

# Proposed Revisions to the Saint Paul Bicycle Plan

## 1.0 Introduction

[No Revisions to Sections 1.0-1.4]

## 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~~ periodically 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. This plan does not need to be updated to reflect minor deviations from the recommendations of this plan that are encountered during implementation of bikeways across the city. The primary reason to update this document is to ensure that recommendations coming out of other substantial planning efforts are incorporated into the Comprehensive Plan, to which this plan is an addendum.

## 2.0 Why Bicycling Matters

[No Revisions]

## 3.0 Bikeways Accessible to Everyone

[No Revisions]

## 4.0 Policy and Planning Context

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, MnDOT, and the Metropolitan Council. 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 City of Saint Paul Comprehensive Plan and Addenda(2008)**

### **Comprehensive Plan (2008)**

[No Revisions]

### **Great River Passage Master Plan (2012)**

The *Great River Passage Master 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 vital 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 bikeways to connect the existing bikeway network to the Mississippi River corridor. An abridged version of the full Great River Passage Master Plan was adopted by City Council as an addendum to the Saint Paul Comprehensive Plan.

## **4.2 City of Saint Paul Policy Documents and Guidance**

### **Grand Round Design & Implementation Plan (2016)**

The Grand Round Design & Implementation Plan built on recommendations of the 2000 Grand Round Master Plan to develop a final implementation plan for the Grand Round. The plan includes details on bicycle facilities, trail alignments, information on historic significance, and style guide for street furniture, branding and public art. This document has been adopted by the City Council, but is not an addendum to the Saint Paul Comprehensive Plan.

### **Capital City Bikeway: Network Study and Design Guide (2016)**

The Capital City Bikeway: Network Study and Design Guide identified a network of downtown bikeways called the Capital City Bikeway and recommended connections between downtown and the surrounding neighborhoods. The Guide defines the hierarchy of the downtown bike network and the style of the Capital City Bikeway, including landscaping, street furniture, branding and public art. This document has been adopted by the City Council but is not an addendum to the Saint Paul Comprehensive Plan.

### **4.2 Parks & 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, Pelham 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. This document has not been adopted by City Council and is not an addendum to the Saint Paul Comprehensive Plan.

#### **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 bikeways to connect the existing bikeway network to the Mississippi River corridor.~~

#### **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. This document was adopted by City Council, but is not an addendum to the Saint Paul Comprehensive Plan.

#### **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”.

#### **4.64.3 Ramsey County Planning and Policy Context**

Ramsey County has jurisdiction over a number of roadways and parks within Saint Paul. The County and City work together to determine what type of accommodations for bicycles are appropriate along county roadways or throughout county parks. Active Living Ramsey Communities, an arm of the County Parks department actively plans and encourages bicycling as an important quality of life and health issue. They actively plan for bicycle facilities throughout Ramsey County. ~~At the time of this writing, Ramsey County is beginning a process to develop a county-wide bicycle and pedestrian plan.~~

#### **Ramsey County-wide Pedestrian & Bicycle Plan (2016)**

This planning document, adopted by the Ramsey County Board of Commissioners in February 2016, establishes a vision to allow pedestrians and bicyclists to move freely, comfortably, and safely throughout the County. It establishes a series of goals to guide progress and provides resources to local communities within Ramsey County to achieve those goals. The plan also establishes a county-wide network of proposed pedestrian and bicycle facilities, many of which utilize city controlled rights-of-way. This document has not been adopted by the City Council and is not part of the Saint Paul Comprehensive Plan.

#### **Ramsey County All Abilities Transportation Network Policy (2016)**

The Ramsey County Board of Commissioners approved a resolution in December of 2016 stating that the County is committed to creating and maintaining a transportation system that provides equitable

access for all people. Among other objectives, the policy states a principle of implementing an integrated and fully interconnected transportation system utilizing a variety of modes. The policy also establishes a hierarchy of transportation system users that ensures that the most vulnerable users of the transportation network are considered first, beginning with pedestrians, followed by people using bicycles.

#### **Ramsey County 2030 Comprehensive Plan (2009)**

*The County Comprehensive Plan* states the importance of providing and maintaining a regional transportation system of bicycle/pedestrian pathways throughout the County for both recreational and utilitarian trips. The plan states that the county's role in providing for bicycle travel is to provide a link between municipal and state bikeway networks. The plan states that "accommodation of pedestrians and bicycles is very important to the County", and that "the County will encourage multi-modal forms of transportation wherever feasible." This document has not been adopted by the City Council and is not part of the Saint Paul Comprehensive Plan.

#### **4.74.4 MnDOT Planning and Policy Context**

The Minnesota Department of Transportation (MnDOT) owns and operates the trunk highways (TH) throughout the state, including a number of roadways throughout Saint Paul. MnDOT also typically has jurisdiction over bridges that cross MnDOT highways, even if the bridge carries local or county roadways or bikeways.

MnDOT typically relies on the City or County to operate, and maintain (including snow clearance) bicycle facilities along trunk highways, with the exception of facilities provided on major bridge structures. While MnDOT may permit or encourage the development of bike facilities along or across MnDOT rights-of-way, ongoing maintenance and operation of those facilities is typically a local responsibility.

