



Pedestrian and Bicycle Master Plan



City of Savage



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Prepared by WSB

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1. **PLAN OVERVIEW**

The City of Savage is a suburban community located along the Minnesota River Valley in northeastern Scott County. The city offers a relatively short drive to downtown Minneapolis due to its proximity to both the I-35W and US Highway 169 river crossings. The landscape itself is of high-quality, providing scenic views and bluff vistas over the river valley, unique features such as the Savage Fen, and preserved natural areas along the Credit River and Murphy-Hanrehan Park Reserve. These factors along with first-rate schooling and city services have attracted residents to Savage, an established community of over 30,000 residents. Most of this growth has occurred in the last few decades following suburban development patterns.

Savage has an extensive pedestrian and bicycle system with over 30 miles of existing trails, 64 miles of sidewalks, and 142 miles of streets and county and state highways. As the community continues to evolve, the city is exploring opportunities to enhance connections and promote walking and biking throughout the community and neighboring communities to key destinations including parks, schools, civic buildings, commercial and employment areas, and between neighborhoods. This Pedestrian and Bicycle Master Plan, the first of its kind for the City of Savage, builds upon existing facilities to guide future efforts and investments in bicycle- and pedestrian-friendly infrastructure and practices.

A. PURPOSE OF PLAN

The purpose of the Savage Pedestrian and Bicycle Master Plan is to provide a framework for maintaining and expanding the sidewalk and trail system, taking advantage of the ongoing evolution of non-motorized transportation facilities and increased walking and biking trends nationwide. This plan provides direction for future implementation and maintenance work of the city's sidewalk and trail system in the following areas.

Increase Walking and Biking

The City of Savage is committed to making walking and biking more attractive for transportation, recreational and health purposes. Ultimately, the city wants to increase walking and bicycling by providing the necessary infrastructure, policies and encouragement to make walking and biking more attractive, safe and enjoyable for residents of all ages and backgrounds.

Engage the Community

In order to enhance the existing sidewalk and trail system, the city needs to understand what residents want and/or need to make walking and biking more attractive options – be it for health, transportation or recreational reasons. Public engagement efforts were made to gather input on the existing sidewalk and trail system and identify where current issues or barriers exist that prohibit or reduce the ability to walk and bike in Savage. This input was used to identify plan recommendations and prioritize future improvements.

Make Recommendations to Enhance the System

Along with understanding the needs and desires of residents, this plan identifies methods and practices that the city can utilize to develop a safe, efficient and enjoyable sidewalk and trail system. This plan identifies recommendations and revisions to current ordinances or standards

in order to effectively implement the outcomes of the master plan and support increased walking and biking activity.

Identify Opportunities for Implementation

Finally, this master plan intends to identify opportunities that the city can use to prioritize sidewalk and trail investments, implement improvements over time, and track pedestrian and bicycle use to ensure that the ongoing needs of users are evaluated and addressed.

B. IMPORTANCE OF WALKING AND BIKING

America's communities are undergoing many changes that have emerged over the past decade. Notably, the population is aging – the baby boomers are getting older and their transportation and recreational needs are changing. The population is also becoming increasingly diverse, racially and economically, with increased demand for affordable and accessible transportation options that cater to varying needs. Additionally, health concerns about cardiovascular disease and obesity have come to the forefront of the medical community. These conditions occur at the adult and childhood levels and have associated negative effects like high cholesterol, diabetes, strokes and certain types of cancer. These concerns have increased while insurance premiums have increased and the national health care debate has taken place.

Since the 1970s, the percent of children who are obese has tripled, with the largest increases seen in low-income populations. The trends for adults are no less concerning. Today more than one third of American adults are obese. Regular exercise and physical activity can reduce obesity – yet studies show that less than half of children meet and less than 10 percent of adults meet recommended guidelines for physical activity.

Benefits Associated with Pedestrian and Bicycle Planning

The changes in our communities, both in terms of health and demographics, are beginning to make their impact and influence felt. Many cities have started to think about the actions they can take to encourage physical activity, to make their communities healthier, and to make transportation systems more accessible for all residents. Physical activity is likely to occur for four primary reasons – work, household activities, recreation/leisure and transportation. One of the ways in which communities can make a difference is by improving their recreational and transportation facilities and their connections to key destinations.

Creating conditions that make walking and biking convenient and safe are beneficial for several reasons. One of the most important benefits is that increased biking and walking rates encourage a healthier community. If conditions are in place to make it safe, convenient and enjoyable to walk or bike, more people will have the opportunity to choose non-motorized transportation for commuting, running errands, getting to and from school or for recreational and leisure activities. For many people, walking and biking as a means of transportation may be their only opportunity for exercise in a given day. And for many people, walking and biking may be their only means of transportation. It is important to realize that not every resident is an automobile driver, but every resident is a pedestrian. An equitable approach to transportation starts with making walking and biking safe for everyone.

Another benefit of increased walking and biking is reduced dependency on fossil fuels. While the number of electric and hybrid vehicles is increasing, most vehicles still operate on regular gasoline or diesel fuel which emits pollutants that contribute to poor air quality. Even at low levels, these emissions are known to cause respiratory issues, and are a suspected cause of some cancers. With the volume of vehicle related emissions produced, efforts to increase non-motorized transportation are welcome for overall community and environmental health.

C. PLANNING PROCESS SUMMARY

This master plan was developed under the direction of the City Council, Parks, Recreation and Natural Resource Commission (PRNRC), Planning Commission, and City of Savage staff. A Project Management Team (PMT) consisting of city staff and consulting staff was established to guide the overall planning process, develop plan goals and outcomes, provide technical analysis, and ensure plan development is consistent with direction provided by the Council and advisory commissions. PMT members met monthly over the course of eight months to discuss these issues and continue advancing development of the plan. The following is the list the PMT members:

- Greg Boatman, Public Works Director (staff lead)
- Barry Stock, City Administrator
- Seng Thongvanh, City Engineer
- Terri Dill, Senior Planner
- Trent Jutting, Assistant Public Works Director
- Andy Hingeveld (consulting staff)
- Jeff Feulner (consulting staff)
- John Powell (consulting staff)

Input from other sources was provided throughout the planning process. At the beginning of the planning process, PMT members provided a presentation to the City Council, PRNRC, and Planning Commission to introduce the master plan process and gain feedback on plan goals and outcomes. Public engagement (further described in Section 3) was collected using multiple formats to gain an understanding of issues and opportunities related to the existing sidewalk and trail system. PMT members used the inputs provided by the public and city officials along with technical analyses to develop a draft master plan document that was presented back to the public and PRNRC prior to going to the City Council for final action.

D. GOALS AND OUTCOMES

The following set of goals with actionable outcomes were established as part of the Pedestrian and Bicycle Master Plan process to guide development of the master plan and support the City of Savage's future efforts for advancing walking and biking activities:

Goal #1: *Provide a safe and comfortable pedestrian and bicycle network for all ages and abilities.*

Outcomes:

- Identify deficiencies in the pedestrian and bicycle network.
- Recommend improvements that maximize network connectivity, comfort, equity and safety while minimizing levels of stress.
- Recommend revisions to City policy that would further support use of the pedestrian and bicycle network.

Goal #2: *Promote the City's pedestrian and bicycle network to improve the health of the community.*

Outcomes:

- Identify resources and outreach programs that can be used to inform residents of the City's current pedestrian and bicycle network.
- Promote the health benefits associated with walking and bicycling.
- Explore potential partnerships that could result in increased walking and bicycling.

Goal #3: *Maintain the existing pedestrian and bicycle network to preserve previous and future public investments.*

Outcomes:

- Develop trail maintenance policies for the City to preserve the existing network and provide safe and comfortable facilities.
- Incorporate sustainable practices in maintaining the network that considers seasonal use and condition of the infrastructure.

Goal #4: *Develop a Pedestrian and Bicycle Master Plan that is both actionable and measurable.*

Outcomes:

- Develop a ten-year plan for network improvements that can be implemented in coordination with the capital improvement program and 10-year street improvement plan.
- Identify possible funding sources that can be utilized to finance the implementation plan.
- Identify a set of performance measurements to monitor the on-going implementation of the master plan and to measure pedestrian and bicycle activity.

2. EXISTING CONDITIONS

This section describes Savage's existing pedestrian and bicycle network. Understanding the current network provides the basis for analysis and recommendations. See Figure 1 for a map of existing sidewalks and trails.

A. EXISTING AND PLANNED PED/BIKE NETWORK

Sidewalks

The City of Savage owns and maintains over 64 miles of sidewalk. Most of the sidewalk is between four and six feet wide and is made of concrete. Sidewalks can be found in residential and commercial areas as well as around public facilities. Sidewalks are generally intended to serve pedestrians. While sidewalks are not located along all roadways, sidewalks are provided in most neighborhoods and provide access to other neighborhoods and the rest of the city. The Hamilton area in downtown Savage has an established sidewalk system with sidewalks along nearly all streets, making the area pedestrian friendly.



Multi-Use Trails

Multi-use trails (referred to as trails throughout this plan) are generally defined as paved or unpaved surfaces that can serve multiple users, including pedestrians, bicyclists, in-line skaters, etc. These trails are generally 8-10 feet wide and support the occasional two-directional traffic. There are over 30 miles of bituminous trails within Savage.

Trails complement the sidewalk system, providing spaces for recreation, exercise, and non-motorized transportation. Existing trails are located within parks or adjacent to natural features. Several trails run adjacent to collector or arterial roadways and can serve longer biking trips



within the city or to neighboring cities. The trails within Savage generally provide low-stress connections to destinations. However, certain trail segments cross heavily-trafficked intersections, driveways, and other roadways that require trail users to navigate high-stress situations.

In addition to bituminous trails, there are natural surface trails, such as wood chips or grass, that exist within the city's parks and natural areas. These also serve a recreational function for users.

On-Road Facilities

Minnesota law allows bicyclists to ride on all streets and roadways except for limited access highways. However, usage of roadways by cyclists varies as aspects of the roadway influences bicyclists level of comfort and sense of safety. Few bicyclists feel comfortable using all streets.

Most potential bicyclists indicate feeling interested but cautious about bicycling. Factors that influence feelings of safety for bicyclists include road width, traffic speed, traffic volume and the presence of bicycle infrastructure. Roadways that have bike lanes and paved shoulders typically make bicyclists feel safer as they separate the bicycle and car traffic.

Most residential streets in Savage may have low enough traffic and speeds that all users can feel safe biking on them. Savage has several on-road paved shoulders on its collector roadways that provide space for cyclists to use outside of the travel lane. Painted lines delineate the wide shoulder from the travel lane, giving additional space for cyclists to ride away from the travel lane. It is important to note that while bicyclists can use the paved shoulder, they are not required to and in many instances, some bicyclists feel more comfortable and choose to ride in the travel lane with traffic.

There is currently one bike lane signed and striped within Savage. It is located along Murphy Lake Boulevard near the city border with Burnsville. This bike lane does not connect to the entire city, leaving many bike-friendly areas isolated from one another, separated by busy roadways that do not have bike lanes or infrastructure.

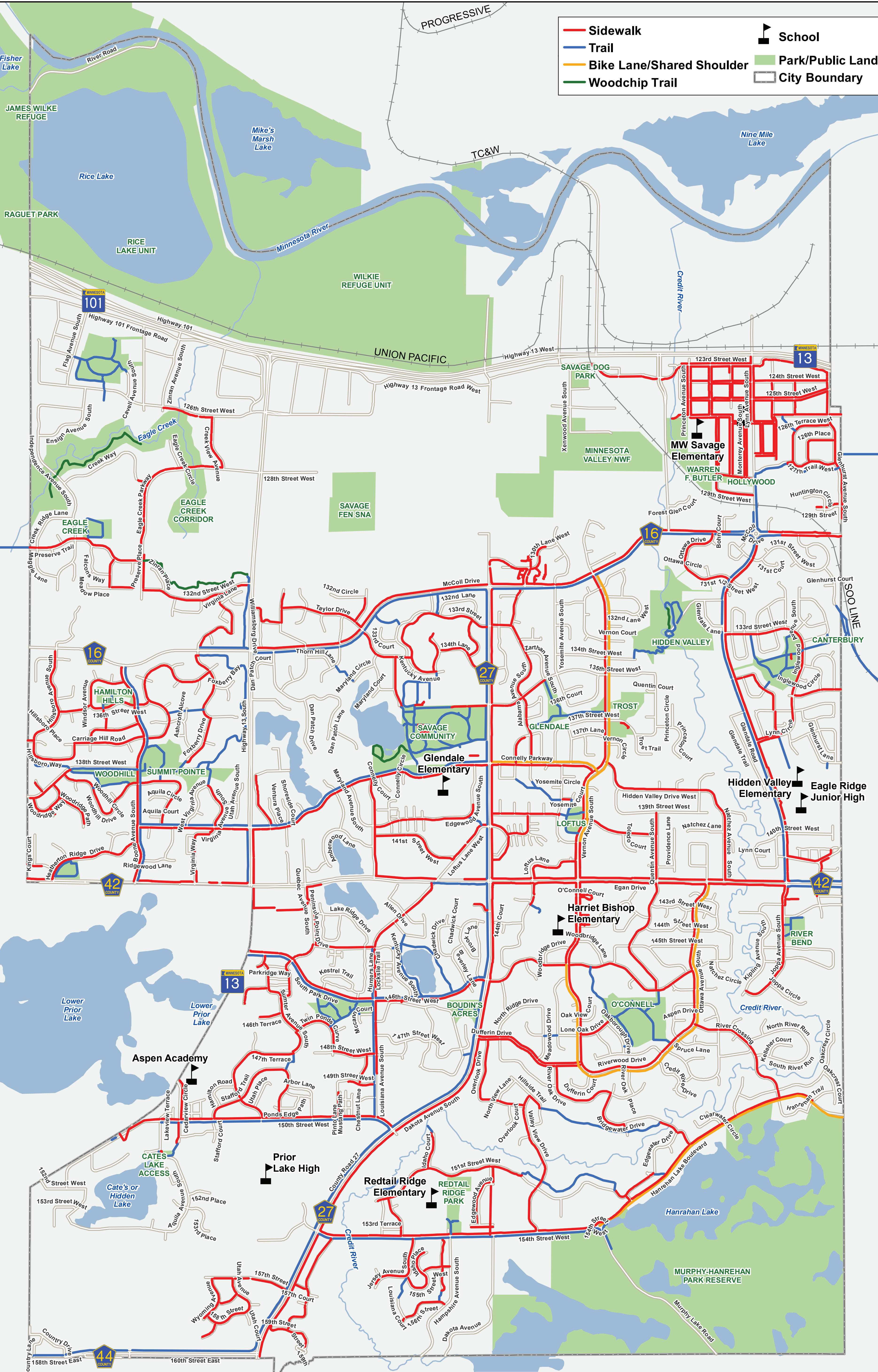
Pedestrian Crossings

Pedestrian crossings enable pedestrians and bicyclists to access locations on either side of streets and highways. Pedestrian crossings can be either marked with signs and striping or unmarked and can be placed at intersections or in mid-block locations. Marked crosswalks are intended to enhance visibility and awareness for drivers that pedestrians may be present in the crossing. Uncontrolled pedestrian crossings are crossing locations that are not controlled by a stop sign, yield sign, or traffic signal. There are several marked crosswalks located within Savage.

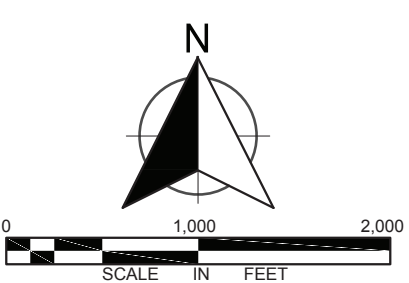
Five pedestrian activated crossings have been recently installed in Savage to further enhance visibility of pedestrians at key crossing locations. The pedestrian activated crossings include a striped crosswalk and enhanced pedestrian crossing signs that light up or flash when a pedestrian pushes the button. Pedestrian activated crossings have been installed at locations with a higher presence of pedestrian activity near local parks at these three locations:

- Boone Avenue and 138th Street (between Woodhill Park and Summit Point Park)
- Vernon Avenue and 137th Street (near Trost Park)
- Lynn Avenue and 128th Street (near Hollywood Park)
- 150th Street and Virginia Avenue
- 150th Street and Zinran Avenue





PEDESTRIAN AND BICYCLE MASTER PLAN
Existing Sidewalks and Trails
Figure 1



B. OTHER FACILITIES

Parks

Savage is home to 23 parks that range in size from small neighborhood parks to large, regional parks like Murphy-Hanrehan Park Reserve. Park, recreational and preserve land makes up 20 percent of Savage's land area, at 2,145 total acres. Savage's parks boast amenities like playgrounds, picnic areas, trails and nature areas. The city's parks are a popular destination for walking and biking, and many parks are already connected to the city's sidewalk and trail system.

Murphy-Hanrehan Park Reserve has an extensive nature trail network as well as a popular single-track mountain bike course. Nearby Cleary Lake Regional Park also has several trails including a popular paved trail loop around the lake. These regional parks are key attractions to city residents. See Appendix B for maps of these regional parks and their trail networks.

County Roadway Trails

Scott County operates several highways within Savage. The County supports constructing sidewalk and trail facilities along both sides of its highways to accommodate walking and biking activities. Within Savage, the approach has been to construct a sidewalk on one side of the road and a trail on the other side.

