they do not have access to an automobile or possess a driver's license, have no transit available, or are otherwise dependent upon bicycling.

### Recreation Trips

Recreation or discretionary trips include trips made for exercise or leisure. Recreational trips can range from short trips within a neighborhood to long rides covering much greater distances. The most basic type of recreation trip might be a leisurely ride through a park, however there are many other more complex examples as well. For example, when a couple rides bicycles to a restaurant for dinner and then to a movie theater, this is a discretionary trip for recreational purposes, even if no trails were used in the process.

## 3.3 Bicyclist Typology Systems

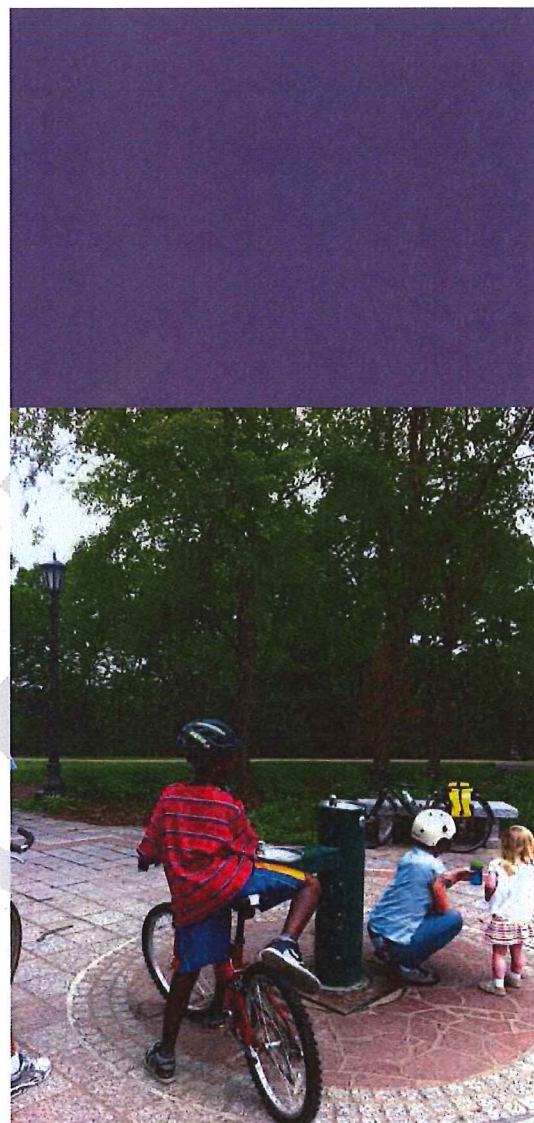
Despite their weaknesses, bicyclist typologies systems can still be a useful tool to help inform how we plan bikeways through the City of Saint Paul. Below are two common classification systems.

### Federal Highway Administration

In 1994, the Federal Highway Administration developed the following general categories of bicyclist types to assist planners and designers in determining the impact of different facility types and roadway conditions on bicyclists.

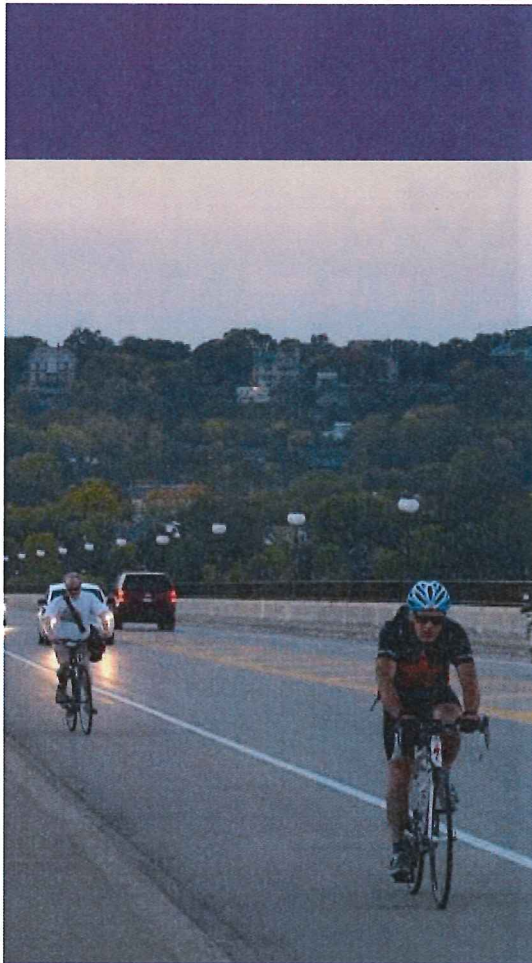
- **Group A** - Advanced Bicyclists – Advanced or experienced riders are generally using their bicycles as they would a motor vehicle. They are riding for convenience and speed and want direct access to destinations with a minimum of detour or delay.
- **Group B** - Basic or less confident adult riders may also be using their bicycles for transportation purposes, e.g., to get to the store or to visit friends, but prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample roadway width to allow easy overtaking by faster motor vehicles.
- **Group C** - Children, riding on their own or with their parents, may not travel as fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities.