MnDOT also plays an important role in providing critical connections across major barriers such as the Mississippi River. Many of the bridges across the Mississippi River are under MnDOT jurisdiction and provide critical connections for bicycles.

In the Twin Cities, MnDOT works closely with the Metropolitan Council to plan for regional transportation facilities and administer state and federal transportation funding sources. MnDOT collaborated on the Metropolitan Council's recently completed Regional Bicycle System Study to identify a set of regional bikeways. That study will inform MnDOT's forthcoming Metro District Bicycle Plan.

#### **MnDOT Bicycle Modal Plan (2005)**

*The MnDOT Bicycle Modal Plan* establishes the role of bicycle in Minnesota's transportation system. It reviews all State and Federal laws, policies, and guidance related to bicycle transportation. The modal plan clarifies policies under which accommodating bicycles is required on MnDOT projects, outlines an initiative to establish a scenic bikeway system throughout Minnesota, and provides basic bikeway design guidelines. An update to this plan is anticipated in 2015 under the title Statewide Bicycle System Plan. This document has not been adopted by the City Council and is not an addendum to the Saint Paul Comprehensive Plan.

### Statewide Bicycle Planning Study (2013)

*The Statewide Bicycle Planning Study* provides foundational information to assist MnDOT in better integrating bikeway facility planning and integration into its day-to-day business. The study provided recommendations for MnDOT in the planning, programming, scoping, design, and implementation of trunk highway projects with consideration to state bikeways. A primary initiative of the study was to create a consistent statewide database of existing and planned statewide bicycle routes, including the production of a new State Bicycle Map. This document has not been adopted by the City Council and is not an addendum to the Saint Paul Comprehensive Plan.

### 4.84.5 Department of Natural Resources (DNR)

The Department of Natural Resources (DNR) manages the nearly 1,300 mile state trail network, of which 541 miles is paved and intended for use by people on bicycles, including the Gateway State Trail in Saint Paul. The Gateway State Trail was opened for public use in 1993, originally as an extension of the Minnesota- Wisconsin Boundary State Trail, which was envisioned to connect the Twin Cities with Duluth. The DNR is responsible for all maintenance and management of the Gateway State Trail. The City and the DNR work together to ensure integration of the Gateway State Trail into the city bikeway network.

The DNR plays an important role in promoting bicycling statewide. While the state trail network is intended primarily for recreational use, experience has shown that state trails can play an important role for utilitarian bicycle trips as well. This is especially true of state trails that penetrate into urban areas, such as the Gateway State Trail.

The DNR plays an important role in funding bikeway projects by administering several funding programs available to help local agencies statewide develop off-road paths, though many of the funding sources are available only to agencies outside the seven- county metropolitan area. Within Saint Paul, applicable programs include the Federal Recreational Trails Program and the Local Trail Connections Program.

### Gateway State Trail Master Plan (1985)

More accurately titled *A Master Plan for the Gateway Segment of the Minnesota Wisconsin Boundary State Trail*, this plan established the vision for the initial construction of the Gateway State Trail, including a desire to extend the trail into the “downtown area” of Saint Paul, though a preferred alignment for this extension was not identified. The plan identified the southwestern terminus of the trail near Arlington Avenue, though the trail has since been extended as far south as ~~Cayuga Street~~University Avenue. In conjunction with the MnDOT I-35E Cayuga Interchange project, the Gateway Trail will be extended approximately 0.7 miles south to University Avenue by 2016. This document has not been adopted by the City Council and is not an addendum to the Saint Paul Comprehensive Plan.

### 4.94.6 Metropolitan Council

The Metropolitan Council does not own, operate, develop, or maintain any bikeways or facilities. However, they play an important role in the planning, funding, and coordination of bicycle facilities throughout the Twin Cities region. Council staff works with MnDOT, counties, and municipalities on bicycle and pedestrian planning efforts in the region, and provides technical assistance to partner agencies.

The Metropolitan Council supports the development of bikeway facilities through two primary systems:

- Regional Bicycle Transportation Network
- Regional Trail System

The two systems are complementary, and some bikeways may be included in both systems. The two systems are described below in greater detail.

The Metropolitan Council provides planning guidance on land use issues related to bikeways and with the Transportation Advisory Board administers a competitive process for allocating federal transportation funds to bicycle and pedestrian projects.

In addition, the Metropolitan Council assists local governments through the following:

- Establishes regional policies and strategies relating to bicycling
- Assists with interjurisdictional coordination and planning
- Maps and inventories bikeways throughout the region
- Encourages educational and promotional programs
- Establishes priorities for distribution of federal funding

### **2040 Transportation Policy Plan (2015)**

The Metropolitan Council is charged with creating and updating the 25 year *Transportation Policy Plan (TPP)*, which was last updated in 2015 and establishes a long range regional transportation vision. The *TPP* establishes several policy objectives and strategies that promote and support bicycling as a critical part of the regional transportation network. The latest update to the *TPP* incorporates the Regional Bicycle Transportation Network (RBTN) as a regional transportation priority.

The goal of the RBTN is to establish an integrated seamless network of on-street bikeways and off-road trails to most effectively improve conditions for bicycle transportation at the regional level and to encourage planning and implementation of future bikeways by cities, counties, parks agencies, and the state, in support of the RBTN vision. The RBTN vision network is subdivided into two tiers for regional planning and investment prioritization.