There are few sidewalk and trail gaps remaining along county highways within Savage. One of the major remaining gaps will be completed when Egan Drive (County Highway 42) is reconstructed in 2018 between Boone Avenue and Louisiana Avenue. The project will include an 8-foot trail on the south side of the road from Harbor Place to Allen Boulevard and a 5-foot sidewalk on the north side from Heatherton Ridge Drive to Louisiana Avenue. One other key gap that remains are sidewalk and trail facilities along McColl Drive (County Highway 16) between Shakopee and Highway 13.

Transit

Savage is served by three bus routes and a park and ride location by the Minnesota Valley Transit Authority (MVTA). Routes 421, 444 and 464 serve Savage with connection to the Burnsville Transit Station, the Mall of America, and Downtown Minneapolis. The Savage Park and Ride is located near Egan Drive (County Highway 42) and Huntington Avenue and currently has 182 parking stalls. There are currently no bike lockers or storage racks at the park and ride location. Other nearby park and rides that serve Savage residents include Southbridge Crossings and Eagle Creek in Shakopee and the Burnsville Transit Station.

Adjoining City Networks

The cities of Burnsville, Shakopee, and Prior Lake all have their own sidewalk and trail systems. It is recognized that several key gaps between Savage and neighboring cities exist. Completing these gaps will provide access beyond Savage into nearby commercial locations and connect residents to the metropolitan area. Figure 2 shows sidewalk and trail connections to neighboring communities.

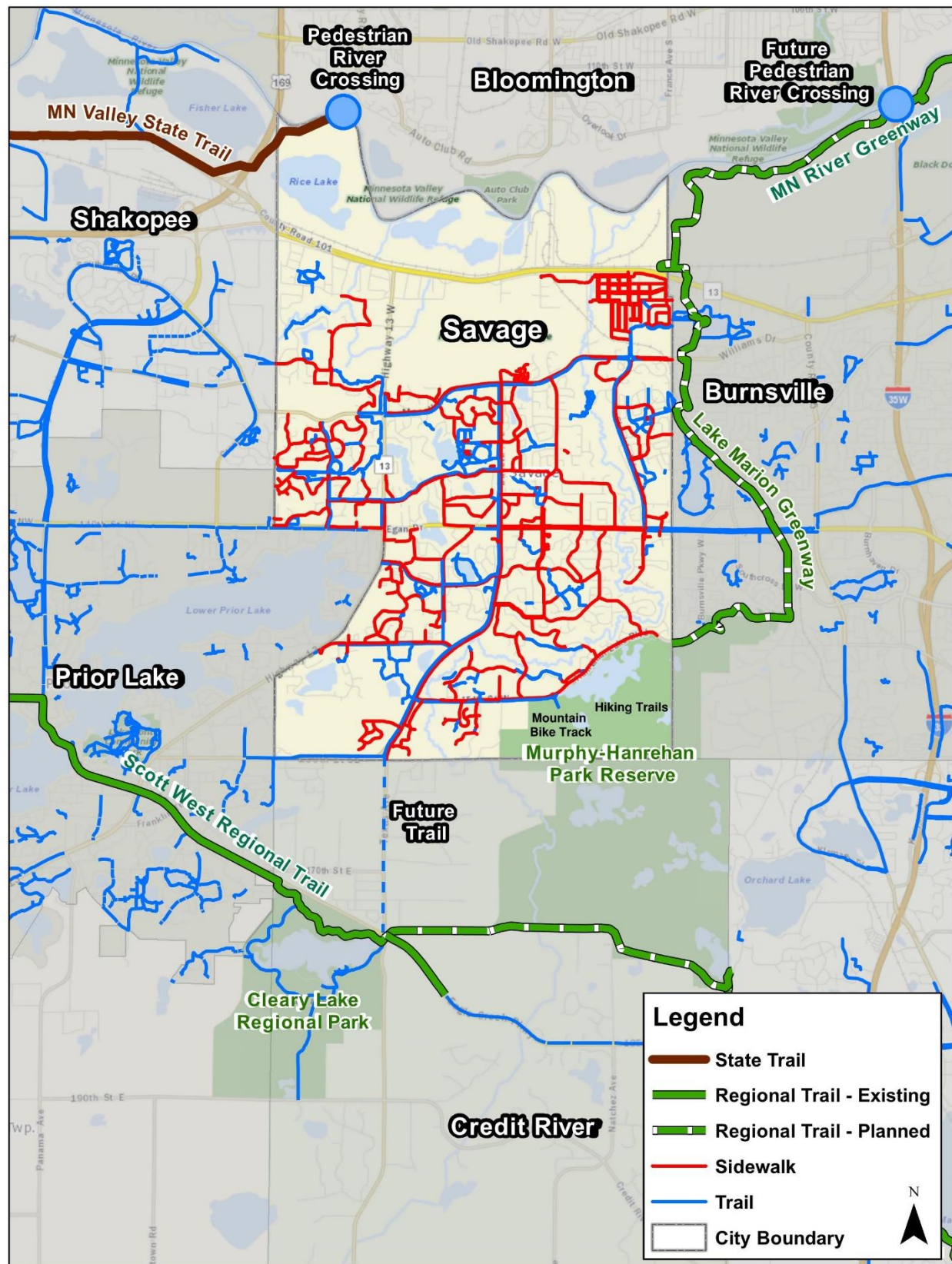


Figure 2: Neighboring Communities and Regional Destinations

Regional Trail Connections and River Crossings

While Savage does not have any regional trails within its city limits, the Lake Marion Greenway Trail is planned for construction and will run north-south just east of Savage in Burnsville. The Lake Marion Greenway will provide trail access between Murphy-Hanrehan Park Reserve, Sunset Pond Park, and Rudy Kraemer Nature Preserve in Burnsville. The Scott West Regional Trail, maintained by Scott County, also runs just south of the city, following Eagle Creek Avenue (County Highway 21). The Scott West Regional Trail connects to Cleary Lake Regional Park, the City of Prior Lake, and Shakopee. A future trail planned along Texas Avenue (County Highway 27) will connect Savage to the Scott West Regional Trail and Cleary Lake Regional Park. This trail is expected to be constructed in 2021 as part of the road reconstruction project.

Savage is bordered to the north by the Minnesota River, to the east by Burnsville, to the south by Credit River Township, and to the west by Prior Lake and Shakopee. There are currently mountain biking trails along the north side of the Minnesota River. A paved trail is under development along the north side of the Minnesota River between the Bloomington Ferry Bridge and Fort Snelling. On the south side of the river, the Minnesota Valley State Trail exists between Chaska and the Bloomington Ferry Bridge in Shakopee. Pedestrian crossings of the Minnesota River are provided near US Highway 169 (Bloomington Ferry Bridge), Highway 101 near downtown Shakopee, and Highway 41 near downtown Chaska. These river crossings provide key regional connections between both sides of the river and offer access to the rest of the regional trail system in the metro area.

A new pedestrian river crossing will be provided as part of the I-35W river bridge replacement which is anticipated to open in 2021. In addition, the City of Burnsville and Dakota County envision extending the Minnesota River Greenway trail, from its current end near I-35W along the Minnesota River near the Savage border. This would tie into the current trail which follows the river from I-35W east to Cedar Avenue.

There are significant trail investments happening along the Minnesota River, particularly to the north and east in Bloomington and Burnsville. Bicycle and pedestrian connections to these neighboring city systems should be prioritized so that Savage residents can access a greater variety of trails and amenities.

Regional Bicycle Transportation Network

The Regional Bicycle Transportation Network (RBTN) was established by the Metropolitan Council as part of the 2040 Transportation Policy Plan. The plan indicates tiers of regional planning and investment prioritization in the regional bicycle network. Tier 1 corridors and alignments are given the highest priority, while Tier 2 corridors and alignments are given the second highest priority for transportation investment. Savage has a Tier 2 Alignment running east-west on Egan Drive (County Highway 42) and a Tier 2 corridor generally following McColl Drive (County Highway 16).

C. KNOWN PEDESTRIAN/BICYCLE SAFETY PROBLEMS

Pedestrian and bicycle safety is a primary concern for the City of Savage. A search of the Minnesota Department of Transportation (MnDOT) Crash Mapping Analysis Tool (CMAT) data showed a total of 12 pedestrian-vehicle and 28 bicycle-vehicle crashes occurred in Savage in the 10-year period between 2006 and 2015. Figure 3 shows the location of traffic crashes involving pedestrians and bicyclists.

Crashes involving pedestrians and bicyclists occurred along several corridors, including Highway 13, Egan Drive (County Highway 42), McColl Drive (County Highway 16), Dakota Avenue (County Highway 27), and Glendale Road. Of the 40 total crashes, 20 crashes resulted in personal injuries. There were no pedestrian or bicyclist fatalities reported during this time.

In addition to the reported crashes, participants of the public engagement process noted several locations along major roadways where crossing the street via walking or biking is difficult or unsafe, especially during the afternoon rush hours. Key roadways identified included 154th Street, McColl Drive (County Highway 16), Dakota Avenue (County Highway 27), and Highway 13. High vehicle speeds, high volumes of traffic, lack of pedestrian crossing facilities or traffic signals, and length of crossing distances for pedestrians were attributed to these crossing safety concerns.

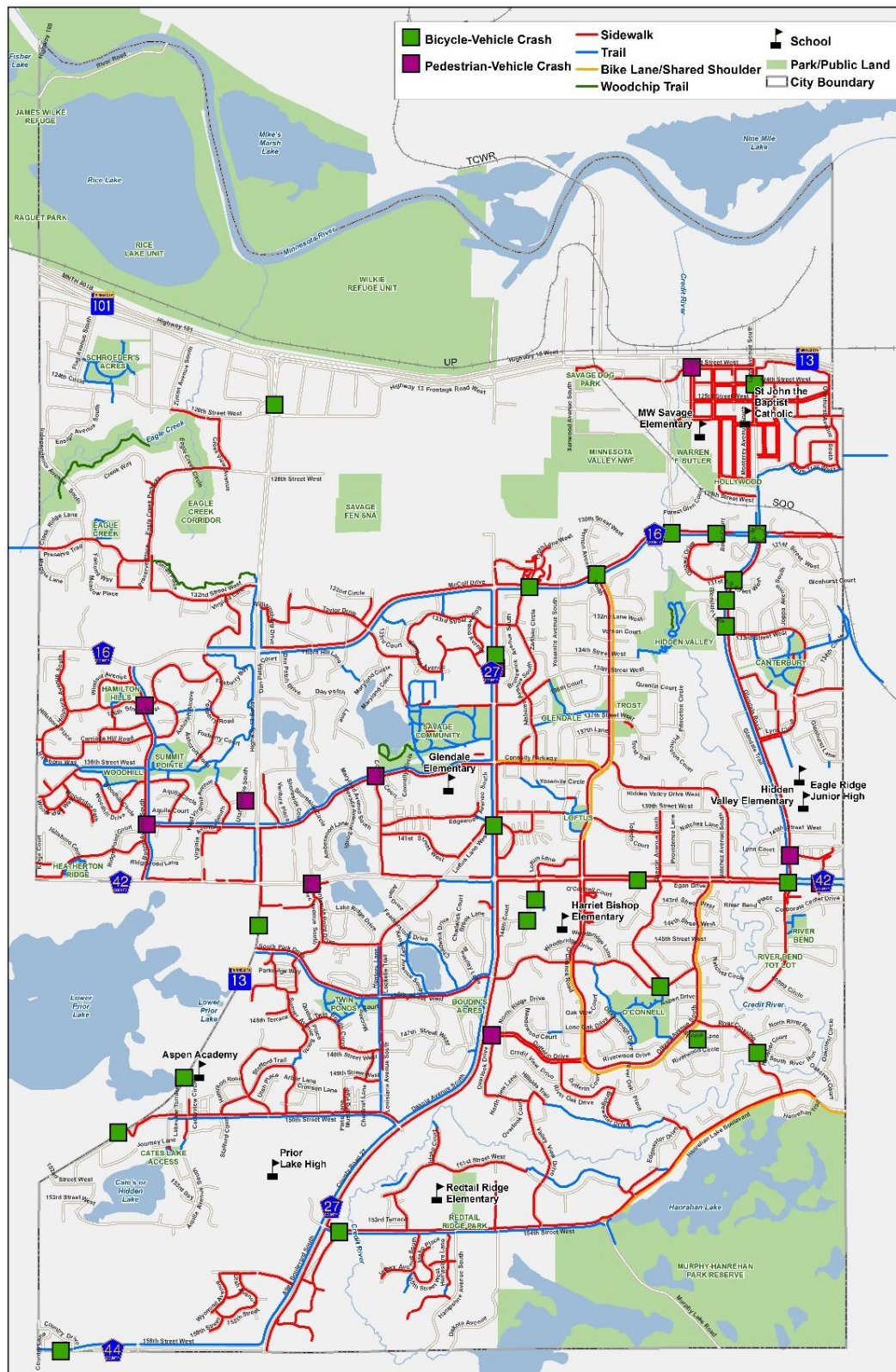


Figure 3: Pedestrian-Vehicle and Bicycle-Vehicle Crashes, 2006-2015

Source: MnDOT Crash Mapping Analysis Tool (CMAT)

3. PUBLIC ENGAGEMENT SUMMARY

In development of this master plan, public feedback was pursued early in the process to help identify opportunities and deficiencies within the current trail, sidewalk and roadway network. The public engagement process included three general methods: on-line engagement, public open house meeting, and direct contact with staff. The three methods gave flexibility and opportunity for the public to provide feedback in a manner that fit their schedule and utilized their preferred communication style. A summary of each of the public engagement methods is described in the following this section.

A. ON-LINE ENGAGEMENT - INTERACTIVE MAPPING TOOL

An on-line interactive mapping tool (Social Pinpoint) was utilized and publicized on the city's social media accounts, city newsletter, and via a press release. A set of instructions were provided, asking users to add comments to the interactive map of the city's sidewalk and trail network to describe what they currently like about the pedestrian and bicycle infrastructure within Savage and what could be improved. Users could provide three types of comments: "Make a Comment" (general), "Something I Like," and "Something I Don't Like." Comments added to the map were available for others to see, and users could then "Like" or "Dislike" these comments. The interactive map was available for comment December 2017-January 2018. A total of 159 comments were provided on-line, with 56 unique commenters.

B. OPEN HOUSE

A public meeting was held on January 18th, 2018, to provide an additional opportunity for residents to provide input into the master planning process. The meeting was held at the Environmental Learning Center in an open house format. The meeting was publicized via the city's social media accounts, city newsletter, and a press release. News articles were provided in the Savage Pacer and Star Tribune prior to the meeting date.

Twelve people attended the open house. Participants could view presentation boards displaying information related to the study process, study goals and outcomes, schedule, and the current and planned sidewalk and trail network as identified in the city's 2030 Comprehensive Plan. Participants could provide feedback in four ways: 1) writing on large maps of the sidewalk and trail network, 2) comment cards, 3) use available computers to access the on-line interactive map, and 4) discuss with project staff. Participants primarily utilized the large maps and discussions with project staff to provide feedback. Comments received were largely consistent to those provided on-line. In general, participants discussed gaps in the trail network and emphasized connections to key regional destinations and adjacent communities. These comments have been incorporated into the on-line interactive mapping tool for tracking purposes.

C. DIRECT CONTACT WITH STAFF

Residents were also invited to discuss the master plan directly with city staff via e-mail, phone, or in person. A handful of e-mails were received. These comments were incorporated into the on-line interactive mapping tool for tracking purposes.

D. SUMMARY OF PUBLIC INPUT AND KEY THEMES

Comments received from the three public input methods were consolidated into the interactive mapping tool. A total of 184 comments from 64 participants were provided. The list of all comments received is provided in Appendix A. Several general themes emerged and are listed in this section along with general locations that had the most comments. Overall, comments provided a positive light on the city's sidewalk and trail network. For the most part, users enjoy and utilize the existing network for recreation and commuting purposes. Enhancements could be made by completing small gaps and by making larger connections to the neighboring communities and across the Minnesota River. Commenters demonstrate a strong desire to increase access to the city's natural areas, especially the Minnesota River, Savage Fen, Eagle Creek and Credit River.

Other issues that emerged are the conflict of pedestrians (walkers/runners) with snowmobiles, demand for bike lanes, and demand for natural surface trails. In terms of pedestrian and snowmobile conflicts, pedestrians lose access to certain trails that become designated snowmobile routes during winter months. This conflict was recognized by three commenters. In addition, bike lanes along major roadways (County Highways 16, 27, 42) for commuting purposes was noted by six commenters, while four commenters provided comments opposing bike lanes. The use of natural surface (grass and woodchip) trails in open space and natural areas was also identified by several commenters, particularly near Eagle Creek and Credit River. The use of natural surface trails recognizes the desire to access natural areas without disturbing or over-developing them.