This typology system has been widely adopted and endorsed by numerous agencies.



*Bicyclists visiting the Shadow Falls Park Preserve*





The bicycle network in Saint Paul must accommodate all categories and levels of riders

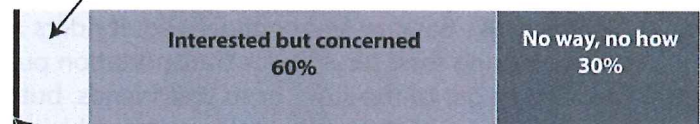
### Portland: Four Types of Transportation Cyclists

In 2004, The Portland Office of Transportation published a report that described four general categories of transportation cyclists and their differing needs. Through surveys and research, they identified four categories of residents and their relationship to bicycle transportation<sup>1</sup>:

- **"No way, no how" (30%)** – As the name implies, this category represents people who will not ride a bicycle for transportation, either out of disinterest or the inability to do so.
- **"Interested but Concerned" (60%)** – People in this category would like to ride more, but do not feel safe on busy streets with fast moving traffic nearby. Fewer and slower-moving cars would help them feel more comfortable. Constituting 60% of the demographic spectrum, this category represents the majority of residents.
- **"Enthusied and Confident" (5-10%)**– This group is those who have been attracted to cycling as a result of previous investment in the bicycle network. They are comfortable sharing the road way with automobile traffic, but they prefer to ride on dedicated facilities such as bike lanes or paths.
- **"Strong and Fearless" (1-2%)** – This category, by far the smallest, will ride regardless of roadway conditions and regardless of investment in bicycle facilities.

Enthusied and confident

5-10%



Strong and fearless

1-2%

Geller, Roger, Portland Bureau of Transportation, "The Four Types of Cyclists," 2004. <http://www.portlandoregon.gov/transportation/445977a=237507>



### 3.4 Planning for Trip Purpose & Cyclist Typology

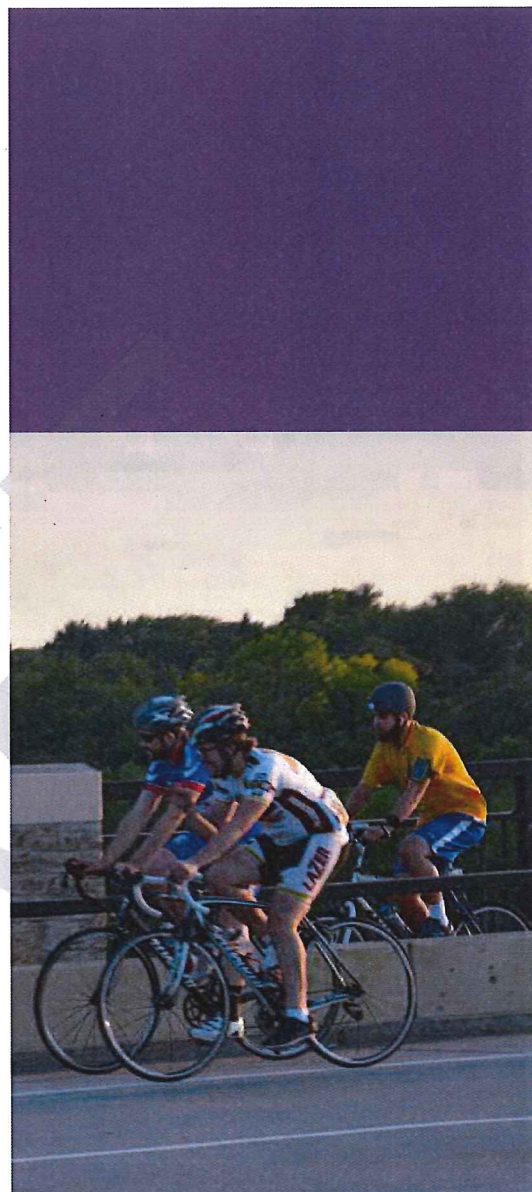
Understanding trip purpose is an important part of planning for bikeways throughout Saint Paul, however, this plan intentionally avoids designating any existing or proposed routes for a particular trip purpose or a particular type of cyclist. It is often difficult to differentiate between utilitarian and recreational trips because the same bikeway network can be used for both purposes. Trip chaining, the process of making intermediate stops at multiple destinations between two trip endpoints, further complicates the question. Bikeways originally designed for recreational purposes (such as a recreational trail) can also play a critical role in helping people commute to work by bicycle or for other utilitarian purposes.