- **Tier 1 corridors** and designated alignments are planned in locations where they can attract the most riders and where they can most effectively enhance mode choice in favor of biking, walking, and transit over driving alone. These Tier 1 corridors are given the highest priority for regional planning and investment in the 2040 Transportation Policy Plan.
- **Tier 2 corridors** and designated alignments include all the remaining segments of the RBTN and are given the second highest priority for regional planning and investment.

[This document has not been adopted by the City Council and is not an addendum to the Saint Paul Comprehensive Plan.](#)

### **2040 Regional Parks Policy Plan (2015)**

The Metropolitan Council designates and coordinates a system of regional parks and recreational facilities, including a network of regional trails. The regional trail system is guided by the Council's *Regional Parks Policy Plan*, a 25 year vision policy plan to guide the development of regional parks and trails. [This document has not been adopted by the City Council and is not an addendum to the Saint Paul Comprehensive Plan.](#) The Metropolitan Council partners with 10 regional park

implementing agencies, including Saint Paul and Ramsey County, which own and operate regional parks and trails.

Regional trails are designated to connect regional park facilities to one another. These parks and trails play an important role in providing recreational opportunities, however many regional trails also serve an important transportation function.

The Metropolitan Council plays an important role in funding the costs of acquiring and developing regional trails through its Regional Park Capital Improvement Program, Park Acquisition Opportunity Fund, and through administration of the Parks and Trails Legacy Fund. The Council also passes through state funds to partially finance operation and maintenance of regional parks and trails.

## 5.0 Bicycle Network Framework

[No Revisions]

## 6.0 Expanding the Bicycle Network

The primary objective of this plan is to establish the planned bicycle network as directed by Strategy 3.4 of the Comprehensive Plan. The planned bicycle network is the result of a planning process that included substantial public input and collaboration between city staff from several departments, including Public Works, Planning & Economic Development, and Parks & Recreation. The primary objective of the planned bicycle network is to provide safe and comfortable places for people of all ages, abilities, and preferences to ride a bicycle.

### 6.1 Existing Bicycle Network

There are a total of 153 miles of bikeways in Saint Paul ~~as of March 2015~~, including facilities owned and managed by agency partners. The network of existing bikeways is divided relatively evenly between off-street paths and on-street facilities of various types. About 48% of the existing facilities throughout the city are off-street paths, with bike lanes and shoulders composing an additional 35% of the bike network. The remaining 17% of the existing bicycle network is comprised of bicycle boulevards or enhanced shared lanes. The existing bicycle network is identified on **Figure 2**.

**Table 6.1.1 Existing ~~(March 2015)~~ Bicycle Network**

[No revisions to table]

### 6.2 Planned Bicycle Network

This plan identifies a full bicycle network of ~~350-347~~ miles, an increase of ~~197-195~~ miles of new bikeways. This is a ~~129%127%~~ increase in bikeways, compared to the existing 153 miles of bikeways ~~in March 2015~~. The planned bicycle network was designed to serve major destinations throughout the city based on the mapping criteria presented in **Appendix D**. The complete functional classification and facility types for each link in the bicycle network are shown on **Figure 3** and **Figure 4**.

This plan envisions a bikeway system based primarily on off-street paths and in-street separated lane facilities such as bike lanes or cycle tracks to appeal to the widest range of potential users.

Approximately 70% of the planned bicycle network is comprised of off-street path or in-street separated lane facilities. An additional ~~13%14%~~ of the full bikeway network is comprised of bicycle



boulevard facilities. Roughly 17% of the planned bicycle network ~~are~~<sup>is</sup> enhanced shared lane facilities. In many cases this facility type recommendation was made where space or traffic characteristics did not permit for the implementation of one of the other three facility types. Roughly 60% of the planned bicycle network is identified as major bikeways, 4% of which were identified as long term facilities.

In some cases, the planned bicycle network includes improvements to existing bikeways. For example, this plan recommends that the 17.9 miles of roadway with “bikeable shoulders” should be modified to fit into one of the planned bikeway facility type groups. In many cases, the existing shoulders can be converted into bicycle lanes relatively easily, though in other cases this plan recommends development of an alternate facility type.

**Table 6.2.1 Planned Bicycle Network Expansion by Facility Type**

Facility Type		Existing Facilities (miles)	Planned Facilities (miles)	Total Facilities (miles)	Percent of Planned Bicycle Network
Off Street Facilities	Off-Street Paths	74	62	135	39%
	<i>Off-Street SubTotal:</i>	74	62	135	39%
On-Street Facilities	In-Street Separated Lanes*	53	53	107	31%
	Bicycle Boulevards	7	40	47	14%
	Enhanced Shared Lanes	18	39	57	17%
	<i>On-Street SubTotal:</i>	79	133	212	61%
<b>TOTAL</b>		<b>153</b>	<b>195</b>	<b>347</b>	<b>100%</b>

**Table 6.2.2 Planned Bicycle Network by Functional Classification**

Functional Class	Total Facilities* (miles)	Percent of Bicycle Network
Major	190	55%
Major Long Term	13	4%
Minor	142	41%
Minor Long Term	3	1%
<b>TOTAL</b>	<b>347</b>	<b>100%</b>

The major bikeway network stresses separation between motor vehicles and bicycles, while the minor bikeway network relies more heavily on shared facilities. Nearly 90% of the major bikeways are off-street paths or in-street separated lane facilities. In contrast, only 43% of the minor bikeways are off-street paths or in-street separated facilities. Nearly 25% of the minor bikeways are bicycle boulevard facilities.