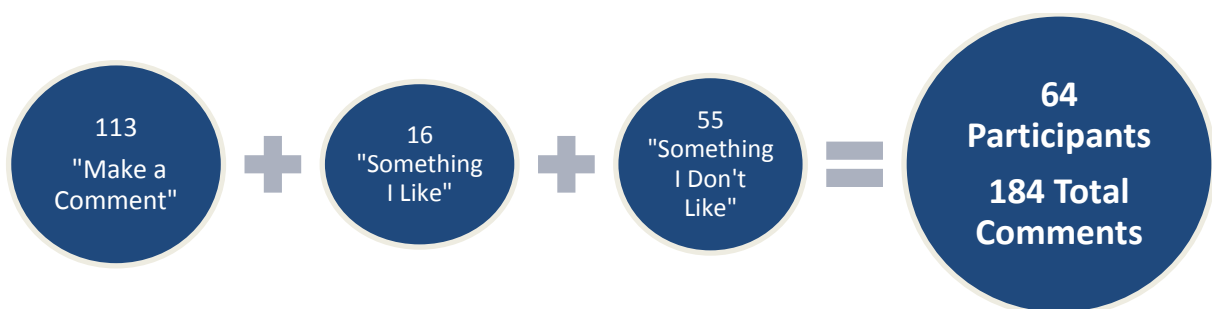


Figure 4: Number of Public Comments Received

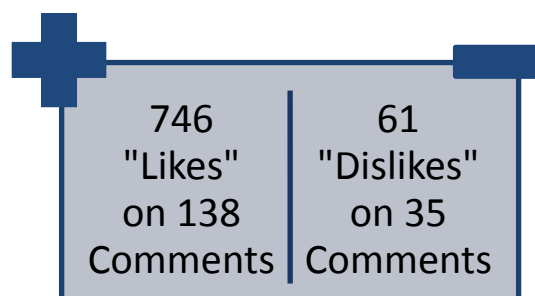


Figure 5: Number of Liked and Disliked Comments

Table 1: Top 10 "Liked" Comments

Top 10 "Liked" Comments	Number of Likes
Trails to and along the Minnesota River! We're a river town but have no easy river access.	41
There needs to be a connector between the SW corner of Hwy 13 & McColl Drive to this point. Currently when coming from the east on McColl you cross the south side of the intersection and have to go against traffic in an area with no pedestrian accommodations until you get to the water treatment plant driveway....	30
Trails along the bluffs	29
Add trail along County Road 16 to Shakopee	23
Dirt trails along the Credit River	21
Please coordinate with Burnsville to create a safe bike connection between Burnsville Pkwy and the terrific new bike lanes along Hanrehan Lake Blvd, possibly via a short trail through Arbor Vista and Dufferin Park. Or alternatively, by making a bike path between Oakcrest and Camelot Rd. The goal is to avoid having to bike along the narrow, dangerous curve on Burnsville Pkwy just before the border with Savage.	21
There is a short but nice bike trail that runs along 101 to Shakopee - I access it at the little parking lot at crest ave and it would be great if we had a connector bike trail in savage. And overall, it would be great if we start adding miles to our trail system at a much lower cost by connecting with other regional trails and using them....	19
We need a connecting trail to Cleary Lake park. There is no easy way to get there from south Savage by bike or walking.	18
Be nice to have a river crossing using the old railroad bridge or a new bridge. Would be much more direct than going west to 169 or east all the way to I-35....	16
Need sidewalks and trails along county road 42	16

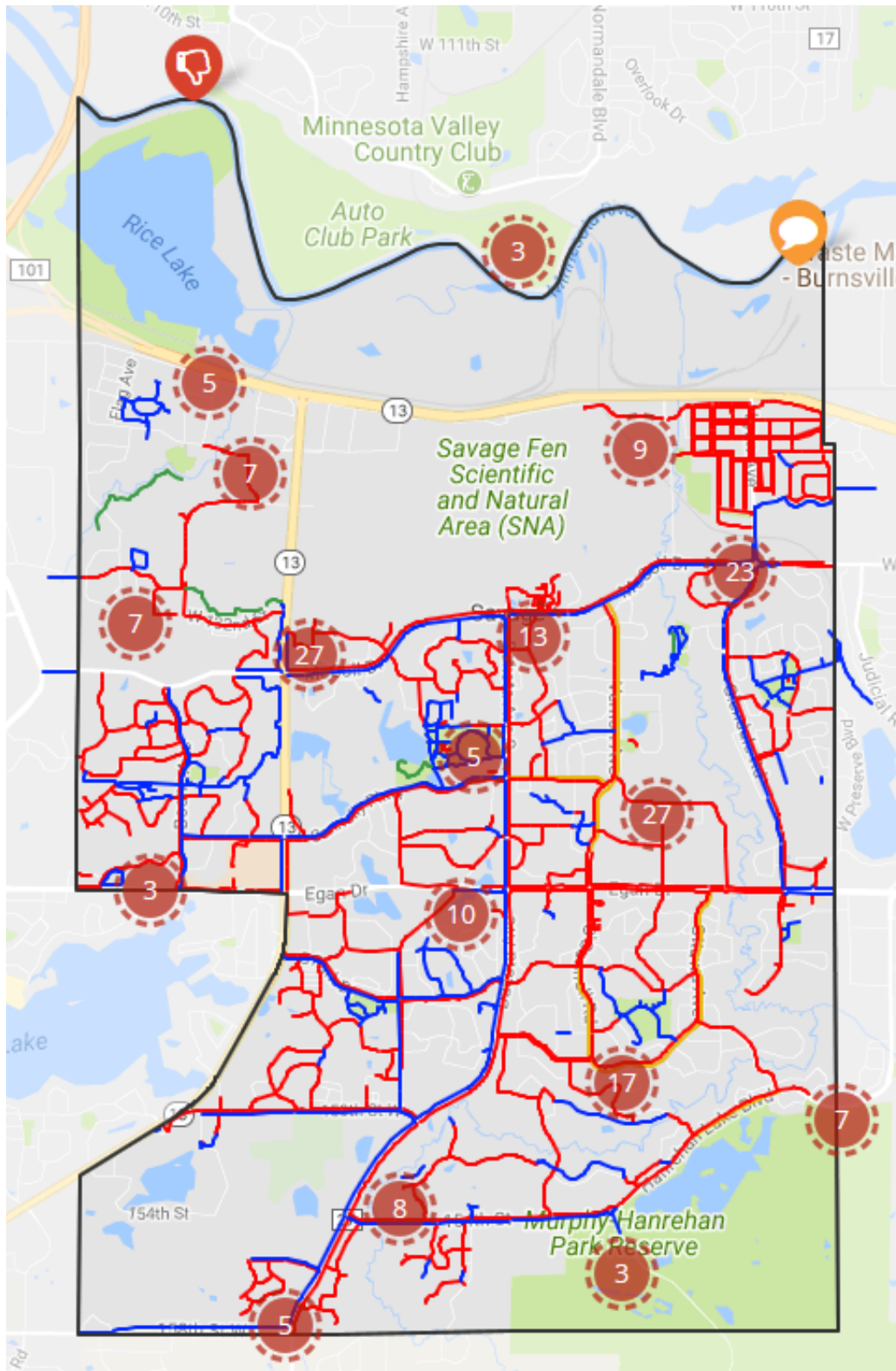


Figure 6: Number of Comments by General Location



Figure 7: Key Themes from Public Input

4. ISSUES AND OPPORTUNITIES

This section summarizes key issues and opportunities that were evaluated as part of this master plan. Issues were developed based on review of current city plans and policies, public input, input from city staff, and technical and best practices review. Figure 8 provides the Issues Map that was developed based on these inputs to geographically summarize issues related to the city's pedestrian and bicycle network. Within each of the issues, key challenges and obstacles that may limit the ability for implementation are identified.

A. ISSUES IDENTIFIED IN PREVIOUS PLANS

Two previous city plans provided key discussions and recommendations for the pedestrian and bicycle network. The 2006 Parks, Trails & Open Space System Plan and the 2030 Comprehensive Plan transportation and parks chapters were reviewed to better understand past efforts and review what has since been implemented.

The 2006 Park, Trail & Open Space System Plan recommended several new sidewalk and trail connections designed to connect neighborhoods, parks, schools and commercial areas. Also identified was the need to overcome physical barriers and gaps to pedestrian and bicyclist movement across the city. The 2030 Comprehensive Plan carried forward the recommendations from the 2006 Park, Trail & Open Space System Plan. The following is a summary of key issues identified in each of these plans.

Grade Separated Crossings along Major Roadways

Several potential locations for grade separated (overpass/underpass) crossings of major roadways (County Highways 16, 27, 42, 44, 154th Street, Highway 13, Lynn Avenue, Quentin Avenue) were identified. Grade separated crossings can greatly enhance access and connectivity for pedestrians and bicyclists, but the cost and physical impact of such crossings create significant challenges in implementing. Recent roadway improvements along County Highway 44 and 154th Street have also been completed, and certain locations may warrant other crossing treatment considerations.

Sidewalk/Trail Connections to Hamilton Area

Improved trail and sidewalk access to the downtown Hamilton area was prioritized as a short-term action plan. Sidewalk improvements on Lynn Avenue and the pedestrian activated crossing at Lynn Avenue and 128th Street have been made in recent years. These improvements provide a connection from McColl Drive to the Hamilton area via the existing sidewalk network along adjacent local streets. The addition of wayfinding signage could assist with users accessing the Hamilton area via the existing sidewalk network.

Other sidewalk and trail gaps that have been identified along Lynn Avenue and Quentin Avenue to connect to the Hamilton area have significant implementation challenges due to the cost of constructing, topography issues, limited right of way, and the need to replace the sub-standard railroad bridges. Remaining improvements are likely to be considered long-term issues as opportunities arise.

Trail Connections to MN River

Although Savage is a river city, there is little to no access to the Minnesota River. Floodplains, wetlands, Highway 13, railroads, and industrial properties all make it very challenging to connect the rest of the city to the river. The 2030 Comprehensive Plan identifies the desire to provide recreational access to the Minnesota River and connect to its scenic views and natural amenities. While progress has been made for providing trails along the river in nearby communities, the obstacles to overcome in Savage require long-term opportunities. However, there are some upcoming projects that should be evaluated to whether they may be able to assist in providing trail access to the Minnesota River. These include the construction of a grade-separated access near Dakota Avenue and Yosemite Avenue at Highway 13 and a potential interchange in the Highway 13 and Chowen Avenue area in Burnsville. Also, the city should continue to monitor any future trail or access opportunities along the Dan Patch rail line.

Trail Connections along Savage Fen and Minnesota River Bluffs

A future trail generally along the Savage Fen between Quentin Avenue and Highway 13 was identified in the previous plans. This trail segment was identified to provide both public access to the Savage Fen and to improve east-west connections near the city offices complex. In recent years, the City of Savage pursued development of this trail by identifying an alignment that was previously disturbed and minimized impact to the Savage Fen on a Scientific and Natural Area property that was obtained by the Minnesota Department of Natural Resources (DNR). The project was halted due to design requirements that did not make construction feasible. Design variances and approvals from the DNR would be needed to allow for future improvements to be provided.

Credit River Trail Greenway

Several properties along the Credit River between Egan Drive (County Highway 42) and McColl Drive (County Highway 16) are under city ownership as part of Hidden Valley Park and other parcels that have been purchased over time for natural resource protection. Both previous plans state that the city should continue to acquire key parcels or easements needed to complete trail connections and to protect lands along the Credit River. Without future acquisitions, providing trail access to the Credit River is not feasible. Conversations with city staff and current landowners have led to the understanding that future acquisitions are likely limited. In addition, development of trails along the river is restricted due to topography, wetlands, floodplains, and cost constraints. Hence, the concept for trails along the Credit River is a long-term goal should opportunities arise.

Improving Trail Connections to Parks

This was a key theme intended to enhance access and connectivity between the sidewalk and trail system within the city to the trails located within parks. While several connections have been completed or enhanced, this continues to be a key goal for the city to pursue.



Issues Map

Figure 8



B. CITY POLICIES AND ORDINANCES

City Code

In general, the City Code is consistent with other City plans and policies. The items of note are summarized below per the City Code:

Snowmobiling: Snowmobile use is prohibited on sidewalk or bituminous trails except on designated snowmobile trails. Using city streets for direct snowmobile trail access to or from the closest designated snowmobile trail is allowed at a maximum speed of 15 mph.

Sidewalks: The owner and occupant of property adjacent to a public sidewalk must keep it safe for pedestrians and cannot allow snow, ice, dirt or rubbish to remain on the walk longer than 24 hours.

Sidewalk repairs are the responsibility of the adjoining property owner. If the City of Savage notices the property owner that repairs are needed, the property owner has three weeks to make the necessary repairs. After three weeks, the city may make the necessary repairs at the expense of the property owner. Actual enforcement and current practice by city staff may not be fully consistent with City Code.

Sidewalk and Trail Assessments: Class A improvements (including public park, playground or recreational facility) provide general benefit to the city at large. These improvements are financed from general city funds and not from special assessments.

Class B improvements (including construction of sidewalk/pedestrian pathways) provide both general benefit and special benefit to abutting or nearby property. Pedestrian circulation systems located within or adjacent to the boundaries of a subdivision are to be constructed and paid for by the developer or, in an existing development, assessed on a frontage or unit basis against lots within the development if sidewalks are petitioned to be installed, as deemed appropriate by the City Council.

Zoning and Subdivision Ordinances

The County Road 42 Overlay District requires pedestrian walkways to support connections to parks, schools, and shopping facilities. The location of all trails and sidewalks shall conform to the comprehensive plan and/or similar city-approved trail/sidewalk plan. Other trails and sidewalks would be required to provide for the continuation or appropriate projection of existing walkways in surrounding areas; or conform to a specific pedestrian plan for the neighborhood.

The Design Standards within the Subdivision Ordinance limit direct driveways along arterial streets and collector streets. This reduces the potential for bicyclist and pedestrian conflicts between vehicles at driveways and increases the ability for arterial and collector streets to accommodate bicycle facilities.

Like the County Road 42 Overlay District as stated in the Zoning Ordinance, the Subdivision Ordinance also states that the City Council may require the provision of sidewalks, trails or pathways in proximity to public service areas such as parks, schools, shopping facilities or in

other appropriate locations of a similar nature. However, this text does not appear to be limited to the County Road 42 Overlay District. The text states:

151. 11 DESIGN STANDARDS. (C) - Pedestrian walkways. The City Council may require the provision of sidewalks, trails or pathways in proximity to public service areas such as parks, schools, shopping facilities or in other appropriate locations of a similar nature. All facilities shall conform to city design standards and ADA guidelines and shall be constructed at the sole expense of the developer.

(1) The location of all trails and sidewalks shall conform to the park and trail corridor master plan, as outlined in the comprehensive plan, and shall be considered in their relation to existing and planned walkways, to topographical conditions, to public convenience and safety and in their appropriate relation to the proposed uses of the land.

(2) Where not specifically illustrated in the comprehensive plan, or similar city-approved trail/sidewalk plan, the arrangement of walkways in the subdivision shall either:

(a) Provide for the continuation or appropriate projection of existing walkways in surrounding areas; or (b) Conform to a specific pedestrian plan for the neighborhood approved or adopted by the City Council to meet a particular situation.

Engineering Standards

The City of Savage Engineering Standards include standard plate design templates for sidewalks and trails. The standard plate (no. 107) identifies a bituminous trail width of 8 feet with 1/2 foot clear zones on each side for a total width of 9 feet. The concrete sidewalk standard plate width is 5 feet. The local roadway standard plate (no. 112) shows a 5-foot sidewalk on one side of the road with a 7- to 7.5-foot boulevard between the sidewalk and the road surface.

C. TEN-YEAR STREET IMPROVEMENT PLAN

In 2017, the City of Savage adopted a 10-year street improvement plan to implement major roadway improvements including mill and overlays and reconstruction. Alongside the roadway improvements, sidewalk and trail facilities are evaluated to determine whether maintenance or reconstruction is needed. Coordination between the activities performed as part of the 10-year street improvement plan, on-going sidewalk and trail maintenance operations, and recommended improvements identified in this master plan should be evaluated annually.

D. GAPS, CROSSINGS, SAFETY, ETC.

The City of Savage strives to design and maintain a sidewalk and trail network that is accessible for all pedestrians and bicyclists, including those who use walkers, wheelchairs, and scooters. The city understands that obstructions in sidewalks, poor sidewalk/curb ramp surface conditions, and lack of snow/ice removal leads to unsafe and undesirable travel conditions.

Creating a consistent, continuous and connected network improves access to local and regional systems. It also ensures that the system is generally convenient. Sidewalks, trails, and bikeways provide safety benefits, as these designated facilities make it less likely that pedestrians and bicyclists will be involved in a traffic crash.

Sidewalk Gaps

The city has a rather extensive sidewalk system. However, there are still gaps in the network that would enhance connectivity and access if completed. Completing gaps along already developed neighborhoods are quite challenging and often face opposition from adjoining property owners.

Trail Gaps

Along with gaps in the sidewalk network, there are also some key gaps in the trail network. Gaps are identified regardless of the agency that may ultimately own and operate the trail.

Crossings

Several locations have been identified where it is challenging for bicyclists and/or pedestrians to cross the roadway. Locations were identified for several reasons such as: heavy traffic volumes, a large roadway or barrier to cross, high-speed traffic, and lack of crossings for a significant distance or lack of crossings at a desired destination.

E. WINTER USES

During the winter season, the city plows key sidewalks and trails within parks and along arterial and collector streets. Keeping these facilities clear of snow and ice increases the ability for residents to travel and recreate throughout the city during winter. Snow and ice removal for the remaining sidewalk facilities are the responsibility of the adjoining property owners. Most trails are generally plowed by city staff.

The operation of snowmobiles is allowed on designated trails within city limits. A designated snowmobile trail is a trail that is maintained by a snowmobile club recognized by the Minnesota Department of Natural Resources. More than 24 miles of trails in Savage are maintained by Scott County Sno-Trails Inc. and supported by the Savage Sno-Pacers. The demand for winter use of trails for walking and biking has increased in recent years as the demand for snowmobiling within Savage has decreased. There are some trails that bicyclists and walkers lose access to in the winter as they become designated snowmobile trails. This conflict of users was brought up in community engagement conversations.