For example, imagine an individual who uses a bicycle to ride home after work, but occasionally chooses to take the long way home to take advantage of the comfort and attractiveness of a trail running through a regional park. Imagine another individual who rides a bicycle from work to their child's daycare center, then bikes with the child to the nearest ice cream shop before heading home. In both of these examples, it is not clear whether the trip is best described as utilitarian, recreation, or some combination of both.

This plan also intentionally avoids correlating the level of bicycling skill or experience with cyclists preferences. A person's level of experience or skill in handling a bicycle does not necessarily dictate a preference for certain facility types or a desire or willingness to integrate with motorized traffic. Many experienced and dedicated cyclists prefer off-street trails or low-volume streets that provide separation from motorized traffic.

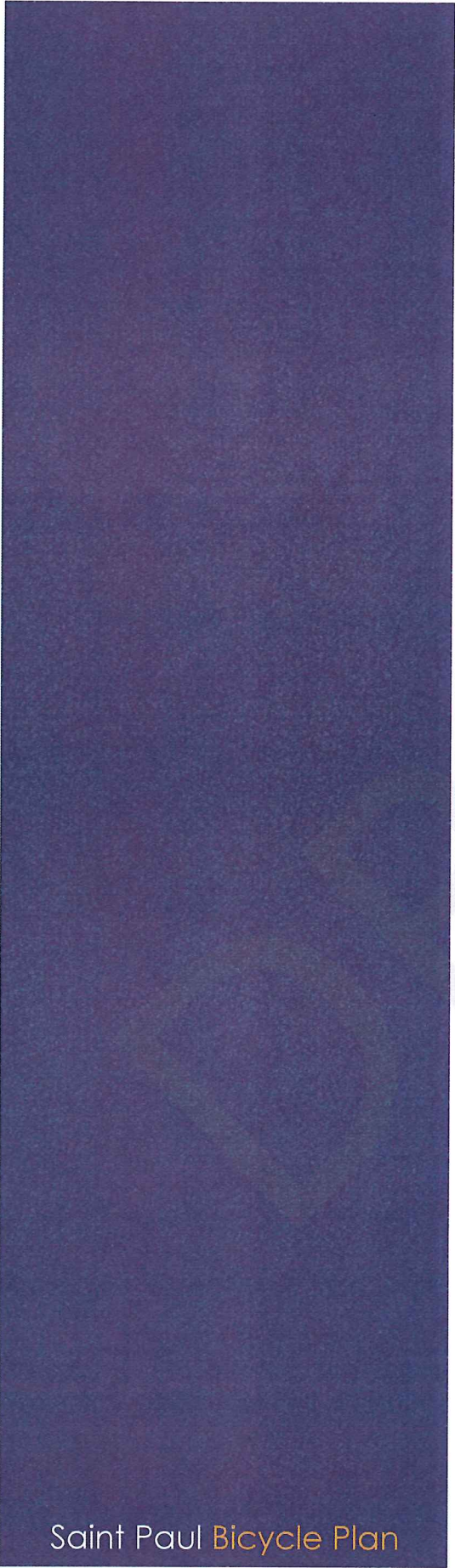
This plan acknowledges that all people have various preferences depending on circumstances, and accommodates those preferences by recommending a wide variety of facility types throughout the city. By providing a diverse mixture of cycling facilities throughout the city, the plan ensures that all people, regardless of preferences, will have access to a facility type that caters to their needs.

The variety and differentiation represented by cyclist typologies highlights the wide range of public opinion about bicycling. For some, bicycling is intimidating or uninteresting.