**Table 6.2.3 Planned Bicycle Network by Facility Type & Functional Classification**

Facility Type		Major Bikeways			Minor Bikeways			Total Facilities (miles)
		Near Term Facilities (miles)	Long Term Facilities (miles)	Total Major Facilities (miles)	Near Term Facilities (miles)	Long Term Facilities (miles)	Total Minor Facilities (miles)	
Off Street Facilities	Off-Street Paths	92	13	105	30	0.1	30	135
	<i>Off-Street SubTotal:</i>	92	13	105	30	0	30	135
On-Street Facilities	In-Street Separated Lanes*	74	0.1	74	30	2	33	107
	Bicycle Boulevards	12	0	12	35	0	35	47
	Enhanced Shared Lanes	11	0	11	46	0.4	47	57
	<i>On-Street SubTotal:</i>	97	0	97	112	2	115	212
<b>TOTAL</b>		<b>190</b>	<b>13</b>	<b>202</b>	<b>142</b>	<b>3</b>	<b>145</b>	<b>347</b>

## 6.3 Barrier Crossings

[No Revisions]

## 6.4 Regional Bicycle Transportation Network Refinement

[No Revisions]

## 6.5 Regional Trail Improvement

Regional trail corridors are intended to provide for recreational travel along linear pathways for bicyclists, pedestrians, and other users throughout the metropolitan area. Regional trails must be designated by the Metropolitan Council and are intended to pass through or provide connections between components in the Regional Parks System. Regional trails are defined in the Metropolitan Council's Regional Parks Policy Plan. Regional parks and trails identified in the Regional Parks Policy Plan are eligible for other funding sources, as described in **Appendix G**.

In urban areas such as Saint Paul, the regional trail network also plays an important function for transportation bicycling and often forms the backbone of the bicycle transportation network. Regional trail facilities are often developed along natural or linear features, which can limit the number of intersections, greatly enhancing safety and comfort for trail users.

Four facilities in Saint Paul have been designated as Regional Trails:

- Samuel Morgan Regional Trail
- Bruce Vento Regional Trail
- Trout Brook Regional Trail
- Summit Avenue
- Robert Pira Regional Trail

The Metropolitan Council generally does not designate trails that are wholly contained within regional parks as regional trails. However, many of these trails are critical in connecting the various regional trails together into a cohesive network and are eligible for the same funding sources as regional trails. In Saint Paul, these facilities are

- Mississippi River Boulevard (Mississippi Gorge) Trail

- Lilydale/Harriet Island Trail
- Cherokee Trail
- Indian Mounds Trail
- Battle Creek Trail

**Figure 7** identifies the existing regional trails and other linear trails that pass through regional parks, as well as planned regional trails and regional trail search corridors. The Metropolitan Council requires the city to prepare a master plan document for all planned regional trails. Regional trail search corridors are defined by the Metropolitan Council in the Parks Policy Plan.

## 6.6 Grand Round

The Grand Round is an approximately 26 mile system of parkways, trails, and sidewalks. The Grand Round unifies a network of community and regional parks, parkways, neighborhood landmarks and destinations, scenic viewpoints, and public art. Its "Grandness" is evidenced by the sum of its many parks linked seamlessly together by a consistent design including wayfinding, interpretive signing, connections to local parks, appropriate lighting, historical markers and interpretive elements, landscaping, public art, street furniture, scenic overlooks, and other amenities which add to the comfort, safety, and enjoyment of visitors.

Landscape architect Horace W. S. Cleveland established the early vision for the Grand Round over 100 years ago, which led to the completion of several parkway segments in the early 1900s. By the 1930s, however, implementation of the remainder of the system had stalled. Planning for the parkways waned until the *Grand Round Master Plan* was completed in 2000, which built on the parkway system and started laying the groundwork to complete the 26-mile recreational greenway. The *Grand Round Design & Implementation Plan*, completed in 2016, further refined the vision of the Grand Round and identified trail alignments and design guidelines for the Grand Round. Both the *Grand Round Master Plan* as well as the *Grand Round Design & Implementation Plan* documents have been adopted by City Council, but are not addenda to the Saint Paul Comprehensive Plan.

While the Grand Round was initially perceived as a recreational amenity, the existing portions of the Grand Round form the backbone of the bicycle transportation network as well. The potential for high-quality parkway trails to encourage bicycle use for transportation purposes and to attract a new segment of the population to bicycles should not be underestimated.

The ideal Grand Round is comprised of low-speed scenic parkways and off-street pedestrian and bicycle paths. Wherever possible, bicycles and pedestrians should be provided with separate paths or sidewalks to minimize conflict between the two modes. The Grand Round should include bicycle and pedestrian facilities that are useable and maintained year-round, including snow removal in the winter.