F. MAINTAINING THE SIDEWALK AND TRAIL NETWORK

Savage should continue to inventory and monitor its existing network of sidewalks and trails to ensure that they offer a comfortable, barrier-free, high quality user experience year-round. Bituminous paved trails may need to be resurfaced and bike lanes/shared shoulders may need to be repainted. Sidewalks should be replaced as necessary and crosswalks should be ADA compliant. Investing in the ongoing quality of the network signals to residents that the city prioritizes pedestrians and bicyclists and is committed to ensuring that people traveling via all modes of transportation are traveling safely and easily.

5. BEST PRACTICES

Just as there are best practices and design guidelines associated with developing roadway facilities, there are also best practices and design guidelines associated with developing pedestrian and bicycle facilities. This section of the report identifies best practices that should be considered as projects are developed. Some of the recommendations apply to the system while others are targeted to a portion (e.g., sidewalk, trail, on-road facility) of the network. The best practices that are specific to portions of the network are not intended to be applied in every situation or that one recommendation is always better than another.

A. CONSIDERATIONS FOR ALL FACILITIES

There are some practices that should be considered regardless of the facility type that is being developed. These considerations include eliminating gaps, utilizing the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD), conducting studies, and wayfinding.

Eliminate Gaps

One of the most frustrating challenges for pedestrians and bicyclists is to reach a gap in the system and interrupt their trip, leave them in a location where they are unable to complete their journey without some challenges or require them to reroute significantly out of their way. Systems with a number of gaps in them will reduce the likelihood of users and will create frustration and safety concerns for those willing to use the system.

For pedestrians, if the gap is on a city street (local roadway) with low traffic volumes, lower speeds and with opportunities to use the roadway facility, the gap may be overcome by the user. However, on facilities with heavier traffic volumes (collector roadways and above) or higher speeds, a gap in the sidewalk or trail system can be a significant barrier because the user will not feel safe mixing with traffic and may not have anywhere else to go.

The City of Savage should continue to eliminate gaps identified in this master plan when opportunities arise. Gaps can be completed in coordination with new land development projects, as standalone projects, or as part of roadway improvement projects. When reconstructing city or county roadways, this master plan should be consulted to check for identified gaps in the sidewalk and trail network.

In addition, considerations of future on-road bicycle facilities need to ensure that gaps are not created when making roadway improvements. Failure to have a complete connection with on-road facilities could create a safety problem. At this time, it is not anticipated that additional on-road bicycle facilities will be provided. But should the opportunity arise, it is recommended that additional studies be completed to determine the appropriate on-road improvement and logical termini.

Consult MMUTCD

All improvements related to signage, striping and traffic control devices should be reviewed against the current Minnesota Manual on Uniform Traffic Control Devices (MMUTCD). This manual provides the most up-to-date requirements and design practices. If additional information is needed, an additional resource is the federal Manual on Uniform Traffic Control

Devices (MUTCD). However, the MMUTCD should be the guiding reference document for improvements.

Conduct Studies

The improvements identified in this section of the report are best practices. Not all practices should be used in all situations. Some situations favor one type of treatment over another given a set of circumstances. As such, treatments should be evaluated on a case-by-case basis and not just applied because a treatment has been identified as a best practice.

Signage and Wayfinding Materials

Signage can be helpful to direct pedestrians and cyclists towards popular destinations such as parks, community facilities, transit stations, commercial areas, or other trail connections. Generally, signage for wayfinding is used on regional trail facilities and on important city and county trail and/or sidewalk connections. Signage is generally not used on sidewalks within residential areas on roadways classified as local. Coordination with multiple agencies (Scott County, Dakota County, Three Rivers Park District, MVTA, etc.) may be needed for regional facilities and for connections to regional destinations.

B. PEDESTRIAN FACILITIES

The following are best practices for improving pedestrian sidewalk facilities:

ADA Requirements

The American with Disability Act has requirements for the slopes, size, crossing placement and other elements of pedestrian facilities. Any new construction and reconstruction of existing facilities should take these requirements into account to ensure that all potential users are able to enjoy the pedestrian network developed by the city.

Sidewalks

Sidewalks are the basis of the pedestrian network. As noted previously, gaps in the system should be eliminated where possible, but especially in areas where roadways are classified as collector facilities and above and where there are linkages to important community facilities such as schools, parks, etc.

Design Standards and Guidelines for Sidewalks

- Minimum width is 5 feet; 6 feet preferred in residential areas.
- Minimum width in commercial areas should be wider – 6 to 8 feet to accommodate heavier use.
- Maximum cross slope should be 2 percent.

Curb Extensions

Curb extensions extend the sidewalk and shorten crossing distance. They decrease the amount of time needed to cross at intersections and can help to lower traffic speeds by narrowing the street. Curb extensions are most beneficial at intersections with wide crossings.

Curb extensions can be done as standalone projects or as part of a roadway reconstruction project. Generally, they are constructed to assist pedestrians and bicyclists in crossing higher-volume roadways and are most relevant in established urban areas such as the Hamilton District.



Design Standards and Guidelines for Curb Extensions

- Should not extend into traffic lanes or cut off bike lanes.
- Intended for streets with on-street parking or wide shoulders.
- Should be visible for oncoming traffic.

Median Refuge Islands

Median refuge islands provide bicyclists and pedestrians a safe zone halfway through an intersection. By providing a safe midpoint while crossing a street, pedestrians and bicyclists are only required to focus on one direction of oncoming traffic at a time. This is especially beneficial when crossing wide roads with high traffic volumes and speeds. Median refuge islands allow pedestrians and bicyclists to take advantage of gaps in one direction of traffic which decreases the amount of time waiting to cross. Placing a median refuge island within a roadway can also calm traffic.



Like curb extensions, refuge medians can be constructed as a standalone project or as part of a roadway reconstruction project. They are generally constructed on busier state or county roadways.

Design Standards and Guidelines for Median Refuge Islands

- Can be applied at signalized or unsignalized intersections.
- Minimum width is 6 feet.
- Medians should be raised at least 6 inches.
- Shape of the island should conform to the natural vehicle paths.
- Must be clearly visible for oncoming vehicles.
- Reflective markers around the median are recommended.

- Should only occupy the minimum area necessary while providing enough space to serve its purpose.

If median refuge islands are placed in locations where bicyclists can or will likely use them, then the city may wish to have a minimum width of 10 feet to accommodate bicyclists that have trailers or connect with a second bicycle.

Marked Pedestrian Crosswalks

Crosswalks are a marked portion of the roadway indicating use for pedestrians to cross. Striping the roadway at the location of a crosswalk alerts drivers that this is a location where pedestrians may be present and have the right to enter the roadway. Mid-block crossings should be avoided if there is an intersection alternative that is close and likely to be used by pedestrians. If mid-block crossings are truly the appropriate location for a crossing, active notification should be considered as part of the design.

Design Standards and Guidelines for Crosswalks

- May be used at intersections or uncontrolled/mid-block locations.
- Marked crossings are especially beneficial for intersections with high levels of vehicle traffic and high speeds.
- Crosswalks at midblock locations may be accompanied by active warning systems (options discussed on the following pages) to increase awareness. This should be evaluated on a case-by-case basis.
- Should be at least 6 feet in width.
- Continental markings or zebra-style are recommended (perpendicular to crosswalk direction). Lines should be 12-24 inches wide and be spaced 12-24 inches apart.
- Marked crossings should extend the full width of the crossing.
- Appropriate signage warning drivers of crossings may be considered.
- Durable materials (rather than paint) should be used when feasible. The more durable materials can last several years versus the one to two years that may be obtained by paint.

Leading Pedestrian Interval

The leading pedestrian interval feature (LPI) activates the walk sign a few seconds prior to the vehicle light changing to green, giving the pedestrian a chance to get out into the intersection where they may be more visible to right-turning vehicles. Studies have found that the LPI method reduces conflicts for pedestrians.

Coordination with Scott County or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects on county and state facilities.

Standards and Guidelines for LPI

- The FHWA recommends the LPI method be used where older pedestrians may frequently use an intersection.
- The leading pedestrian interval should be at least three seconds in duration.
- During the LPI, consideration should be given to prohibiting turns across the crosswalk.

Pedestrian Activated Crossings

Pedestrian activated crossings are a warning system used at crosswalks that flash a blinking light to oncoming motor vehicles to alert them of pedestrians or cyclists using the crosswalk. These types of systems are used at midblock and un-signalized intersections where warranted to notify drivers to yield to cyclists and pedestrians using the crosswalk. The system is typically activated by pedestrians and cyclists pushing a button but may also be designed to automatically detect users. By requiring pedestrians to activate the system or incorporating detection as part of the design, the system reduces the likelihood of drivers overlooking the beacon. If the beacon is always on – motorists tend to begin to ignore it and not pay attention to see if there are any pedestrians or bicyclists present. The most common pedestrian activated crossing used is the Rectangular Rapid Flashing Beacon (RRFB).



Standards and Guidelines for Pedestrian Activated Crossings

- Pedestrian activated crossings should be installed on the sides of roadways.
- Beacons should not be lit unless being used by pedestrians and cyclists to cross the intersection.
- Pedestrian activated crossings should not be used at signalized intersections or intersections with a yield or stop sign.

If pedestrian activated crossings are used in locations where bicyclists can or will likely use them, then the city should consider placing them in locations where cyclists can activate them without having to dismount from their bicycle.

High-Intensity Activated Crosswalk

High-intensity activated crosswalk (HAWK) or hybrid beacons can be used when a street with lower traffic volumes intersects with a major street and a traffic signal is not desired. The hybrid beacon helps pedestrians and bicyclists when crossing the major streets. Hybrid beacons consist of an overhead signal over the major street and have two horizontal red lights on top of one yellow light to alert drivers of people using the crosswalk. The HAWK or hybrid beacon is only lit when pedestrians or bicyclists activate the system. This reduces the likelihood of drivers

overlooking the signal. Drivers tend to ignore traditional pedestrian signals because they are always on and are usually green for the motorists.

Coordination with Scott County or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects on county and state facilities.

Standards and Guidelines for HAWKS



- Typically used when a major street intersects a minor road with low traffic volumes and does not warrant a traffic signal.
- The MMUTCD permits the use of hybrid beacons depending on vehicle speed, traffic volume, intersection length, and pedestrian volume.
- The MMUTCD provides standards for hybrid beacons including location and height, as well as length of signal phases.
- Sight obstructions such as on-street parking should not be permitted within 100 feet in front of a hybrid beacon or 20 feet beyond the marked crossing.
- The signal should not be lit unless being used by pedestrians to cross the intersection.
- Installation of a HAWK system should be based on meeting one of the signal warrants of Chapter 4C of the MMUTCD and justification through an engineering study. The engineering study should consider major-street volumes, speeds, widths and gaps in conjunction with pedestrian volumes, walking speeds and delay if no warrants are met. Systems should be installed based upon the provisions of Chapters 4D and 4E.

Countdown Pedestrian Signals

Countdown timers at signalized intersections display the amount of time pedestrians have available to cross a roadway before the traffic signal changes. The countdown timers and audible/vibrotactile indicators allows users to use their judgment as to whether they can safely cross the intersection in the time available. Without timers and/or audible/vibrotactile indicators, pedestrians may enter the intersection believing they have enough time to cross only to have the signal change before reaching the other side. This is especially helpful for wider crossings and benefits those who need more time to cross intersections. Although countdown timers have been shown to increase the number of pedestrians entering the crosswalk after the flashing orange hand starts, they reduce the percentage of pedestrians that do not complete crossing the intersection in time. This is likely due to people speeding up their walk as the timer approaches zero.

Standards and Guidelines for Countdown Signals

- The MMUTCD requires that any new signal must include a countdown timer unless the pedestrian change interval is seven seconds or less.
- Timers must finish their countdown prior to the onset of the signal changing to yellow.
- Recommended for longer crossings.
- Timers should be designed in accordance with the MMUTCD which regulates size, color, and location of countdown numerals.
- Considerations should be made with all new traffic signals and/or reconstructed traffic signals pertaining to accommodations for the deaf and visually impaired by providing both audible and vibrotactile walk indications.

LED Signage and In-Roadway Warning Systems

Flashing LED stop signs or in-pavement LED markers can be an effective means of alerting vehicles that a pedestrian is using the crosswalk. Utilizing LEDs can be an effective way to catch a driver's attention and can be used to provide advance notice of a crossing ahead. They are also beneficial when visibility conditions are poor (e.g., nighttime, poor weather). Flashing in-roadway lights are currently limited to marked uncontrolled crosswalks.

Standards and Guidelines for LED Signage and In-Roadway Systems

- The MMUTCD regulates design, color, spacing and usage of light sources used for traffic crossings.
- Flashing in-roadway lights are currently limited to marked uncontrolled crosswalks.



C. MULTI-USE TRAIL FACILITIES

Multi-use trails are popular with recreational bicyclists and pedestrians alike. Bicyclists that are focused on purely commuting/transportation purposes are not as likely to use these facilities because they have a mix of users and those users can block their way through the corridor. Additionally, the more advanced cyclists do not like interruptions (driveways and other interruptions) that require them to slow or stop as compared to on-road facilities. Multi-use trails generally link to major community destinations such as parks, schools, community centers and popular retail/commercial destinations. The following describe best practices for multi-use trail facilities:

Consult MnDOT's Bikeway Facility Design Manual

MnDOT has put together a manual targeted to designing bicycle facilities. The manual provides recommendations and guidelines to improve safety and to provide a consistent facility for users throughout the state. When designing trails and on-road facilities, this manual should be consulted.

ADA Requirements

The American with Disability Act has requirements for the slopes, size, crossing placement and other elements of pedestrian facilities. As time has passed, many agencies have been incorporating some of the ADA requirements into their recreational trail facilities. ADA design standards are an option the city should consider as part of its trail design.

Off-Road Trails

The existing network of off-road trails in the City of Savage provides a safe way for pedestrians and cyclists to get around the community. Off-road trails can be a much more comfortable option than an on-street bike lane for less experienced cyclists because they are separated from motorized vehicles. Multi-use trails provide a great opportunity for children and less experienced cyclists to use non-motorized transportation and feel safe. In many cases, off-road trails are used by multiple types of users such as cyclists, joggers, people on rollerblades, and people walking their dog. This variety can present some safety conflicts and should be anticipated by users. Providing adequate signage can be one way of alerting users of potential conflicts.

Standards and Guidelines for Off-Road Multi-Use Trails

- For two-way trails, the minimum width is 10 feet. For trails that experience significant use, 12-14 feet is encouraged.
- Center lines should be provided for heavily used trails.
- Cautionary signage should be utilized as necessary.
- Intersection crossings should be at flat grades.
- Off-road paths should not cross roadways in areas where the roadway is not straight.
- Trails should be maintained in good condition to avoid potential safety hazards.
- If a route experiences significant traffic from a variety of users (cyclists, pedestrians, people on rollerblades, etc.) separate trail facilities should be considered.
- A 2-foot graded shoulder should be provided on each side of the path in case cyclists drift off the path or need to avoid hazards.

- Any signage, poles, trees or other obstructions should be at least 3 feet from the edge of the path. However, signage for cyclists should not be farther than 6 feet from the edge of the path.
- Pedestrian-scale lighting should be considered for user safety and security.

For routes that receive significant use, separate trails for different users may be necessary. When separate paths are provided, proper signage should indicate which paths are to be used by pedestrians and which should be used by cyclists. Using different paving materials or providing a median between the separate facilities can further reinforce designation for different users.

- Separated facilities for cyclists and pedestrians should be considered when peak hour bicycle traffic volumes exceed 100 users per hour or where combined pedestrian and cycle user volume is greater than 2,000 individuals per day.

D. BICYCLE FACILITIES

In some instances, it may be advantageous to provide exclusive facilities for bicyclists. (In general, most city and regional trails are designed to accommodate both the bicyclist and the pedestrian. These trails are discussed in the Multi-Use Facilities section). The more expert bicyclists generally prefer on-road facilities. The expert cyclists are comfortable riding alongside vehicles. They primarily use the larger roadways which are more likely to provide bicycle facilities such as shoulders, bicycle lanes, etc. Having a system in place for these users is not necessarily the focus of this plan – however, their needs and desires should be considered and evaluated as county and state facilities are updated.

Before a decision is made for the use of on-road facilities, traffic volumes, speeds, right of way availability and connectivity to other bicycle facilities (on- or off-road) should be considered. If on-road facilities are considered for use, the following should be evaluated as part of the process in selecting the preferred method of delivering the facility:

Consult MnDOT's Bikeway Facility Design Manual

MnDOT has put together a manual targeted to designing bicycle facilities. The manual provides recommendations and guidelines to improve safety and to provide a consistent facility for users throughout the state. When designing trails and on-road facilities, this manual should be consulted.

6. RECOMMENDATIONS

The City of Savage has the opportunity as part of its Pedestrian and Bicycle Master Plan to create the foundation for providing important community links and connections that would allow individuals to pursue walking and biking as part of their work, household, recreation, and transportation activities by making its system of sidewalks, trails and transportation facilities safer and more convenient. The city also can update policies, coordinate with other agencies, and implement practices that will encourage walking and bicycling within the community.

This section outlines an overall vision for pedestrian and bicycle facilities within the community and provides some broad recommendations for activities and practices that will encourage the long-term use of the system and a healthy lifestyle.