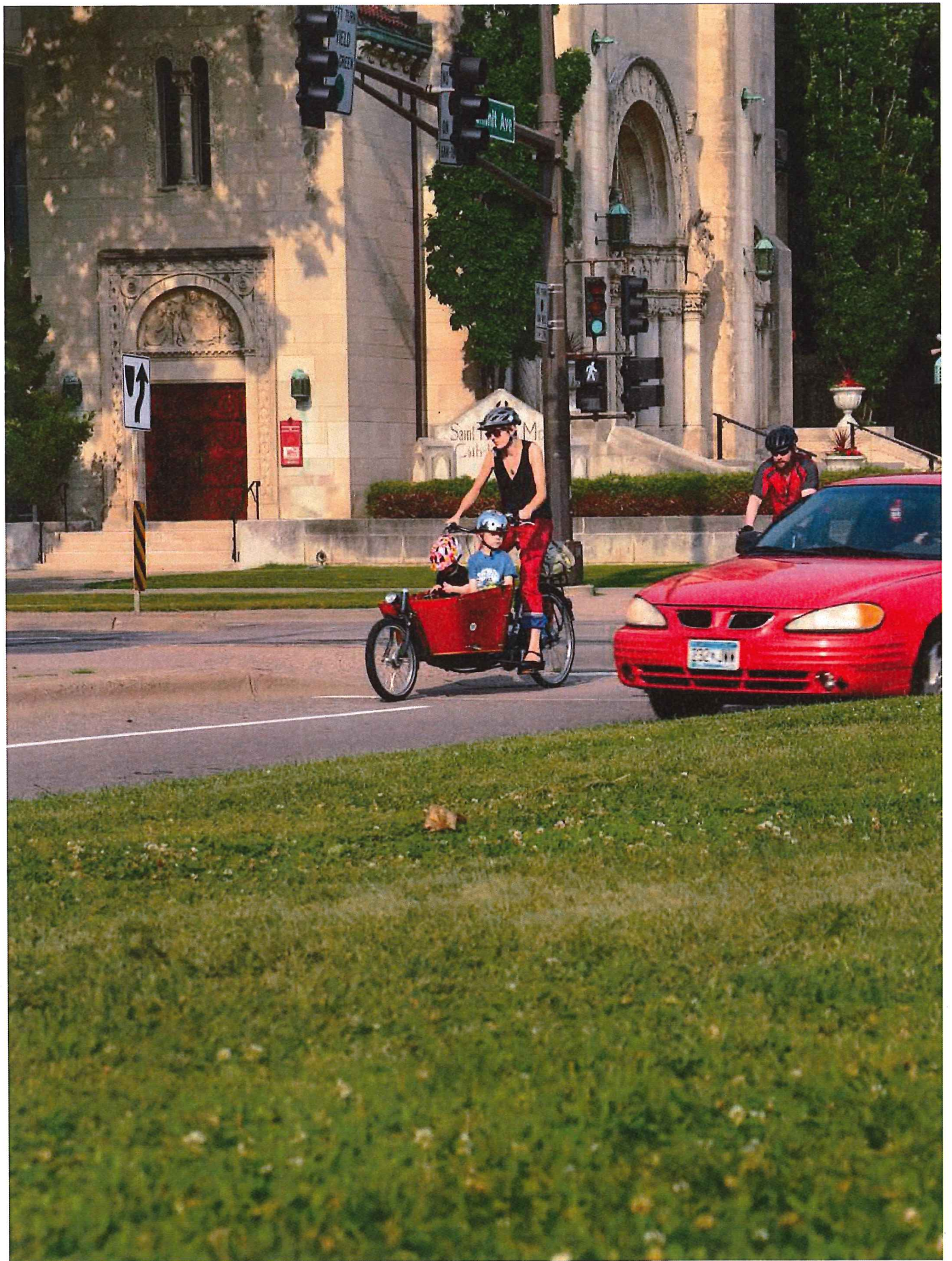
*Bicyclists prefer a variety of facility types depending on circumstance*





For others, bicycling is integral to their identity and lifestyle. Some cyclists prefer dedicated bicycle facilities separated from traffic, while others favor riding in traffic on the street. As a result, the bicycle network in Saint Paul must accommodate all categories and levels of riders. Making bicycling comfortable and practical for all users will increase and encourage use, and make Saint Paul a world class bicycling city.