The 2010 *Saint Paul Parks and Recreation System Plan* describes the desire to enhance the 26-mile Grand Round system throughout the city:

Trails are currently the most desired parks and recreation facility by Saint Paul residents. They are an important quality of life element and a factor in choosing where to locate for many residents and businesses. [...] Trails and parkways are advantageous from a fiscal and a recreation standpoint. Trails allow self-directed recreation which is immensely popular, does not require any staffing (besides periodic maintenance) and requires less initial investment than [other types of facilities]. Due to their linear nature, they have large service areas, and can expand the service areas of parks connected by trails. [...] For these reasons, trails, especially those associated with the historic Grand Round, are a key part of the 21st Century Parks and Recreation System.

The 2010 Saint Paul Parks and Recreation System Plan describes the desire to enhance the 27-mile Grand Round system throughout the city: "Trails are currently the most desired parks and recreation facility by Saint Paul residents. They are an important quality of life element and a factor in choosing where to locate for many residents and businesses. [...] Trails and parkways are advantageous from a fiscal and a recreation standpoint. Trails allow self-directed recreation which is immensely popular, does not require any staffing (besides periodic maintenance) and requires less initial investment than [other types of facilities]. Due to their linear nature, they have large service areas, and can expand the service areas of parks connected by trails. [...] For these reasons, trails, especially those associated with the historic Grand Round, are a key part of the 21st Century Parks and Recreation System." The Grand Round is identified on **Figure 8**:

While the Grand Round was initially perceived as a recreational facility, the portions of the route that are already in place also form the backbone of the bicycle network for transportation cycling as well. The potential for high-quality parkway trails to encourage bicycle use for transportation purposes and to attract a new segment of the population to bicycles should not be underestimated.

An enhanced system of parkways and multi-use off-street paths will allow connections to and between the regional parks, downtown, and other key destinations. The Grand Round—a scenic green parkway for drivers, pedestrians, and people on bicycles around the entire city—has been a vision for Saint Paul for over 100 years.

The Saint Paul Grand Round was conceived by famed landscape architect H.W.S. Cleveland over 100 years ago. His vision led to the completion of several parkway segments in the early 1900s. By the 1930s, however, implementation of the remainder of the system was halted. Many residents are familiar with the alignment of the Grand Round through participation in the Saint Paul Classic Bike Tour, the largest annual bicycle tour in Minnesota that follows the scenic loop around the city.

The ideal Grand Round is comprised of low-speed scenic parkways and off-street pedestrian and bicycle paths. Wherever possible, bicycles and pedestrians should be provided with separate paths or sidewalks to minimize conflict between the two modes, either on the same side or opposite sides of the parkway. The Grand Round should include bicycle and pedestrian facilities that are useable and maintained year-round, including snow removal in the winter.

The Saint Paul Grand Round plays an important role in the bicycle transportation and recreation network. This plan establishes a vision for much of the Grand Round to accommodate all types of users by providing multiple facility types within the same corridor. Providing both off-street paths and on-street bike lanes along portions of the Grand Round is envisioned to attract users of all preferences. Off-street paths will attract slower bicyclists and pedestrians, while on-street bike lanes will attract faster cyclists.

While the off-street paths attract a wider range of cyclists and are critical to establishing the inclusive nature of the Grand Round, the city should strive to provide on-street bicycle facilities where space permits as well. As many of the off-street paths will permit both bicycles and pedestrians, providing the in-street bicycle facilities will immensely help to encourage faster-moving bicyclists to use the roadway rather than the trail.

In addition, the Saint Paul Grand Round should include a number of other features, including wayfinding, interpretive signing, bike racks, connections to local parks, drinking fountains, appropriate lighting, historical markers and interpretive elements, landscaping, public art, street furniture, scenic overlooks, and other amenities that add to the comfort, safety, and enjoyment of visitors.

Some portions of the Grand Round have already been implemented with multiple facility types in the same corridor. For example, Wheelock Parkway between Arcade Street and Phalen Boulevard provides on-street and off-street bicycle facilities. This plan envisions extending these facilities to other parts of the Grand Round, including Wheelock Parkway west of Arcade Street, Johnson Parkway, and portions of Pelham Boulevard and Como Avenue.

However, this plan does not present a singular vision for the Grand Round, and the planned improvements must be guided by existing constraints. This vision does not propose in-street facilities where the Grand Round follows the Sam Morgan Regional Trail. On-street bicycle facilities are not recommended for Shepard Road or Warner Road. This vision also does not propose off-street path facilities along Raymond Avenue and portions of Como Avenue where right-of-way is limited. In-street bicycle facilities are recommended in these locations:

## 6.7 State Trails

[No Revisions]

## 6.8 Mississippi River Trail (MRT) - U.S. Bike Route (USBR) 45

MnDOT has been the lead agency on the development of the Mississippi River Trail (MRT), also known as U.S. Bike Route (USBR) 45, which is a 3,000 mile long planned bikeway from the Mississippi River headwaters to the Gulf of Mexico. The U.S. Bike Route System is a national effort to establish a network of numbered interstate bicycle routes across the nation. Approximately five numbered routes have been identified at a conceptual level that pass through Minnesota. One of these, the MRT, passes through Saint Paul. MnDOT has been the lead agency in identifying the specific alignment of the MRT, and is the lead agency in establishing all signage designating the route.