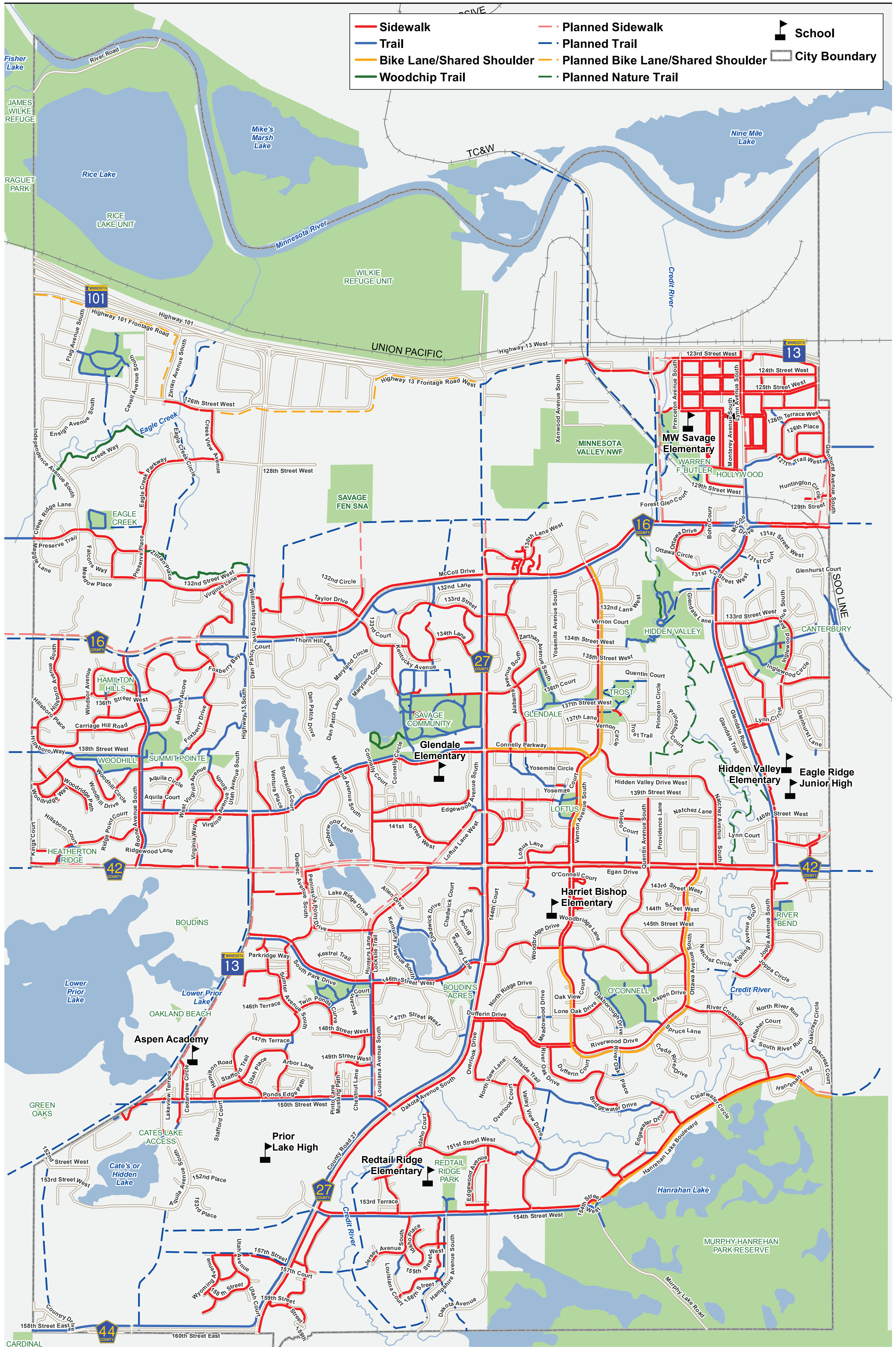
A. SIDEWALK AND TRAIL NETWORK VISION

The sidewalk and trail network master plan should reflect the input of plan participants and good planning practices that encourage connections to important destinations within the community, that provide opportunities for recreation as well as commuting purposes, and that provide connections throughout the entire community. The vision for the trail and sidewalk network:

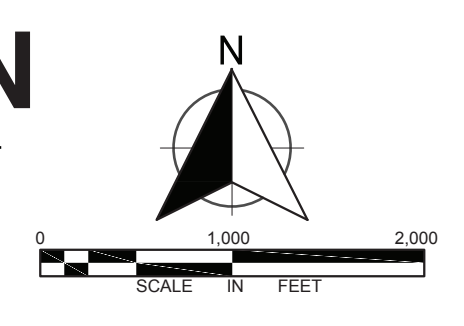
- Connects to existing and planned recreational facilities and parks.
- Completes gaps in the network to connect neighborhoods and community destinations.
- Provides access to other communities and regional attractions.
- Provides opportunities to connect to the natural environment.

This is a long-term vision. It is to be used as a guide for the city when making both long- and short-term decisions with regard to planning and construction of facilities. It is intended to be used to incorporate pedestrian and bicycle needs not only into projects immediately on the table, but to not preclude them as part of planning and other activities. For instance, a trail may not be completed or constructed as a single parcel redevelops, but right of way or an easement should be preserved if it is included as part of the vision so that it can be constructed at some point when there are enough parcels for a trail to be constructed.

Figure 9 shows the planned sidewalk and trail network. Sidewalk and trails shown in solid lines represent facilities already in place. Dashed lines show “planned” connections needed to complete the network. “Planned” improvements will be evaluated on a project by project basis and brought through the appropriate process for discussion on feasibility. All projects identified in this document as “planned” require City Council approval.



PEDESTRIAN AND BICYCLE MASTER PLAN
Planned Sidewalk and Trail Network
Figure 9



K:\01018-000\Cad\Exhibits\01018-000 Existing and Planned Maps

B. GENERAL GOALS AND RECOMMENDATIONS

The following general recommendations were developed to help meet the goals and outcomes established as part of the Pedestrian and Bicycle Master Plan:

- The City of Savage has a robust sidewalk and trail system. The city should maximize the value of the infrastructure by maintaining this system, completing key gaps, and enhancing safety and comfortability for users of all ages and abilities.
- Support healthy and active lifestyles through a pedestrian and bicycle infrastructure system that connects neighborhoods, schools, parks, community centers, commercial centers, and places of employment.
- Continue to improve access and connectivity between parks and the sidewalk and trail system.
- Prioritize completing trail and sidewalk connections that improve access between Savage and its neighboring communities and beyond to the rest of the region. Also emphasize improved access to regional destinations and facilities including Cleary Lake Regional Park, regional trails and bikeways, and major river crossings.
- Provide opportunities to connect residents to the unique natural environments within Savage in a sustainable manner, and pursue future endeavors that may enhance access to the Minnesota River, Credit River, Eagle Creek, Murphy-Hanrehan Park Reserve, and the Minnesota River Bluffs.
- Evaluate designated snowmobile trails within the city regarding how they may conflict with pedestrian and bicycle activity during winter months and consider what changes could be made to reduce such conflicts. The city should also evaluate current designated snowmobile trails and determine whether they should be reduced or eliminated over time to meet the long-term needs of the city.

C. SIDEWALK AND TRAIL DEVELOPMENT RECOMMENDATIONS

The City of Savage has been successful in developing its sidewalk and trail network by coordinating with developers, other agencies, and incorporating improvements into roadway projects. These activities can be further enhanced by:

- Continue to require new developments to install sidewalks and trails that are consistent with this master plan and provide pedestrian and bicycle access between neighborhoods and the rest of Savage.
- Consider pedestrian and bicycle improvements as part of street improvement projects. City staff should consult this plan during the early stages of street improvement projects so that identified pedestrian and bicycle infrastructure can be included at the beginning of a project if feasible.
- Limit use of boulevard widths under six feet between sidewalk/trails and roadways to provide a more safe and comfortable user experience and to provide snow storage for the adjacent road.
- Work with neighboring communities, Scott County, Dakota County, Three Rivers Park District, and MnDOT to complete gaps in the sidewalk and trail system and enhance

access between Savage and the region. Consider holding annual meetings with these agencies to discuss opportunities and implementation approaches to completing gaps.

- Monitor the railroad status of the Dan Patch railroad line and pursue trail use in the corridor should the opportunity arise.
- Should the opportunity arise for the replacement of the railroad bridges over Quentin Avenue and Lynn Avenue, pursue adding pedestrian and bicycle facilities along these roads to complete these key connections to downtown Savage.

D. MAINTENANCE AND PRESERVATION RECOMMENDATIONS

Regular maintenance of facilities shows the city's commitment to and investment in walking and biking. Things the city can do to improve maintenance include:

- Utilize sustainable practices to protect the public investment and ensure the safety and quality of sidewalks and trails through long-term management.
- Include sidewalk repairs and panel replacements in roadway rehabilitation projects including mill and overlay projects.
- Continue replacing curb ramps to comply with ADA requirements: The city should identify and replace necessary curb ramps to bring them into compliance with ADA design requirements to improve accessibility for all users.
- Maintain vegetation to ensure horizontal and vertical clearances on all sidewalks and trails.
- Sweep trails annually.
- Inspect and repair sidewalks on a rotating five-year basis to ensure that sidewalks are in good condition for residents of all abilities.
- The city should continue to repaint crosswalks annually so that crosswalks are in good condition throughout the summer and fall.
- Continue to plow trails within 48-72 hours of a snow event.
- Educate residents about snow removal requirements. Utilize city communication materials to emphasize property owner responsibility to clear sidewalks within 12 hours of a snow event. Communications materials should highlight the importance of clear sidewalks for pedestrian mobility.

E. SAFETY RECOMMENDATIONS

Additional considerations should be made to ensure a safe sidewalk and trail network is provided for residents:

- Assure that planned trails, sidewalks and grade-separations associated with road and intersection projects occur as an integral part of the improvement project.
- Work with Scott County and MnDOT to identify appropriate locations and treatments for the safe crossing of county and state highways.
- Educate community members on safe walking, bicycling, and driving around pedestrians/bicyclists. The Savage Police Department should seek opportunities to educate community members on safe walking, bicycling, and driving in interactions with the public and at community events such as Dan Patch Days.

F. CURRENT CITY POLICY REVISION RECOMMENDATIONS

The City of Savage has been successful with its street reconstruction projects in adding neighborhoods to the sidewalk network and the city has successfully negotiated with developers to incorporate trails and/or sidewalks as part of major redevelopment efforts. These activities can be further enhanced by:

City Code

- The City Council should evaluate the sidewalk assessment policy so the City Code and current practices are consistent.

Subdivision Ordinance

- Update references to this master plan.
- Consider updating Subdivision Ordinance to require a sidewalk on at least one side of all new local roadways.
- Consider future improvements along arterial roadways with 8- to 10-foot trails along both sides of arterial roadways to support bicycle use and reduce the crossing of arterial roadways.

Zoning Ordinance

- Update references to this master plan.
- Consider updating the County Road 42 Overlay District and Hamilton Overlay District to strengthen ordinance language that ensures pedestrian facilities are provided between commercial uses and sidewalk/trail facilities and meet ADA requirements. Consider requiring pedestrian access (sidewalks and crosswalks) through new parking lots. Parking lots can be uncomfortable places for pedestrians to walk when there is not a designated pedestrian route to the entrance of a building.
- Review existing ordinances regarding pedestrian-friendly building and parking design, sidewalk construction, and bike parking.

G. SYSTEM ENHANCEMENT RECOMMENDATIONS

Education and encouragement strategies are often paired because they are complementary efforts. When people have more information about how and where to walk and bike safely, they often feel encouraged to walk and bike more often. The following strategies address ways to educate and encourage residents to walk and bike.

- Regularly promote the pedestrian and bicycle system via city communication resources (newsletter, social media, website, etc.). Topics should include safe walking and bicycling behaviors, information about the health benefits of walking and bicycling, and information on local walking and bicycling routes.
- Develop a map with existing trails and sidewalks on the city's website. The map should also include the schools, parks and other major destinations. Printed copies of the map could be made available at city hall, the library and the community center.
- Explore installing park and trail system maps at key locations to enhance Savage's identity and build sense of community.

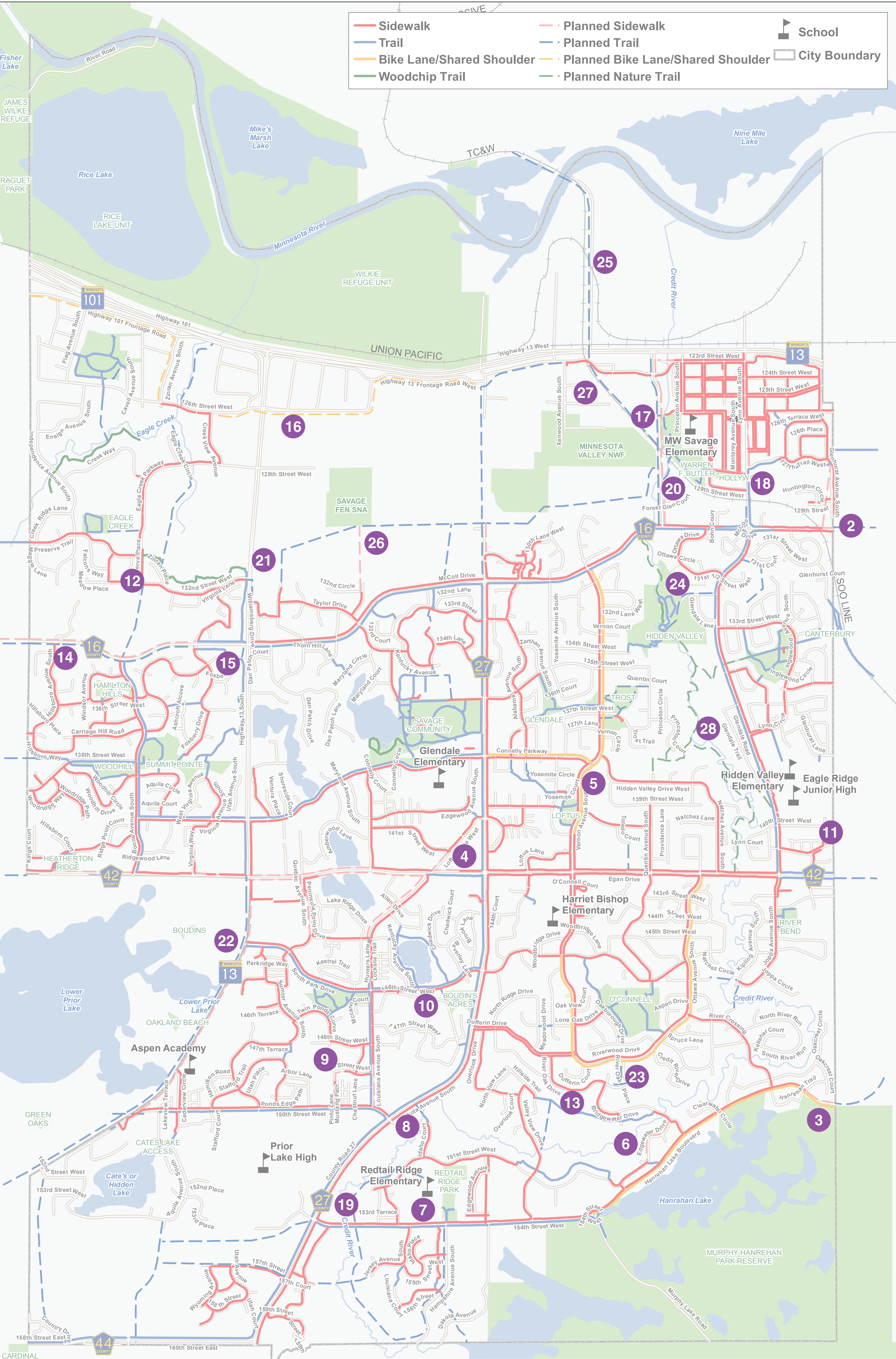
- Install bike racks and bike parking facilities at parks and city facilities. Also explore the opportunity to install amenities such as trailhead kiosks, drinking fountains, restrooms, and bike repair stations at key locations that can accommodate both trail users as well as serve the main facility needs.
- Coordinate with MVTA to explore the need and opportunity to add bike parking and supporting facilities at key transit facilities.
- Encourage businesses to install bike parking, especially in the County Road 42 and Hamilton Overlay Districts. The city could consider establishing a cost sharing program for bike racks and/or updating city zoning codes/ordinances to require bike parking to be installed as part of new commercial and multifamily residential development.

7. IMPLEMENTATION PLAN

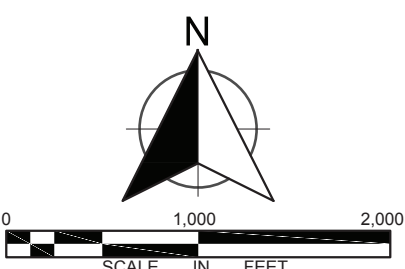
Plan implementation will occur over many years. To reach the goals of this master plan, the city will need to focus on plan recommendations and strategically construct and maintain pedestrian and bicycle infrastructure. This section provides a suggested framework on how to implement this master plan by identifying a list of priority improvement projects, discussing city and external funding sources to finance the system, providing a trail maintenance schedule for future maintenance operations, and identifying performance measures to evaluate how this plan has been implemented over time.