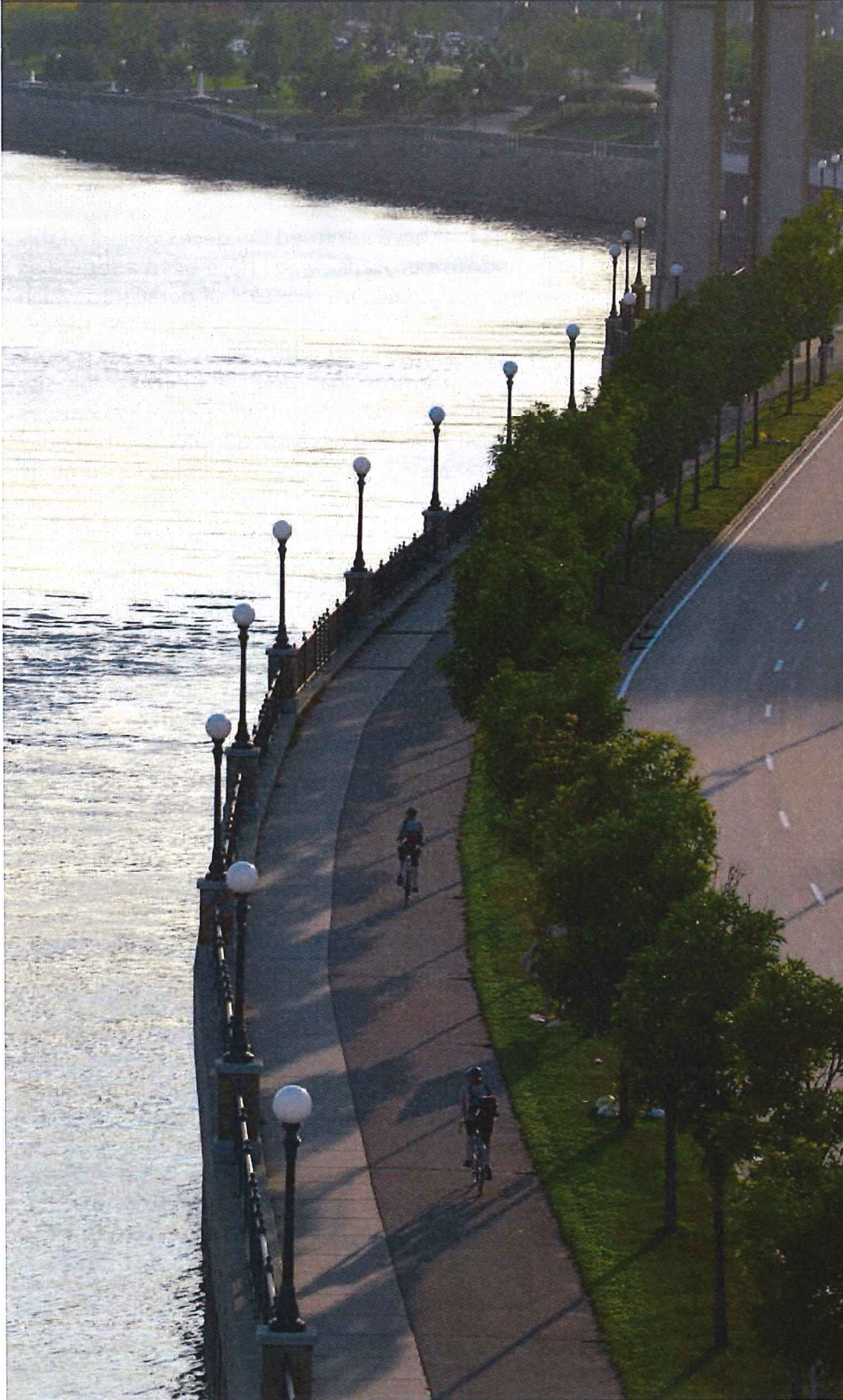


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## Chapter 4: Policy & Planning Context



Saint Paul  
Bicycle Plan



# 4.0

## POLICY & PLANNING CONTEXT

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The Bicycle Plan builds on previous planning efforts and existing policy both established by the City as well as work completed by agency partners, such as Ramsey County and MnDOT. Planning for, constructing, and maintaining the bicycle network in Saint Paul is a joint effort between the Department of Public Works, the Department of Parks and Recreation, and the Department of Planning and Economic Development. Each department plays an important role in planning and developing bicycle facilities throughout the city.