In Saint Paul, the MRT is established entirely on existing bikeway corridors through signage and wayfinding. The MRT is identified on **Figure 98**.

## 6.9 Ford Site

The 125-acre Ford Motor Company Twin Cities Assembly Plant is currently in the process of undergoing a major transformation. The former assembly plant has been removed and the city is currently in the process of planning for future redevelopment. The city has established a vision for a "21st Century Community," and the site will be a livable, mixed use neighborhood that looks to the future with clean technologies and high-quality design for energy, buildings, and infrastructure. The site will place a high priority on encouraging walking, biking, and transit.

The city is currently in the process of setting a vision for new roadways, transit access, walkways, and bikeways throughout the site, ~~and planning should be complete in 2016~~. This ongoing planning process should include establishing a plan for bikeways to be developed throughout the site. Special care should be taken to identify bikeways that both serve the planned development site as well as facilitate bicycle passage through the site. At a minimum, the following bikeway priorities should be set for the Ford Site and the surrounding areas:

- **Dedicated Bicycle Infrastructure** - Off-street and in-street bikeways, as well as support facilities such as bicycle parking, should be incorporated to the fullest extent possible within the Ford site redevelopment, to provide a strong network of bicycle connections to, from, and within the site for all types of users.
- **Improvements to the existing facilities along Mississippi River Boulevard** – The existing trails adjacent to the Ford Site along the west side of Mississippi River Boulevard are not of sufficient width to accommodate existing users, and space to expand the trails is limited given the current location of Mississippi River Boulevard. Improvements to Mississippi River Boulevard that result in additional space to develop higher quality off-street trail facilities along the west side of Mississippi River Boulevard adjacent to the Ford Site should be considered, including the existing trail bottleneck where Mississippi River Boulevard passes underneath Ford Parkway.
- **Improved connections between Mississippi River Boulevard and Ford Parkway** – The existing connections between Mississippi River Boulevard and the Ford Parkway bridge are insufficient and opportunities to improve these connections should be explored.
- **Ford Rail Spur** – Ford site planning should anticipate reuse of the freight railroad spur as a public transportation opportunity and include off-street paths for walking and biking, in addition to other potential modes such as transit. Ford site planning efforts should develop a plan to connect trail users to both Mississippi River Boulevard and the Ford Parkway bridge.
- **Montreal Avenue Extension** – Montreal Avenue is an important existing east/west bicycle route. Concepts should be developed that facilitate east/west travel between the current western terminus of Montreal Avenue and Mississippi River Boulevard.
- **Ford Parkway Improvements** – This plan identifies an enhanced shared lane strategy for a portion of Ford Parkway adjacent to the Ford site. However, this is not an optimal solution given the traffic volumes and speeds on Ford Parkway. Ford site planning efforts should consider alternative options to accommodate east/west bicycle travel on Ford Parkway.

## 6.10 ~~Downtown Trail Loop & Shared Lanes~~Capital City Bikeway

The primary objective of the Capital City Bikeway is to provide safe and comfortable places for people of all ages, abilities, and preferences to ride a bicycle in downtown Saint Paul. The project will spearhead a transformational change to downtown Saint Paul by increasing activity in the streets, enhancing the vitality of sidewalks and public spaces, and stimulating investment and fostering economic development. When implemented, the Capital City Bikeway will be an enjoyable, comfortable, and safe experience that appeals to a wide range of people. Design standards are essential to creating a consistent experience on this new bikeway system. Similarly, the elements of the bikeway such as wayfinding, site furnishings, and plantings contribute to a legible, memorable experience unique to the Capital City Bikeway.

Planning for the bikeway was completed in 2016 with the publication of the *Capital City Bikeway: Network Study and Design Guide*, which identified the routes and design guidelines. The *Capital City Bikeway Network Study and Design Guide* has been adopted by City Council but is not an addendum to the Comprehensive Plan. The bikeways are to be off-street path type facilities that accommodate two-way bicycle traffic, even when adjacent to one-way streets. The Capital City Bikeway will be a connected network of protected bikeways throughout the heart of downtown Saint Paul. When implemented, the Capital City Bikeway will be an enjoyable, comfortable, and safe experience that appeals to a wide range of people. The bikeway design standards as well as the elements of the bikeway such as wayfinding, site furnishings, and plantings are essential to creating a consistent experience on this new bikeway system. Despite the different look and feel of these urban trails, they will share similar operational characteristics with other popular off-street trails throughout the city. People who are comfortable riding a bicycle on off-street paths in other contexts will find these facilities familiar and attractive.

The Capital City Bikeway will connect popular attractions such as the Xcel Center, the Ordway Theater, the Science Museum of Minnesota, the Minnesota History Center, the Union Depot, the Farmers Market, the Lowertown Ballpark, the Landmark Center, the Minnesota Children's Museum, and other institutions and businesses throughout downtown.

Major routes of the Capital City Bikeway are anticipated to attract the largest number of users, and form the backbone of the bikeway network in downtown Saint Paul. These routes include a sidewalk-level two-way bikeway that is physically separated from motor vehicles and pedestrians with landscaping where possible. Major routes feature protected intersections which helps to clearly define spaces for all users, and improve the safety at potential places of conflict among people walking, biking and driving. Major routes include:

- Jackson Street – The bikeway will be located on the west side of the street.
- 9th Street (east of Jackson St) – The bikeway will be located on the south side of the street.
- 10th Street (west of Jackson St)– The bikeway will be located on the north side of the street east of Cedar St and on the south side of the street west of Cedar Street.
- St. Peter Street – The bikeway will be located on the west side of the street.
- Kellogg Boulevard – The bikeway will be located on the east/north side of the street.