A. LIST OF PRIORITY PROJECTS

The city has identified the following sidewalks, trails, and facility improvements as the highest priority for short-, medium-, and long-term implementation of this plan. These projects have been prioritized based on community input, potential to improve safety, connections to key destinations, and the ability to coordinate with currently funded projects.



PEDESTRIAN AND BICYCLE MASTER PLAN
Map of Priority Projects
Figure 10



City of Savage Pedestrian and Bicycle Master Plan
Table 2: List of Priority Projects

Map Reference	Location	Priority A (High) - D (Low)	Timeframe (Short 0-5 yrs., Mid 5-10 yrs., Long 10+ yrs.)	Range of Cost (Low, Mid, High)	Notes	Relation to 10-Year Street Improvement Program?
--	Various locations - sidewalk and trail maintenance	A	Short	Low	Incorporate sidewalk and trail improvements into annual street improvement projects	Yes
1	Add bike racks to community facilities (ELC, City Hall, dome, park and rides, etc.)	A	Short	Low	Can be added to future park improvements or as a standalone project	No
2	County Highway (CH) 16 sidewalk extension at Savage/Burnsville border	A	Short (2018)	Low	Potential cost share with City of Burnsville Rose Bluff 2018 project	No
3	Hanrehan Lake Boulevard/Burnsville Parkway trail extension into Burnsville	A	Short (2021)	Mid	Potential cost share with City of Burnsville 2021 project	No
4	Complete sidewalk between Loftus Lane and CH 27 on CH 42	A	Short	Low	After CH 42 reconstruction, this is the last remaining gap along CH 42. Identified as part of County's 2022 CH 42 rehabilitation project	No
5	Sidewalk repairs on Vernon Avenue from 141st Street to Utica Avenue	B	Short/Mid	Mid	Sidewalk floods / collects ice	2018
6	Sidewalk/Trail near Edgewater Drive	C	Short/Mid	Mid	Complete loop - evaluate adding to 2019 street project	2019
7	Pedestrian crossing on 154th Street by school	B	Mid	Low	Need to evaluate safety issues and road conditions	No
8	Pedestrian bridge over Credit River between Idaho Court and CH 27	B	Mid	High	Provides neighborhood connection to CH 27 trails	No
9	Oregon Avenue and 149th Street sidewalk extension	B	Mid	Mid	Completes gap	No
10	Trail connections to Boudins Acres Park	B	Mid	Mid	Improve access to park	No
11	Sidewalk connection on 141st Street to Preserve Boulevard (Connection to Burnsville)	C	Mid	Mid	Improve access to Sunset Pond Park and businesses	No
12	Sidewalk extension on Meadow Place/Lane to 132nd Street	B	Mid	Mid	Pending development and/or road extension	No
13	Repave trail between Hillside Trail and Bridgewater Drive	C	Mid	Mid	Maintenance project	No
14	CH 16 trail project (south side of road) at Savage/Shakopee border	A	Mid/Long	Mid	City supports trail along south side of road to tie into existing development, could be a cost-share project with County	No
15	Highway 13 and CH 16 - improve intersection crossing (also add connection in SW quadrant)	B	Mid/Long	Low	Several public comments received at this location	No
16	Bike lanes or shared shouders along Highway 13 frontage roads between Burnsville and Shakopee	C	Mid/Long	Mid	May require road or shoulder widening - Can incorporate into programmed street improvement projects	2020, 2024, 2027
17	Pedestrian connection along Quentin Avenue between downtown and CH 16 (both sides)	D	Long	High	May need to be tied to replacement of railroad bridge	2027
18	Pedestrian connection along Lynn Avenue between 126th Street and 128th Street	D	Long	High	Alternate routes currently exist	No
19	Pedestrian connection between Jersey Avenue and CH 27 over Credit River	D	Long	High		No
20	Quentin Avenue to Warren Butler Park - underpass	C	Long	High	Future pedestrian underpass gateway to park	
21	North of Highway 13 and CH 16 - potential underpass	C	Long	High	Grade separated crossing of Highway 13	No
22	Trail along Highway 13 south between Savage/Prior Lake (south of CH 42)	C	Long	High	Long-term need for Savage and Prior Lake, but difficult to construct	No
23	Pedestrian connection between River Oak Drive and Dufferin Drive	C	Long	Mid	Complete loop	2018, 2023
24	Trail to Hidden Valley Park	D	Long	High	Feasibility issues	No
25	Access to MN River north of Highway 13	D	Long	High	Long-term endeavor to pursue should opportunity arise - Evaluate as part of Dakota-Yosemite Grade Separation and Chowen Avenue Interchange projects	No
26	Trail along bluff and Savage Fen	D	Long	High	Long-term endeavor to pursue should opportunity arise	No
27	Dan Patch Line and river crossing - regional trail	D	Long	High	Long-term endeavor to pursue should opportunity arise	No
28	Credit River (soft surface/nature trails) near Hidden Valley Park	D	Long	Mid	Long-term endeavor to pursue should opportunity arise, property access issues	No

B. FUNDING THE SYSTEM

On-going investments in the sidewalk and trail network are needed to implement the recommendations, improvements, and maintenance practices identified in this master plan. The city should incorporate trail maintenance funding and additional maintenance equipment needs into the Capital Improvement Program (CIP) to ensure the system is preserved and to maximize the value of the initial investment. Annual sidewalk and trail improvement funds should be evaluated to determine whether they will address the demand. To assist with meeting funding needs, the city should consider the reallocation of Aquatic Center Debt Service Levy to General Levy with proceeds split between the Park Improvement Fund and Sidewalk Fund.

There will be opportunities for the city to extend the pedestrian and bicycle system through other transportation projects. City staff should annually review the CIP to identify opportunities to integrate sidewalk and bikeway projects into upcoming capital improvement projects, including the 10-year street improvement program.

In addition, the city should explore cost participation opportunities with Scott County and MnDOT for completing new sidewalks and trails along county and state highways as identified in this master plan.

C. EXTERNAL FUNDING SOURCES

Local funding resources can be supplemented by funding from county sources and regional, state and federal grants or cost participation programs. The city should budget for local funds to construct short sidewalk segments and low-cost bikeways and focus on grant funding sources for larger sidewalk and trail projects that connect to or serve as part of the regional system. Smaller, more localized projects may not be appropriate for grant funding programs because of the time and costs associated with compliance with grant funder requirements. While the grant programs and other funding opportunities may change over time, consideration should be given to pursue programs that will enable the city to eliminate gaps and crossing challenges. Potential funding sources to consider include:

Scott County Transportation Improvement Program - Cost Participation

Scott County updates its 10-year Transportation Improvement Program annually. This funding is generally used in conjunction with highway reconstruction, but has also been used to construct standalone trail projects along an existing county highway. For projects that are programmed within Savage, local funds may be required based on the County's cost participation policy.

As part of the County's Transportation Improvement Program update, the County typically requests cities and townships to recommend proposed improvements to the county highway system to be considered for adding to the program. Proposed improvements could include roadway, intersection, sidewalk, or trail improvements within the county road right of way.

Where key sidewalk and trail gaps or safety issues occur along county highways, the City of Savage could suggest these improvements as part of future updates to the County's Transportation Improvement Program. Scott County cost participation is typically 50 percent of the cost for new sidewalk/trail construction.

Regional Solicitation

The Metropolitan Council and Transportation Advisory Board (TAB) are responsible for allocating federal Surface Transportation Block Grant Program (STBGP) funding within the metropolitan area. The funds are distributed through a competitive application process where each project request is evaluated and scored based on standardized criteria. These programs can fund up to 80 percent of project costs. The Regional Solicitation process typically occurs every two years. Project applications must demonstrate a regional benefit in order to receive a competitive score.

Standalone sidewalk and trail projects are eligible for this funding under the Bicycle and Pedestrian Facilities category, which is further broken into multiuse trail and bicycle projects, pedestrian facility projects, and Safe Routes to School Infrastructure projects. Sidewalk and trail improvements can also be included as part of roadway reconstruction and expansion projects are limited to the non-freeway principal arterial and A-minor arterial systems.

Savage should consider applying for Regional Solicitation funding for larger sidewalk and trail projects (greater than \$250,000) that serve a transportation purpose or complete a key regional gap. Projects along A-Minor or Principal Arterials (County Highway 16, County Highway 27, County Highway 42, and Highway 13), along the RBTN corridors (County Highway 16, County Highway 42), or complete connections to key regional destinations may provide the best opportunity to obtain funding.

Highway Safety Improvement Program

The Highway Safety Improvement Program provides funding to smaller projects that address a targeted safety issue. The funding is administered by MnDOT. Depending upon the year, the program can be used to address safety problems in a proactive or reactive manner. Reactive projects generally include improvements at intersections. Proactive improvements can include countdown timers, median construction, signing and striping, sidewalks, and other smaller-scale improvements designed to improve safety. Funding can provide 90 percent of project costs.

Minnesota DNR Local Trail Connections Program and Federal Recreational Trail Program

The Local Trail Connections Program is used to promote relatively short trail connections between residential areas and desirable locations. The Federal Recreational Trail Program promotes similar trail projects, with funding categories prioritized annually prior to the solicitation process. Up to 75 percent of the total eligible costs up to a maximum of \$150,000 are provided by these grants.

Statewide Health Improvement Program

The Statewide Health Improvement Program (SHIP) is part of the Minnesota Department of Health initiatives to improve the overall health of Minnesotans and to decrease obesity rates. Funding for this program typically goes through Scott County, so the city will need to partner with the county to be eligible for funding. Funding can be used for the education, encouragement and enforcement strategies in this plan, as well as planning studies.

Blue Cross and Blue Shield Center for Prevention

The Blue Cross and Blue Shield Center for Prevention regularly funds bicycle and pedestrian planning, education, encouragement, and enforcement in Minnesota. Savage staff should monitor future funding opportunities through the Center for Prevention that may support the implementation of this plan.

Livable Communities Demonstration Account

The Livable Communities Demonstration Account funds innovative development/redevelopment projects that efficiently link housing, jobs, services and transit in an effort to create inspiring and lasting communities. Grants are available to fund basic public infrastructure and site assembly. Projects can vary significantly from one community to the next, but they all provide linkages between multiple uses. Infrastructure, such as sidewalks, trails, benches, bicycle racks, etc. could be incorporated and paid for as part of this grant. However, the projects are generally large-scale in effort and are focused on redevelopment efforts.

There may be opportunities for the city to work with developers and the Metropolitan Council to explore options for using funding from this program to support overall redevelopment as well as pedestrian and bicycle infrastructure.

D. RECOMMENDED MAINTENANCE SCHEDULE

The following is a recommended maintenance schedule for the city's bituminous trail system. This schedule is intended to provide a general structure for maintenance needs to ensure safe travels for recreation and transportation activities and to get the best value out of the useful life of the trail surface. Trail use, quality of initial construction, and environmental factors can all affect the lifecycle of trail conditions, and the maintenance schedule may need to be adjusted for certain trail segments based on trail performance.

Ongoing Maintenance

- Vegetation – mow shoulders and maintain 2-3 feet clear zone
- Snow Plowing and Ice Removal – on designated routes
- Litter and Debris Cleanup
- Use/Safety Inspections
 - ROW Encroachment Inspections
 - Verify Safety for Trail Users (no fallen/hanging branches, large cracks, slippery spots, etc.)
 - Graffiti/Vandalism
 - Inventory Surface Failures (cracks, dips, crumbling edges, trip hazards)
 - Drainage/Culvert (ensure no blockages and are in proper working order)

Annual Maintenance

- Vegetation
 - Weed Control (if needed)
 - Trim Trees/Shrubs to Maintain Minimum 10-feet Overhead Clearance
 - Other Annual Resource Management Activities
- Trail Surface Sweeping (Spring)

Short-Term Maintenance

- Asphalt Crack Repair and Patching – 3-5 years (where needed)
- Fog Seal – Year 1 following construction, then every 4-5 years (MnDOT Spec. 2355 CSS 1H Diluted)
- Signs and Lane/Crossings Striping – every 3 years or as needed

Long-Term Maintenance

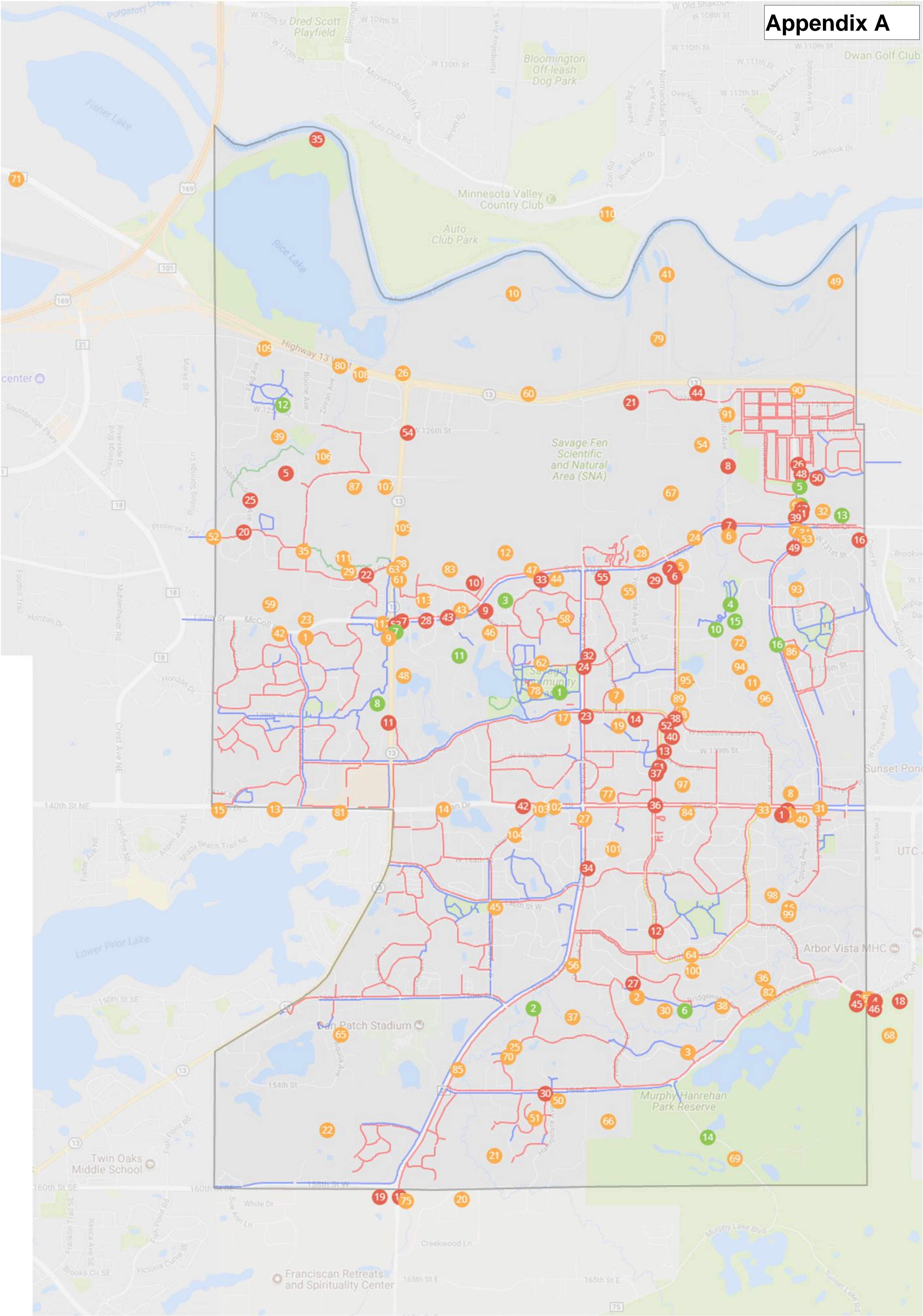
- Overlay in Place or Full-Depth Reclamation – 15-20 years
- Reconstruction – 20-25 years if no overlay in place/full-depth reclamation
- Overpass/Underpass Structure Replacement – 20-50 years (based on lifespan of structure)

E. ONGOING MONITORING (PERFORMANCE MEASURES)

The following performance measures should be tracked on an annual basis to ensure progress towards the goals of this plan. Monitoring these performance measures will help determine whether the strategies in this plan are effective or need to be adjusted to reach the plan's goals. Performance measures should be reported to the Savage City Council for their review.

Table 3: Recommended Performance Measures

Measure	Data source
Number and severity of pedestrian-vehicle crashes	Police Department, MnDOT
Number and severity of bicycle-vehicle crashes	Police Department, MnDOT
Feet of new sidewalk/trail segments constructed	Public Works/Engineering
Feet of sidewalk/trail segments repaired/reconstructed	Public Works/Engineering
List of sidewalk/trail segments and gaps completed as identified in this master plan	Public Works/Engineering
Pavement condition index of sidewalk and trail system based on city's pavement management program (updated every few years)	Public Works
Percent of curb ramps compliant with ADA requirements	Public Works/Engineering
Percent of trail system in place	Public Works/Engineering
Percent of sidewalk system in place	Public Works/Engineering
Percent of residents who walk or bike to work	US Census
Number of snow events and average time to clear trails	Public Works/Engineering
Number of city communications encouraging walking/bicycling and/or promoting pedestrian/bicycle safety	Communications
Number of targeted enforcement campaigns for pedestrian/bicycle safety	Police Department



PEDESTRIAN AND BICYCLE MASTER PLAN

Comments Map
Savage, Minnesota
02/01/2018 | 010318-000



Something I Like

- 1

Really like the high priority put on maintaining the walking paths at the parks. It can be a struggle to get there (walk) but once at the park, it's easier to walk around. Thanks!
- 2

Would like to see this trail finished with a pedestrian/bike bridge over the river to join other trails along 27.
- 3

Want to recognize city staff for trying to keep some trails clear on the 16/27/Connely "loop" in the winter.
- 4

Great job maintaining the paths and bridges in Hidden Valley Park. It's a great place to take a quick walk and exploring the creek.
- 5

New pedestrian crossing is great to gain access to trails from downtown area.
- 6

This trail provides great access to greenspace.
- 7

Yes
- 8

Trail sections in this part of savage are excellent. Quiet, scenic, away from traffic and well connected to main roads, parks, and other trails/sidewalks.
- 9

Thanks for the new cable guard rail on the East side of Lynn North of McColl. It'll help keep me & the dog off bumpers & windshield of the Northbound Lynn Ave. car traffic.
- 10

Great park, great trails.
- 11

Could use a lot more of these connectors to make walking/biking better options.