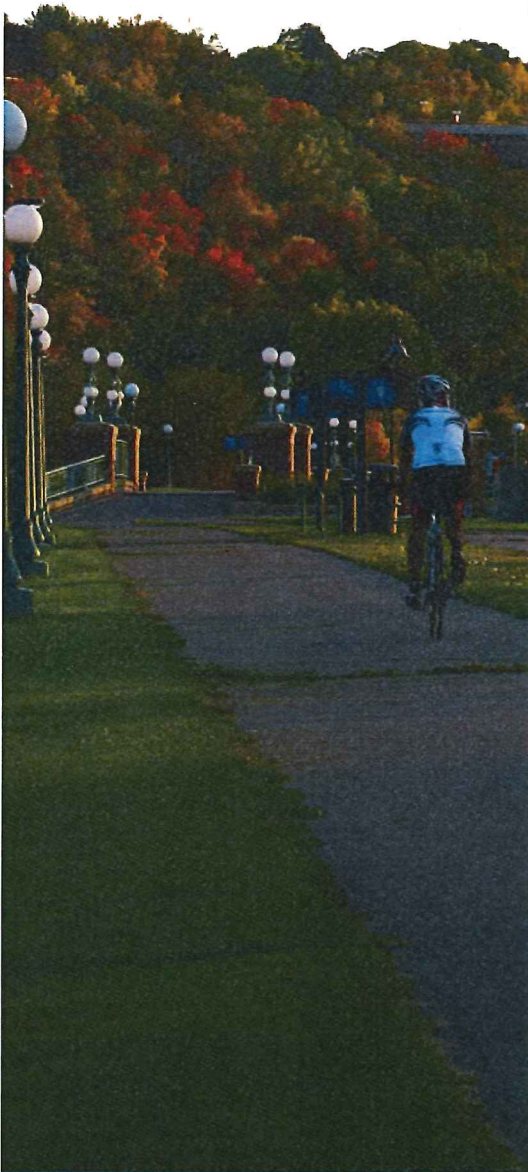
There are numerous planning efforts that have informed the development of this plan, including Small Area Plans and District Plans, which have been adopted as addenda to the Comprehensive Plan. The level of detail into which each of these plans gives recommendations regarding the bicycle network varies greatly. In addition, there have been a number of planning efforts that were adopted by the city council but not as addenda to the Comprehensive Plan, as well as numerous studies that were not adopted by the council. Some of the large-scale planning and policy documents are described below.

### 4.1 Comprehensive Plan (2008)

The Comprehensive Plan strongly supports the development of a multi-modal transportation system, including the development of a citywide bicycle network. The plan states the importance of using a Complete Streets approach to planning the transportation system and promotes context sensitive design. The following strategies identified in the Comprehensive Plan are most directly relevant to this planning effort:

#### Transportation Chapter

- **1.1 Complete the Streets.** – The needs of all users of the transportation system – including pedestrians, cyclists, transit, freight, and motor vehicle drivers – should be accommodated. The public right-of-way must account for the safety and convenience of the most vulnerable populations.
- **3.4 Develop and maintain a complete and connected bikeway system.** – Generally, bikeways should be no more than a half-mile apart, and arterial striped bike lanes and/or off-street trails should be no more than one mile apart. It is the desired goal of the City to increase the bicycle mode share from 2% in 2000 to 5% in fifteen years and increase the mode share of bicycling commuters from 0.6% to 2.5% during the same period. Saint Paul will become a world-class





bicycling city that accommodates cyclists of varying skill levels riding bicycles for both transportation and recreation and encourages bicycle use as part of everyday life.

- **3.5 Support existing off-street shared-use paths and add facilities and amenities supportive of active living principles.**

- **3.6 Fill gaps in the bikeway system.**

- **3.8 Promote “bicycle boulevards” as a new type of bikeway.** - The implementation of bicycle boulevards should be explored, particularly to connect neighborhoods and major destinations and to provide convenient nearby alternatives to bicycling on major streets.

- **3.10 Create public bicycle parking facilities to increase bicycling trips citywide.** - Develop bicycle parking facilities as a part of new or improved public facilities, particularly at hubs of retail and commercial activity; in public parking facilities; and at community gathering spaces. Providing facilities for bicyclists to not only park their bikes but also to shower, store gear, and get needed bike maintenance can help to make bicycling more convenient and attract new cyclists.

#### Parks and Recreation Chapter

- **1.2 Complete the trail and bikeway system.**

- **1.3. Provide functional, accessible, and secure bike racks at all parks and recreation centers.**

- **1.5 Provide better public information on getting to parks and recreation facilities on foot and bike.**

- **6.7 Build the Grand Round Parkway from a loop route to a complete parkway.** - The City should add off-road trails, on-road bike lanes, and “green” the Grand Round to create a scenic recreational parkway experience, enhance property values, and build tourism. Parkway identity should be achieved through the use of cohesive paving, lighting, landscaping, signage, and street furnishings.

- **6.8 Connect the Saint Paul and Minneapolis Grand Rounds parkways together.** - Since the 1880’s a true Twin Cities Grand Rounds parkway system has been envisioned. The two parkway systems would create the finest and largest urban scenic byway system in the United States.