Additionally, 4<sup>th</sup> Street is recommended to be a significant biking and walking corridor in downtown that will complement the Capital City Bikeway. The vision for 4<sup>th</sup> Street is a “shared street” between transit, bicyclists, pedestrians, and motor vehicles. More study is needed on 4<sup>th</sup> Street to evaluate operations, parking ramp access, and potential impacts of future rail alignments.

The recommendation to develop a network of off-street trails throughout the downtown has larger objectives than simply accommodating bicycle transportation. At a basic level, this is a recommendation to develop vibrant urban spaces that encourage city residents and visitors to enjoy being outdoors whether or not they are using a bicycle. This strategy is best implemented within the context of full reconstruction of adjacent sidewalks (if not the full right-of-way), when the needs of pedestrians and ground floor activity in adjacent buildings can be enhanced.

The network of off-street trails is designed to be an economic development catalyst for downtown businesses. Companies that choose to locate in downtown must be confident that downtown is a place where employees will want to work and spend time. Businesses must be confident that the downtown built environment will help them attract top talent from across the nation, in addition to encouraging graduates from the many colleges and universities in Saint Paul to want to stay and work locally. Businesses of all types will flourish as downtown becomes a place where people want to spend time outdoors.

This plan recommends the development of a unique off-street trail network throughout the downtown area as well as enhanced shared lanes on most downtown streets. This strategy is designed to make downtown a hub in the city bicycle network and to effectively and safely accommodate cyclists of all preferences. The trails are designed to accommodate slower bicyclists and to encourage new or casual cyclists to visit downtown. The enhanced shared lanes throughout downtown will accommodate faster cyclists who are seeking the operational and speed benefits of integrating with motorized traffic.

The planned downtown trail network can be described as a loop alignment as well as connections between the loop and the existing bikeways approaching downtown. The loop trail will effectively place a majority of downtown within two or three blocks of the trail. Connections between the loop and other existing and planned routes into and out of downtown will be developed prior to or in concurrence with the loop to ensure connectivity to the surrounding bicycle network.

The trails are planned to be off-street path type facilities that accommodate two-way bicycle traffic, even when adjacent to one-way streets. The trails throughout downtown will be of a different aesthetic character than other trails throughout the city. Generally off-street path facilities are constructed using asphalt, and are surrounded by turf, landscaping, or other boulevards on both sides where space permits. The downtown trails will take on more of an urban character and may be constructed out of a number of different materials, including concrete to provide a distinctive appearance. Despite the different look and feel of these urban trails, they will share similar operational characteristics with other popular off-street trails throughout the city. People who are comfortable riding a bicycle on off-street paths in other contexts will find these facilities familiar and attractive.

The downtown trail network is a unique recommendation that places Saint Paul at the forefront of bicycle planning in the U.S. Very few other cities have developed similar facilities. Saint Paul may look



to the Indianapolis Cultural Trail for design inspiration. The Indianapolis Cultural Trail is a similar eight-mile network of off-street paths through downtown Indianapolis connecting the major cultural institutions throughout the city. In Saint Paul, the off-street trail network would connect popular attractions such as the Xcel Center, the Ordway Theater, the Science Museum of Minnesota, the Minnesota History Center, the Union Depot, the Farmers Market, the Lowertown Ballpark, the Landmark Center, the Minnesota Children's Museum, and other institutions and businesses throughout downtown.

The recommendation to develop a network of off-street trails throughout the downtown has larger objectives than simply accommodating bicycle transportation. At a basic level, this is a recommendation to develop vibrant urban spaces that encourage city residents and visitors to enjoy being outdoors whether or not they are using a bicycle. This strategy is best implemented within the context of full reconstruction of adjacent sidewalks (if not the full right-of-way), when the needs of pedestrians and ground floor activity in adjacent buildings can be enhanced. The call for utilizing unique and innovative design features extends beyond the bicycle facilities to the sidewalks, plazas, and other public spaces.

This recommendation is designed to be an economic development catalyst for downtown businesses. Companies that choose to locate in downtown must be confident that downtown is a place where employees will want to work and spend time. Businesses must be confident that the downtown built environment will help them attract top talent from across the nation, in addition to encouraging graduates from the many colleges and universities in Saint Paul to want to stay and work locally. Businesses of all types will flourish as downtown becomes a place where people want to spend time outdoors.

### **Phase I—Jackson Street**

The first phase of the downtown bicycle facilities will be developed on Jackson Street, from Shepard Road to 11th Street. Jackson Street is a logical choice to be developed as phase one of the downtown trail loop because of the wide right-of-way, and the need to invest in the corridor to correct other deficiencies such as poor pavement quality. In addition, development of this first phase of the loop will help make the connection between the Gateway State Trail and the Sam Morgan Regional Trail, a critical missing link in the regional trail network. The trail is initially envisioned to be along the west side of Jackson Street, though this recommendation should be confirmed as detailed design progresses.