- 12

The newly paved trail is wonderful! Thank you! That being said, I love the idea of connecting this trail with the wood chip trail just south of the park that follows Eagle Creek.
- 13

i like the idea of using this abandoned railway for a future pathway that can connect Savage residents to businesses and jobs more efficiently while avoiding nightmare traffic circles.
- 14

Keep it gravel and the park undeveloped forever
- 15

Love the trails through this park!
- 16

Great trail connections!

Something I Don't Like

- 1

Bike path is too close to Hwy 42. Right on the curb. If you can't move the path away from the busy road, please add a guardrail.
- 2

no cross walk or light very dangerous pedestrian light crossing would be the answer
- 3

Please coordinate with Burnsville to create a safe bike connection between Burnsville Pkwy and the terrific new bike lanes along Hanrehan Lake Blvd, possibly via a short trail through Arbor Vista and Dufferin Park. Or alternatively, by making a bike path between Oakcrest and Camelot Rd. The goal is to avoid having to bike along the narrow, dangerous curve on Burnsville Pkwy just before the border with Savage.
- 4

100% agree. I repeatedly see pedestrians and bicyclists being forced into very dangerous situations here. It's a very short stretch of road but is an important artery to connect Savage and Burnsville. Also, important to link up to Murphy H park.
- 5

No sidewalks on a neighborhood street that cars go fast on
- 6

Too many drivers speed on Vernon Ave. Haven't seen much speed enforcement on Vernon Ave as in years past. The posted speed limit is 35 MPH & I think that's too high. Vernon Ave feeds 4 City Parks, Loftus, Trost, Glendale and Hidden Valley Parks. Connelly Parkway feeds only Community Park. But Connelly Parkway has a 30 MPH Speed Limit.
- 7

A trail or sidewalk between McColl and 123rd Street would provide safe access to the Savage Fen and the Savage Dog Park. Walking on Quentin Ave is dangerous.
- 8

dangerous pedestrian access under old RR on Quentin Ave. poor design for cars too.
- 9

Difficult pedestrian crossing of McColl Drive. Sidewalk is not accessible to bikes pedestrians on north side due to snowmobile trail in winter, requiring runners and walkers to cross dangerous traffic.
- 10

I also would love to feel like there is a safe way to cross the street at Taylor Drive and McColl. With children, dogs, or on bicycles crossing here is life-threatening
- 11

I see many people walking/biking on the highway because there is no sidewalk/trail in this area. Very unsafe. As the commercial area grows, it would be nice to make it more accessible.
- 12

No dedicated bike lanes!!!
- 13

No dedicated bike lanes!!
- 14

No dedicated bike lanes!!!
- 15

I realize this involves commitment from Credit River Township but we need safe passage to Cleary Lake from Savage. County Road 27 is a death trap for cyclists but there is no other efficient way to get to Cleary which opens up countless good county roads for riding.
- 16

Tere needs to be a pedestrian crossing here to cross MColl Drive - the new traffic circle to the west has caused a constant traffic flow so it is impossible to cross in this area
- 17

The metal posts and guard rail cable system will be a disaster if a cyclist runs into it. It would shred someone to pieces if the ran into it
- 18

There needs to be a safe pedestrian crossing here. No one stops for you.
- 19

There needs to be a safe pedestrian crossing here. No one stops for you.
- 20

There needs to be a trail or wide shoulder to get bikers to the Minnesota river trail! This section, along with the connection to Cleary are huge issues that isolate Savage from great connection trails
- 21

There is no connection along 13 to get a biker over to the Blackdog area. As with other areas, there are a number of missing connections to trails beyond Savage. This isolates Savage for avid bikers.
- 22

While I think that extending the bike and walking paths is important I believe that disrupting more of our natural habitat is a bad idea. If the paths are continued parallel along hwy 13 from co. Rd 42 to W. 125th I believe that this would connect all major west Savage paths together.
- 23

There needs to be a safe pedestrian crossing here. No one stops for you.
- 24

There needs to be a safe pedestrian crossing here. No one stops for you.
- 25

There currently are no sidewalks or walking paths to connect residents on Independence Avenue to either Shroeder's Acres or Eagle Creek parks. Traffic speeds remain high on this road despite the speed bumps. This makes for some dangerous situations for children/families trying to get to and from the parks.
- 26

The stretch of lynn with no sidewalk hinders walkability to downtown savage. The residents of dan patch trail have been frustrated about this for years.
- 27

A trail is needed here to connect the end of the trail at Hillside to River Oak drive and O'connell park.
- 28

Bike commuters want to get to work just as fast and safe as a car commuter. Savage planners need to be aware that dedicated bike lanes on busier roads like McColl, at grade, are safer, more efficient and cost less to the taxpayer than above grade pathways.
- 29

Please give us our sidewalks back in the winter. Sidewalks as snowmobile trails put pedestrians out in the street and is unsafe. Crossing 16 here to get to the non-snowmobile side (north side of 16) means running across the fast paced traffic. A runner or walker can't use a sidewalk on the south side of 16 to get from Vernon to the light by city hall (to cross these roads) because sidewalks leading to the lights are snowmobile trails.
- 30

Speed limit is much too high on this part of 154th as it approaches eastbound toward the entrance to the elementary school. At 50 mph the visibility of a pedestrian in the crosswalk is very limited. Lower the speed limit on this road please.
- 31

This sidewalk between Natchez and Glendale ends up unplowed in the winter and covered in the plow overthrow from 42. This creates a barrier to getting from Savage to Burnsville for a runner or pedestrian on the north side of 42.
- 32

East side sidewalk of Dakota Av is a snowmobile trail in the winter. This means walkers and runners have to run across Dakota Av to get to the non-snowmobile side of the road or run in the street on Dakota Av. Unsafe. Please give pedestrians their sidewalks back in the winter.

- 33

the river, just across the bridge. Remove posts from middle of trail also.
- 34

There needs to be a safe pedestrian crossing here. No one stops for you.
- 35

There needs to be a safe pedestrian crossing here. No one stops for you.
- 36

Bike lanes disappear when approaching the intersection with 42. Get some paint and let's fix this.
- 37

please fix sidewalk here, it floods in the spring then freezes making it a skating rink for runners and walkers. it's unsafe.
- 38

please fix sidewalk here, it floods in the spring and then freezes making it a skating rink for runners and walkers.
- 39

Trail ends here on west side of Lynn. it would be helpful and safer to runners and walkers to extend the sidewalk under the bridge like the other side of the street.
- 40

Need wider shoulders for bike trail so one can bile to downtown area from south Savage
- 41

This biking areas is dangerous with no shoulder as one bikes into downtown Savage. Need a major connector from South to North Savage
- 42

should have a safe and secure biking trail (widen trail on 42 for a major commuter bike route for east/west movement through the city
- 43

Need dedicated bike lanes on roads for commuting east/west through the city of Savage
- 44

There is no connection along 13 to get a biker over to the Shakopee and Burnsville areas. As with other areas, there are a number of missing connections to trails beyond Savage. Savage is isolated for bikes. I bike over >1500 miles per year so I know what I am talking about
- 45

I agree with all the other comments. this is a major commuting route for road and mtn biker (Murphy-Hanrehan). It narrows down at it curves around the corner and is very very dangerous. This road needs to updated ASAP
- 46

We have a number of people bike commuting to our company in Burnsville along this route and as others have stated, Burnsville Parkway is extremely dangerous here. Bike route in savage turns into one of the most dangerous sections of road possible for bikes and peds. in Burnsville.
- 47

North side of intersection needs bike and ped crossing too. This would be a good location for a bridge or tunnel in the future. Dangerous intersection for peds and bikes.
- 48

Lack of sidewalks lead us to divert into the residential neighborhoods for a safer bike ride to the farmers market. This also leads up to miss some valuable businesses in downtown.
- 49

Residents from the west side of Glendale get stuck here with the uncleared snowmobile path following the south bound lane. We must cross Glendale to access paved sidewalk which is dangerous since the speed limit is many times not obeyed from the northbound traffic coming down the hill.
- 50

The trail on the east side of Lynn from McColl to 127th (including the new cross walk to Hollywood Park) are great! However, the sidewalk/trail gap left from 127th to 126th is an obvious safety issue for pedestrians and bicyclists.
- 51

Vernon Ave becomes Vernon River during snow melts or heavy rain. If the snow melt refreezes in the winter the sidewalk becomes a long narrow skating rink.



PEDESTRIAN AND BICYCLE MASTER PLAN

Comments
Savage, Minnesota
02/01/2018 | 010318-000



- 18

I ride this road out to Cleary lake and this is one of the most dangerous sections of road because it narrows here and cars back up behind me as I head up the hill and around the corner. This stretch of road needs to be widened to provide a continuous and safe bike path to Murphy Hanrahan and out to Clear Lake.
- 19

Regarding Biking: although the stretch between 138th and Cleary is apparently not Savage's issue, this is by far the biggest issue I have for biking in the area. This section is very dangerous for bikers without a path or at
- 33

north side sidewalk of McColl Drive is a snowmobile trail in the winter pushing pedestrians out into the street. Unsafe.
- 34

East side of Dakota Av here is a snowmobile trail in the winter pushing pedestrians out into the street or making them cross to the other side of the road. Please give the sidewalks back to pedestrians.
- 35

Love the bike bridge across the river but there is a bit of a blind spot here on a downhill turn on the south side of
- 52

please fix sidewalk here. it floods in the spring and freezes making it dangerous for pedestrians.
- 53

The XING buttons don't work.
- 54

Bad intersection.
- 55

Pedestrians are in the road here because snowmobiles are on the sidewalk. runners and walkers can't get across to the other side of the road. please turn the sidewalks back to the pedestrians.

Make a Comment

- 1

Add trail along County Road 16 to Shakopee
- 2

Would like to see this great path extended behind the houses to the south to the bridge on Valley View.
- 3

Would like to see this path extended along the river to the NE and behind the houses all the way to Bridgewater. Adding this extension and my other comment on the northwest side makes a beautiful 2 mile loop around the Credit River.
- 4

This is bituminous and should be a Trail, not a sidewalk.
- 5

need cross walk with pedestrian crossing light
- 6

trail along credit river from Buffalo tap down town to 42
- 7

connect this to community park . straight west under or above 27(not across it)
- 8

Trail along credit river south to Co 16
- 9

There needs to be a connector between the SW corner of Hwy 13 & McColl Drive to this point. Currently when coming from the east on McColl you cross the south side of the intersection and have to go against traffic in an area with no pedestrian accomodations until you get to the water treatment plant driveway. Then you can go through the WTP lot to connect to get to the trail. Perhaps the best way to do this is a short section of trail east of the WTP to avoid the lot altogether.
- 10

Trails to and along the Minnesota River! We're a river town but have no easy river access.
- 11

Dirt trails along the Credit River
- 12

Trails along the bluffs
- 13

Need sidewalk and trails along county road 42
- 14

Need sidewalks and trails along county road 42
- 15

This is a sidewalk to no-where.
- 16

Would be great if there was a way to connect our neighborhood to the broader community without going out to CR-42. Something across the Credit River to the River Crossing neighborhood perhaps?
- 17

Creating a trail to make it easier to get here without having to bike/walk on 42/Dakota! We LOVE this park but tend to drive here first and then enjoy the paths.
- 18

The sidewalk on Vernon Ave, between Utica and McColl, is pretty rough in the Winter. I haven't found a worse sidewalk in the City. The sidewalk needs extra attention because there is almost no buffer between it and the road. Every time the Northbound Vernon Ave is plowed it pushes or blows snow onto the sidewalk. Every time. Not just one time after the snow event, every time a plow goes up Vernon Ave it covers the sidewalk with snow. This is why some folks walk in the street.
- 19

Although snowmobiles can be fun, if we want to emphasize fitness and walking/biking, we should not close city sidewalks in the winter for pedestrians.
- 20

We need a connecting trail to Cleary Lake park. There is no easy way to get there from south Savage by bike or walking.
- 21

Connect the new trail behind the pulte development north to 154th and beyond.
- 39

How about connecting the trail going around Schroeder's Acres Park to the trail around Eagle Creek Park? There is an trail outlet from Schroeder's Acres Park out to and across W 125th Street (between the houses of 9007 W 125th St and 8983 W 125th St), but it just stops about 40 feet south of W 125th Street. Let's extend this trail through the natural grassy lands and across Eagle Creek to Eagle Creek Park.
- 40

If making a bridge over 42 isn't a viable option perhaps a path/tunnel under 42 at the Credit River is a good alternative. It would also be kind of neat. This is a safety issue!!
- 41

Be nice to have a river crossing using the old railroad bridge or a new bridge. Would be much more direct than going west to 169 or east all the way to I-35. Be great fast direct connection towards the cities and would help give more people the option to commute to work within a realistic amount of time! Which would drop a 14 Mile commute to Best Buy HQ to a 7 Mile commute!
- 42

Completing a trail along MCColl between Foxberry Rd and 18 would be very nice, connecting to the pathway along 18.
- 43

Park access to this neighborhood is limited. Crossing the intersection at McColl and Taylor Drive is difficult and dangerous to bike/walk toward Savage community park. Would be nice to see some sort of pedestrian crossing at this location.
- 44

Trails along busy roads are convenient, yet more trails away from high traffic volume would add much to the quality of experience of walking biking and running Savage trails.
- 45

I like the new stoplight at CR 27 and South Park. Safety First! Thanks.
- 46

I can not enjoy walking along McColl as the traffic is too fast and with the curves I keep picturing someone jumping the curb and running me over. Trails somewhere with less traffic would be wonderful.
- 47

As this area is developed, I hope there are some sidewalks or trails so people can walk to the library without going up to McColl which is way too busy. Even if the area is cut up with cul de sacs, could there be a joining trail so the neighborhood is walkable?
- 48

Need more continuity of the trail/sidewalk system so people could walk or bike to Cub/Target, etc. We've tried biking the back roads but too many streets do not go through
- 49

It would be nice to have a bike/walking trail along the River to connect the new trail in Burnsville (Black Dog Rd) and Savage somehow? Maybe even go as far west towards the trail (MRT) in Shakopee 101 area ? That could potentially increase the ride from Chaska to Eagan/St Paul! :)
- 50

A pedestrian underpass across 154th Street near the elementary school would be awesome.
- 69

keep it gravel. forever.
- 70

If you build a trail then it needs to be maintained AND connected to something else eventually. Not sure what the plan is here along the Credit River but it makes little sense right now unless its connected to a larger network.
- 71

Its not in Savage, but Stagecoach is the connector through Savage to get to the Riverbottoms singletrack or other regional paved trails. When crossing 101 south bound on Stagecoach Road, the traffic signal is on the opposite side from traffic, leaving the cyclist, with having to ride against traffic flow on the wrong side of the road or, cross in the crosswalk again or make a sometimes dangerous choice to get on the right side of stagecoach
- 72

Dirt mountain bike trails in this huge park.
- 73

This intersection was safer for cyclists and pedestrians before the traffic circle was added. I avoid this route when riding with my children.
- 75

In the meantime until Scott County adds trails along this stretch of 27 (see another comment for details), there's a trail you can enter on the south side of 160th St near the intersection with Country Ln. This takes you down around Markley Lake and eventually connects to Welcome Ave, which can get you to a point on Eagle Creek just across from the NW trail entrance to the park. The sucky part is having to cross four lanes of Eagle Creek here without a light, so not a family-friendly solution.
- 77

I'd bike or walk to retailers more often if the shopping centers were actually laid out to safely accommodate cyclists and pedestrians, not just cars.
- 78

Bike racks AT the ELC building. I have to lock bike to wooden fence behind the ELC if I go there.
- 79

Should have access to MN river mountain bike trail and to Bloomington via the swing bridge. Would make commuting easier
- 80

We should have bike access from Downtown to the trail in Shakopee (runs along 101 by Valley fair). Could connect to the MN river MTN bike trail to cross at Ferry Bridge
- 81

Need bike trial or larger shoulder on both west bound and east bound County Road 42 so some one can bike west to connect with Prior Lake and Shakopee
- 82

Need to incorporate credit river into the bike and walking trail system
- 83

Perfect area for mountain bike trails on the bluffs as this area is developed
- 84

Co 42 needs a bike path!
- 85

I know this may be more of a city thing and not a trail but it would be nice to have more street lights along Dakota for the people that are walking/running/biking along this road now. Pedestrian and bike traffic has increased with all of the houses being built in this area and the school, and this road is very dimly lit at night.
- 86

Completing this trail connection from Canterbury Park up to Glendale Road seems like a natural gap to fill, to give a nice connection from the Hidden Valley Park area, towards the SE to Sunset Pond in Burnsville.