- **6.11 Work to close gaps in the trail system to ensure seamless connections for bicycles and pedestrians across the city of all ages and abilities.**

- **6.12 Work toward better pedestrian and bicycle connections between parks, recreation centers,**



*The newly-completed Trout Brook Trail extension in Trout Brook Nature Sanctuary*

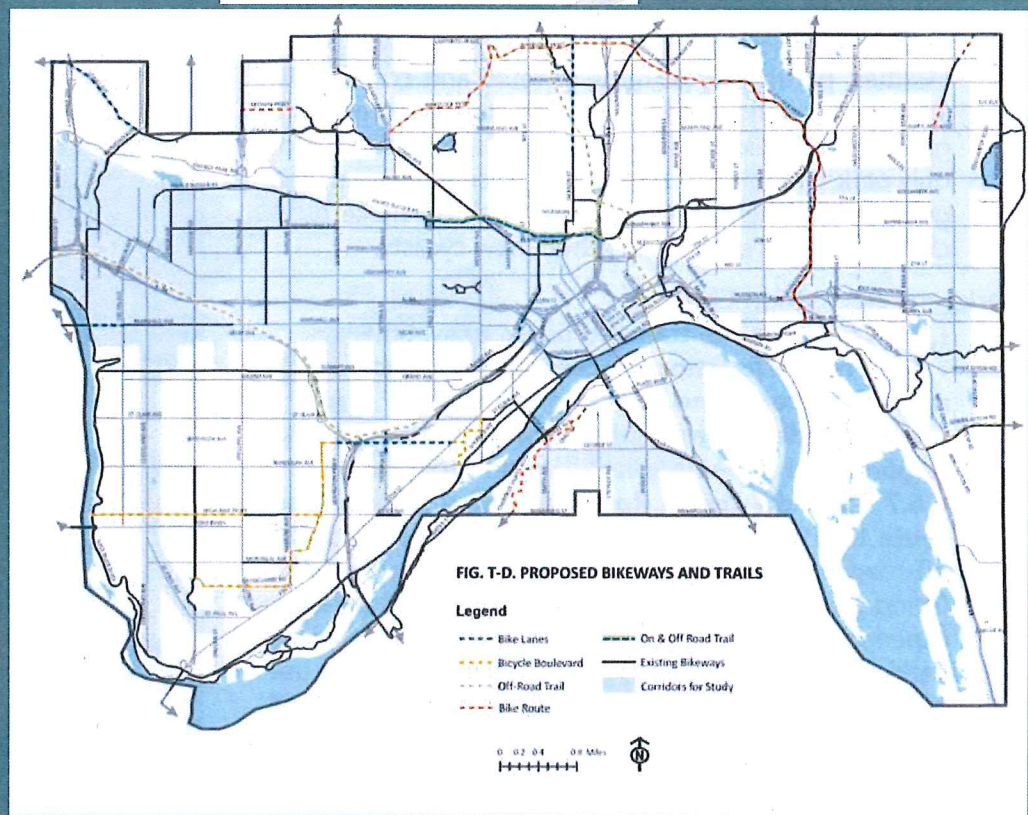


schools, major facilities, and special events.

- **6.13 Build new off-road trails and upgrade existing off-road trails to make cycling and walking more convenient, safe, and pleasant, and add facilities and amenities to improve the experience of using Saint Paul's trails.**

The Comprehensive Plan makes several recommendations regarding new bikeways to be developed throughout the city, many of which have since been implemented; however, the plan primarily establishes a number of search corridors for further study.

Comprehensive Plan Bikeways Map



## 4.2 Parks and Recreation System Plan (2010)

This plan establishes a strong vision for bicycling, primarily within the context of Regional Parks & Trails, the Grand Round, and on-city Parkways. The plan places a high emphasis on completing the city Grand Round, particularly along Johnson Parkway, Wheelock Parkway, Como Avenue, Pel-



ham Boulevard, and Raymond Avenue. The plan envisions a number of new bikeways throughout the city, some of which have already been constructed, such as bike lanes along Ruth Street, the development of a trail within Cherokee Park and Ohio Street, and extension of the Furness Parkway trail. The plan strongly recommends the development of an extension of the Midtown Greenway from Minneapolis through the Ayd Mill Road corridor in Saint Paul.