### **Additional Trail Alignments**

As work progresses on developing a trail along Jackson Street, further study is needed to determine the final alignment of the loop trail network as well as connections between the loop and the existing bikeways that approach downtown. The following corridors should be evaluated to determine the most appropriate final alignment for the remaining three sides of the loop:

- —Saint Peter Street or Wabasha Street
- —Kellogg Boulevard or 4th Street
- —10th Street or 11th Street

Connections between the loop and other existing and planned routes into and out of downtown will be developed to ensure connectivity to the surrounding bicycle network. The following corridors should be evaluated to determine the most appropriate connections between the loop and the surrounding areas:

- ~~West along Kellogg Boulevard or 5th Street to connect to the bikeways on Summit Avenue, Marshall Avenue, and Eagle Parkway.~~
- ~~East on Kellogg Boulevard or 4th Street to connect to the Union Depot Trail, Bruce Vento Regional Trail, Trout Brook Regional Trail, and Indian Mounds Trail.~~
- ~~Northwest on Saint Peter Street or Wabasha Street to connect to the existing bike lanes on John Ireland Boulevard, Park Street, and Como Avenue, as well as the Charles Avenue Bikeway.~~
- ~~South on Sibley Street to connect to the Sam Morgan Regional Trail.~~
- ~~The alignment should include a connection to the Wabasha Bridge.~~

## 6.11 Interim Facilities & Other Notes

[No Revisions]

## 7.0 End of Trip Facilities

[No Revisions]

## 8.0 Bicycle Programs and Other Topics

[No Revisions]

## 9.0 Implementation

[Update tables 9.6.1 and 9.6.2 as follows]

**Table 9.6.1 Planning Level Implementation Cost**

Bikeway Facility Type	Existing Facilities	Planned Facilities	Estimated Implementation Cost	Planned Facilities Estimated Implementation Cost
	(miles)	(miles)	(per mile)	(total)
Off-Street Paths	74	62	\$ 1,500,000	\$ 92,296,271
In-Street Separated Lanes	53	53	\$ 30,000	\$ 1,604,939
Bicycle Boulevards	7	40	\$ 500,000	\$ 20,090,233
Enhanced Shared Lanes	18	39	\$ 21,000	\$ 825,462
<b>TOTAL</b>	<b>153</b>	<b>195</b>		<b>\$ 114,816,904</b>

NOTE: All costs are presented in 2015 dollars.

**Table 9.6.2 Planning Level Annual Maintenance Cost**

Bikeway Facility Type	Existing Facilities	Planned Facilities	Estimated Annual Maintenance Cost	Existing Facilities Annual Maintenance Cost	Planned Facilities Annual Maintenance Cost	Full Network Annual Maintenance Cost
	(miles)	(miles)	(per mile)	(total)	(total)	(total)
Off-Street Paths	74	62	\$ 12,000	\$ 886,728	\$ 738,370	\$ 1,625,098
In-Street Separated Lanes	53	53	\$ 8,000	\$ 426,266	\$ 427,984	\$ 854,249
Bicycle Boulevards	7	40	\$ 16,000	\$ 117,005	\$ 642,887	\$ 759,892
Enhanced Shared Lanes	18	39	\$ 6,000	\$ 109,039	\$ 235,846	\$ 344,885
<b>TOTAL</b>	<b>153</b>	<b>195</b>		<b>\$ 1,539,037</b>	<b>\$ 2,045,087</b>	<b>\$ 3,584,125</b>

**NOTE: All costs are presented in 2015 dollars.**

## Figure 1: Bicycle Base Map

- Clarify that the figure depicts the March 2015 existing trail network

## Figure 2: Existing Bicycle Network

- Clarify that the figure depicts the March 2015 existing bikeway network

## Figure 3: Planned Bicycle Network Functional Classification and Figure 4: Planned Bicycle Network Facility Type Group

- Incorporate Grand Round and Capital City Bikeway recommendations
- Remove reference to Ford Site planning completion date

## Figure 5: Planned Bicycle Network Barrier Crossings

- Incorporate barrier crossings related to Capital City Bikeway recommendations
- Correct mapping error to identify location of planned bridge between the Bruce Vento Nature Sanctuary and the Samuel Morgan Regional Trail

## Figure 6: Regional Bicycle Transportation Network

[No Revisions]

## Figure 7: Existing and Planned Regional and State Trails

- Modify text to ensure consistency with Metropolitan Council 2040 Regional Parks Policy Plan
- Remove construction completion date of Harriet Island to South Saint Paul Regional Trail and indicate that it has a Metropolitan Council approved master plan
- Modify Summit Avenue alignment to be a Regional Trail Search Corridor

## Figure 8: Planned Grand Round Improvements

This Figure will be eliminated. The recommendations for the Grand Round have been simplified as a result of the Grand Round study, and the information on this figure is duplicative of the information in Figure 4. A graphic from the Grand Round study will be incorporated into Chapter 6 of the bike plan identifying the Grand Round alignment.

## Figure 9: Mississippi River Trail (U.S. Bike Route 45)

- Update name of Harriet Island to South Saint Paul Regional Trail to Robert Pira Regional Trail
- Remove outdated construction timelines
- Change figure number