PEDESTRIAN AND BICYCLE MASTER PLAN

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- 22

Integrate trails in all new developments that connect to others outside the development. This should connect to the neighborhood on 154th street by the water tower
- 23

It would be nice to connect to eagle creek parkway from Mccoll somewhere in here if it's not private property
- 24

Dirt/hiking trails exist here already, develop more.
- 25

This trail confuses me. There is only one way to get to it and that's in the middle of it. Would be nice to have it connect up to the sidewalks on both ends or connect to a longer trail.
- 26

There is a short but nice bike trail that runs along 101 to shakopee - I access it at the little parking lot at crest ave and it would be great if we had a connector bike trail in savage. And overall, it would be great if we start adding miles to our trail system at a much lower cost by connecting with other regional trails and using them....
- 27

Have we decided where we will have a safe crossing at county 42? I know it was discussed years ago and the cost was very high, and I respect that. But 42 is a bit of a barrier at this point.
- 28

What happened to to trail along the bluff? We had secured some funding from a grant and hoped it would be underway by now. The concept was to have a trail in the wooded area and not along the busy road for an alternate experience to the train down county16
- 29

The wood chip trail is nice to bike and hike along. Can this trail be expanded further into to the natural space?
- 30

Repave this section of trail - too bumpy to bike or inline skate
- 31

Pedestrian/bike bridge is needed to cross 42 which is a huge barrier and is very dangerous. If the city wants to truly be pedestrian and bike friendly this is critical and without it, it will not feel like a safe place for walking, running, and biking. Currently it's not possible to get to the opposite side to access public transportation or trails and parks without putting ones life in grave danger!!
- 32

Please consider using the now defunct railway through Savage as a bike/pathway.
- 33

This would be a good place to designate a Hwy 42 bike crossing, it connects to the bike lane on Ottawa and has much less congestion than Glendale.
- 34

Walking across or biking across McColl at the round about is very dangerous. Cars are going fast and watching for vehicles entering - not pedestrians or bikers. However this is the only way to get to the downtown. What have other communities done to make roundabout crossing safer?
- 35

The (limited) sidewalks through Eagle Creek/Trout Run neighborhoods are nice for walking but not for biking as it's narrow and not meant for biking on. It would be great to add a bike lane on the road or a paved bike trail connecting to the few paths that are along 13. If Savage plans to work with other cities, PLEASE, PLEASE, PLEASE work with Shakopee to add a trail or paved shoulder along Stagecoach Road so the MN River trail (just north of 101) can safely be accessed via bike.
- 36

Extend the trail system throughout the Credit River Green Space Corridor. Existing trails are great, but consist of short segments and do not connect well to other trails. The Credit River is a great natural resource and an asset to the City but has poor access for residents. Extend trails from Bridgewater downstream to River Crossing, CR 42, Hidden Valley etc.
- 37

I would like to see more trails through this portion of the Credit River floodplain with numerous neighborhood access points.
- 38

Need better (anything) signage of trail locations and maps on the ground. think of the signs with trail maps
- 51

We don't have a kid friendly park in our development. Plus we need a trail that's connected to Cleary. Let's do this!
- 52

Please work with Shakopee to add a trail or paved shoulder along Stagecoach Road so the MN River trail (just north of 101) can safely be accessed via bike.
- 53

Pedestrians and cyclists take their life in their hands trying to cross anywhere near this traffic circle
- 54

The railway corridor would be an excellent route for a paved bike trail
- 55

All of McColl should have a bike lane added and the speed limit should be dropped to 35. This stretch is a death ride for a cyclist.
- 56

All of CR 27 needs a well paved and dedicated bike lane. It is really dangerous to ride on the shoulder right now past the Savage border.
- 57

This section of road is in dire need of a sidewalk to connect with Burnsville. The growing population is increasing the traffic which is making this road even more dangerous. Can Savage and Burnsville work together to build a sidewalk to make this section safer?
- 58

We are new to Savage and have not yet explored all the trails. Like most people, we want safe bike lanes along major roads, trails that connect to water, as well as other city/regional/county trails. A spectacular network of trails that offer commuting ease and short- and long-pleasure riding will only contribute to the beauty and community of this wonderful city and the health of her residents. Thank you for your hard work!
- 59

Please do not allow snowmobile trails to share the pedestrian paths. It is too dangerous to run in Savage during the winter.
- 60

Road upgrades on the Highway 13 frontage road and W 126th would provide a nice route to the Minnesota Valley Trail. I take this route quite often, crossing Highway 13, and taking the frontage road over to Stagecoach road and down to the Minnesota Valley trail head. The frontage road east of 13 and W 126th are in terrible shape and a bit of a treacherous ride.
- 61

Continue N. on Hwy 13 down the hill, route through the west side of Savage, and re-connect to to the paths in town to complete the circuit.
- 62

A path that cuts directly from Providence and goes right to savage community park would be great for walkability and alsoxfor kids who need to walk to Glendale
- 63

so if I want to go north from here from 132nd i have to pop a traffic island curb on 13. Would like to see a bike lane or path heading south on 13.
- 64

A connecting trail here would make O'Connell park much more accessable from Dufferin Dr.
- 65

Would be great to have a single-track mtb trail here behind the High School, nestled back and forth along the hillside. Could be a great partnership with isd719 , the City of Savage and local mountain bike school teams. Nearby municipalities in the south metro have funded mountain bike trails in this growing sport (Burnsville and Lakeville each have their own mtb trail.
- 66

No we don't need more dense housing in Savage to add to the congestion on roadways.
- 67

Great trails don't need to be paved. This area is a nice little gem for cyclists and could be expanded without impacting the area much.
- 68

unused park in Burnsville except for Basketball and seasonal hunting. Work with Burnsville to put a real trail through here to Judicial. Doesn't need to be paved folks, dirt /gravel is perfectly fine.
- 87

Extend the wood chip walking trail from Eagle Creek west tributary to and along the east Eagle Creek tributary to the current wood chip trail.
- 88

Great spot for a tunnel under hwy13 to interconnect bike and hiking trails
- 89

How about more snow removal on Vernon Ave Sidewalks? Just pushing it off the sidewalk lets it accumulate, melt and refreeze back onto the sidewalk.
- 90

There should be a sidewalk here
- 91

Priority on Quentin
- 92

This is a sidewalk gap
- 93

Trail gap
- 94

Add access point from Princteon Circle to trails
- 95

Complete the sidewalk here.
- 96

Use woodchips on the natural trails
- 97

Add connection North/South here.
- 98

Add trail connection between Joppa Ave and 147th here.
- 99

Add trail connection between Kipling and River Crossing.
- 100

Add connection North/South between River Oak Drive and Dufferin.
- 101

This is a sidewalk gap.
- 102

This is a sidewalk gap.
- 103

Add a crossing.
- 104

The sidewalk planned here is not needed.
- 105

Add two-lane bike/walk path.
- 106

This is a trail gap.
- 107

Keep the natural trails.
- 108

Street sweeping is needed more due to trucks.
- 109

Add bike lane to Stagecoach Road.
- 110

I know Bloomington would fight cars to the end. It would be nice to have the bridge for bikes and walking to connect to the trails on the Bloomington side along the river. It would also be nice if there was a way to get Cargill and some of the other companies along the river to allow or donate the land right along the river some of which is unusable to them anyways for a path along or close to the river. Maybe see if a trail could somehow skirt around their businesses with getting in the way.
- 111

I think this little trail would be nice to be paved even with a little 3 foot asphalt trail. The walking path gets overgrown early in the summer and sometimes really muddy in places. When the city has tried to maintain it there are big muddy ruts left from the bobcat and at times hard to get through. It would be a much more consistent and enjoyable trail if it were paved and easier to enjoy 12 months of the year! It might pay for itself without city going through there a few times a year!
- 112

I agree. Coming from Trout Run north of 16 and west of 13 after you cross 16 you turn west towards the water treatment plant and bike in the right turn lane of 16! A connector to the path that runs through the WTP is very much needed for safety.
- 113

You will never convince me that a bike lane on a street is safer than a dedicated bike path off the road. Cty 16 can not be made any more restricted than it already is. If the bike path does not change the lanes status on 16 that might be OK but it is a natural tendency for cars to slow down when there are bikes near them on open higher speed roads like this. I don't want the speed limit to change either. This could slow car traffic down and 16 is getting too busy for that.

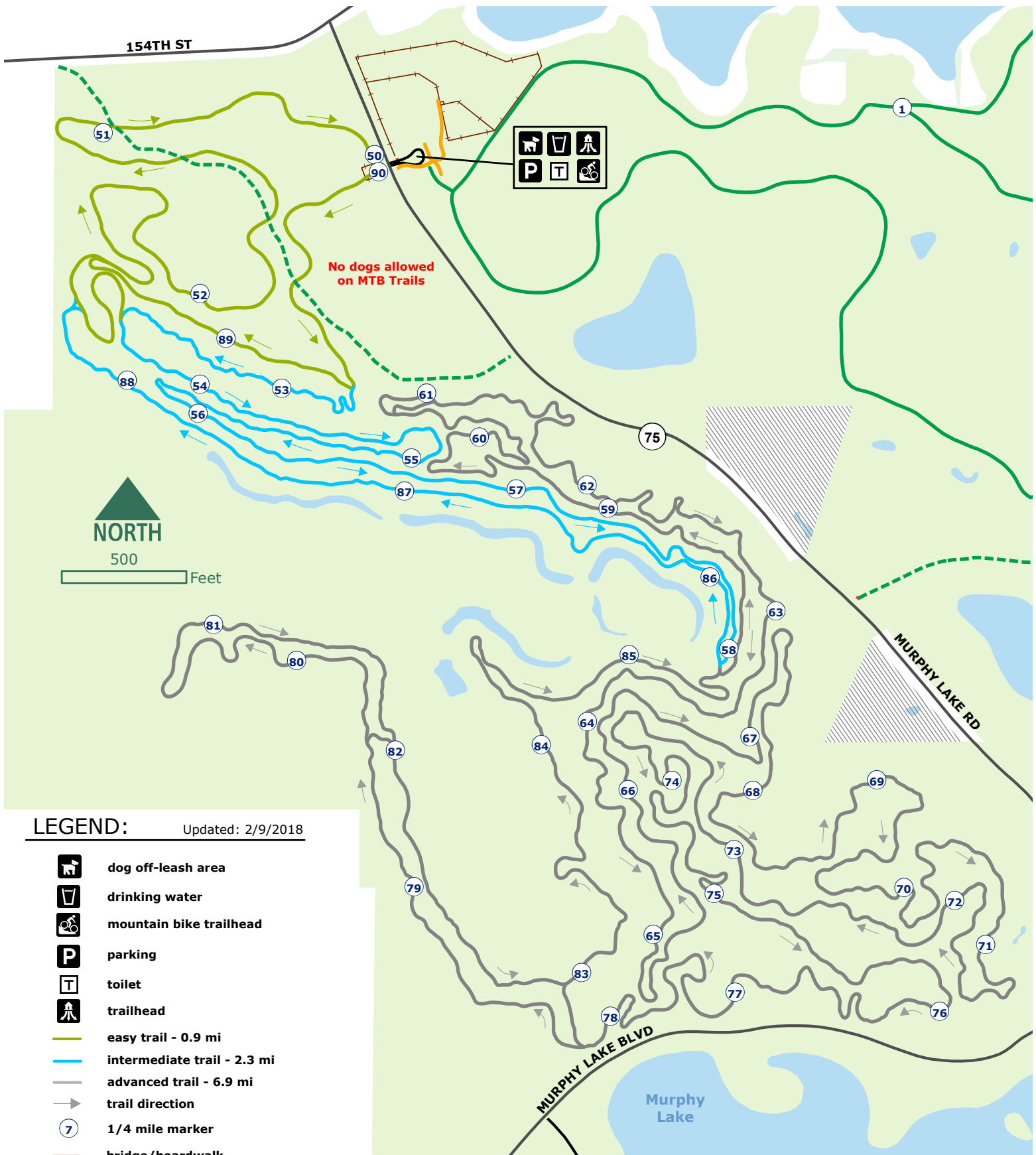


PEDESTRIAN AND BICYCLE MASTER PLAN

Comments
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LEGEND: Updated: 2/9/2018

- dog off-leash area
- drinking water
- mountain bike trailhead
- parking
- toilet
- trailhead
- easy trail - 0.9 mi
- intermediate trail - 2.3 mi
- advanced trail - 6.9 mi
- trail direction
- 1/4 mile marker
- bridge/boardwalk
- paved trail
- unpaved hike trail
- unpaved hike, horse trail
- fence
- road
- park boundary
- private property
- water body

MURPHY-HANREHAN SINGLETRACK TRAIL

Three Rivers
 PARK DISTRICT
 in partnership with

Scott
 County

threeriversparks.org

LEGEND: Updated: 2/9/2018

CLEARY LAKE REGIONAL PARK

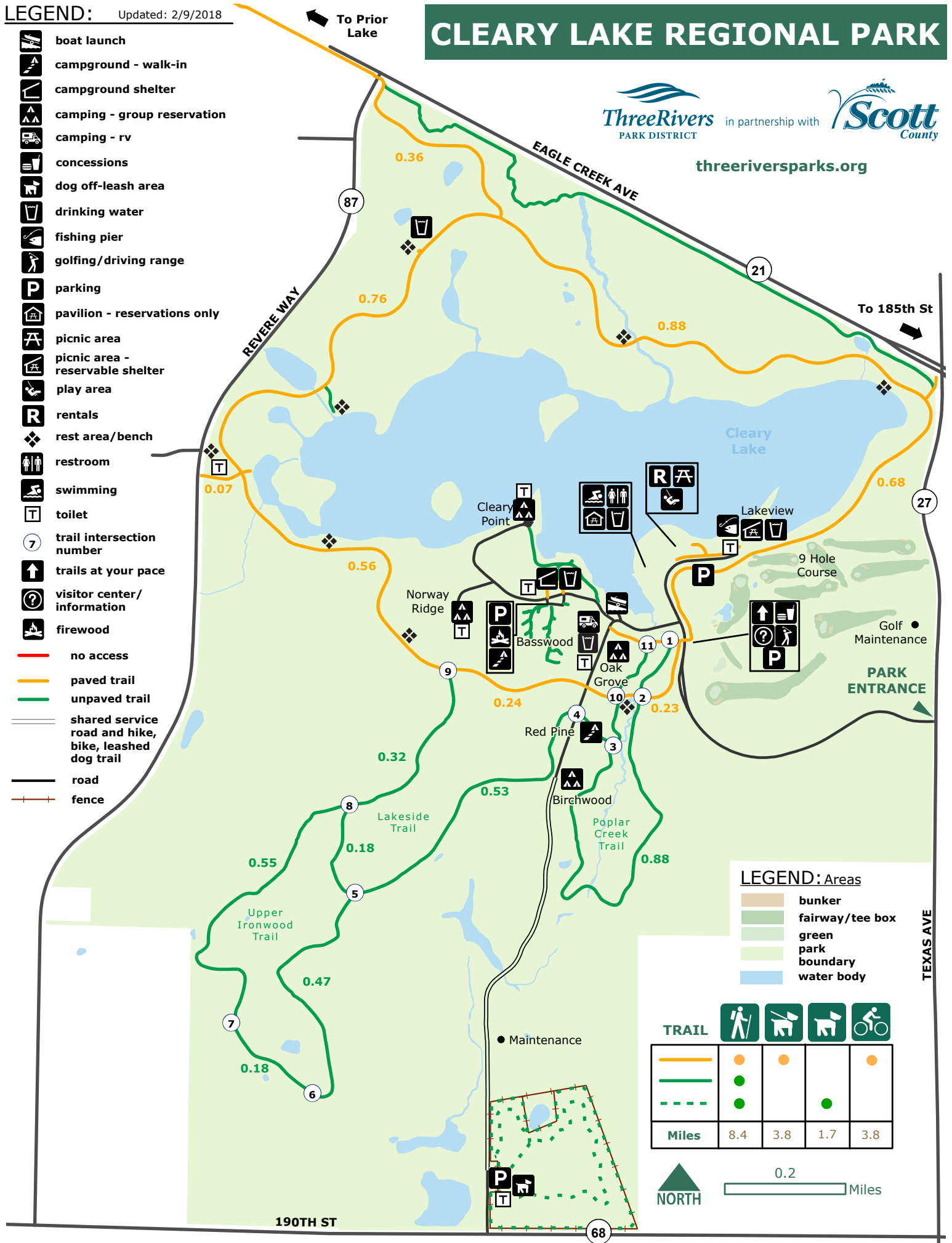
Three Rivers
PARK DISTRICT

in partnership with

Scott
County

threeriversparks.org

- boat launch
- campground - walk-in
- campground shelter
- camping - group reservation
- camping - rv
- concessions
- dog off-leash area
- drinking water
- fishing pier
- golfing/driving range
- parking
- pavilion - reservations only
- picnic area
- picnic area - reservable shelter
- play area
- rentals
- rest area/bench
- restroom
- swimming
- toilet
- trail intersection number
- trails at your pace
- visitor center/information
- firewood
- no access
- paved trail
- unpaved trail
- shared service road and hike, bike, leashed dog trail
- road
- fence



LEGEND: Areas

- bunker
- fairway/tee box
- green
- park boundary
- water body

TRAIL			
Miles	8.4	3.8	1.7



0.2
Miles

TEXAS AVE