Parks and Recreation System Plan Map



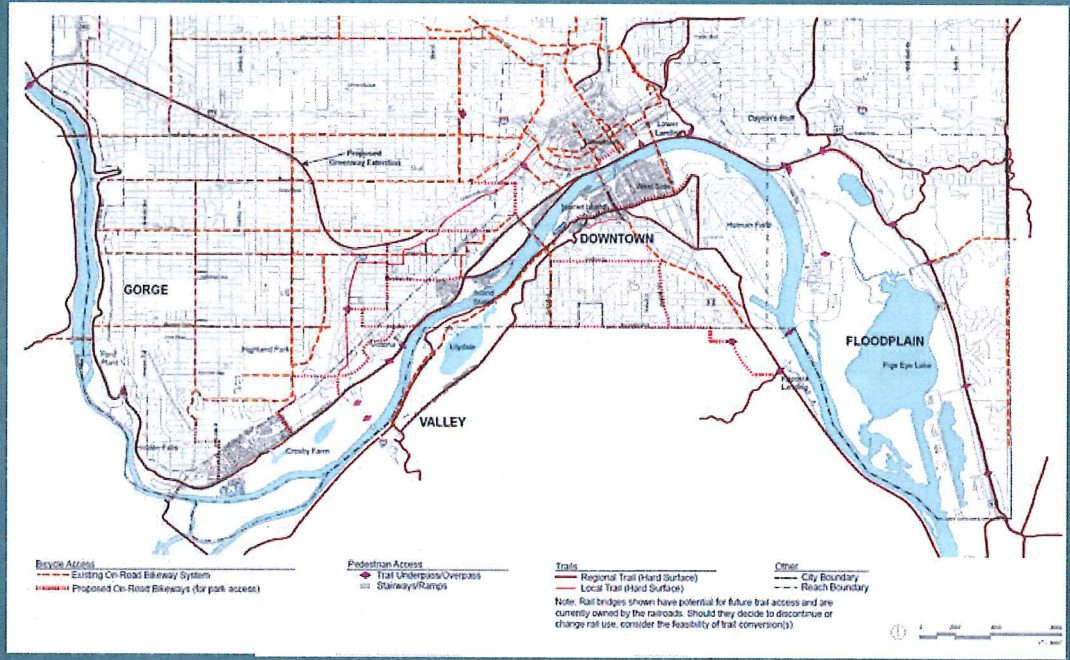
### 4.3 Great River Passage (2012)

The Great River Passage plan places great emphasis on enhancing and improving the many existing trails along the Mississippi River corridor. The plan promotes the Mississippi River as a critical corridor for bicyclists and establishes a vision for drawing more users to the trails and the river. The plan establishes support for improving access to the river through bike lanes, shared lanes, off-street paths, and bicycle boulevards. The plan identified a number of proposed bike-ways to connect the existing bikeway network to the Missis-



issippi River corridor.

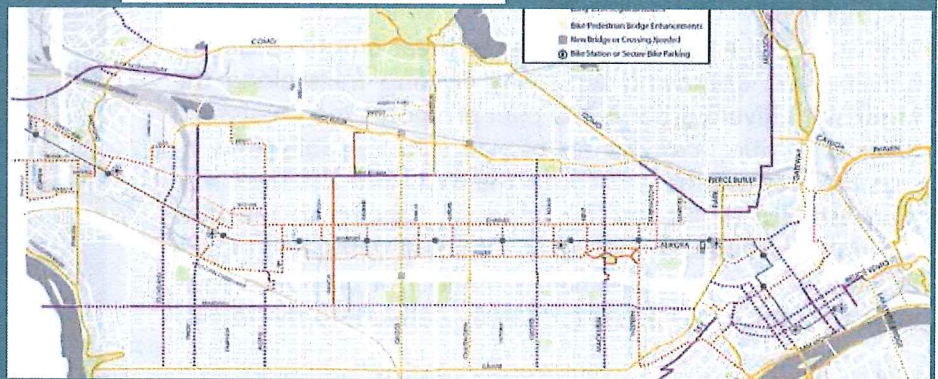
Great River Passage Bikeways and Pedestrian Access Map



#### 4.4 Bike Walk Central Corridor Action Plan (2010)

The Bike Walk Central Corridor Action Plan was developed in anticipation of the Green Line LRT to plan for bicycle and pedestrian access along and across the Green Line. The plan identified bike routes and gave recommendations for facility types along these corridors. The plan identified a fine-grained network of bikeways to connect with green line station locations.

Central Corridor Action Plan Bikeways Map





## 4.5 Complete Streets Resolution (2009)

In March of 2009, the city council approved a resolution adopting a complete streets policy. The resolution directs city staff to approach roadway implementation projects with a "Complete Streets" approach to encourage walking, biking and transit usage. The resolution states that complete streets will be "achieved over time, project by project".

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