PATHWAY MASTER PLAN

City of Roseville, Minnesota

Updated 2017 - DRAFT

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Developed for:
The Roseville City Council
and its Citizenry

Developed by:
Roseville Public Works, Environment
and Transportation Commission
and the
City of Roseville

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Introduction

In the City of Roseville, pathways are defined as facilities that serve non-motorized users (pedestrians, bicyclists, in-line skaters, etc.) commonly within the public right-of-way. There are many different types of pathways throughout the city as further described in this document, and they can be both on-road (i.e., shoulder, bike lane) or off-road (i.e., sidewalks, trails, footpaths). The development of a pathway network in the City of Roseville, as well as, in the entire metropolitan area continues to have the support of Roseville residents. This desired network of pathways is essential in moving people to and from various destinations as well as providing additional recreational opportunities. The City currently has about 114 miles of pathways that provide some alternative to driving but are mostly used as recreational paths. This is a good start but if we as a City want to continue to provide a desirable place to live and work we need to pursue the construction of pathways in an organized and progressive manner.

In 1992, the City invited residents to participate in *Vista 2000* -- a series of forums designed to bring together citizens, city officials and business, education and civic groups to create a vision for our community's future. One of the outcomes of *Vista 2000* was the creation of the Roseville Pathway Master Plan (1997). This plan was instrumental in the development of almost 30 miles of pathways over the last 20 years.

In 2006, the City Council spearheaded a community visioning process entitled: Imagine Roseville 2025. The results of the visioning process demonstrated that the community continues to support the development of a more extensive pathways system that will link the current pathways system to itself, the neighboring community's paths, and the regional system creating a network that will function in the same fashion as our vehicular transportation system.

In 2017, the City initiated an update of its comprehensive plan to guide direction of the city in policy implementation and infrastructure efforts through the 2040 planning horizon. The following transportation goals were developed for the 2040 Comprehensive Plan:

City of Roseville 2040 Transportation Goals

1. Coordinate transportation decisions with other government entities and coordinate planning efforts to ensure connectivity of regional routes.
2. Create a sustainable transportation network by encouraging more efficient use of existing roadways and limiting the need for future roadway expansion.
3. Create a safe and efficient roadway network, able to accommodate the existing and projected demand for automobile capacity and to reduce roadway congestion.
4. Promote the use of transit as a reasonable alternative to driving automobiles during both congested and non-congested time periods through land-use and transportation decisions.
5. Encourage the use of non-motorized transportation by providing and supporting development of a high-quality network of both off-road and on-road pathways, and ensure that bicycle and pedestrian routes are safe, efficient and attractive.

During the public involvement process for the 2040 Comprehensive Plan, continued pathway development and resident access to a safe and connected bicycle and pedestrian system continued to be a common theme.

This Pathway Master Plan is an update of the 2008 plan. The intent of this document is to provide guidance for the future development of pathways in the City of Roseville and to build upon current and previous planning efforts intended to improve and enhance the City's pathway system.

Purpose

Imagine every Roseville resident being within short walking distance of a pathway network that links them to numerous local and metro-wide destinations. Places like; schools, libraries, parks, stores, friends or work could be easily accessed just getting on the pathway network and walking, biking or skating there. A successful network would mean that people living in the Langton Lake neighborhood could safely walk or bike to Rosedale for lunch and a movie and then over to HarMar to pick up some new books. A student from the Lake Owasso area could bike to morning class at the University of Minnesota. Someone who's out for some exercise could bike around Bennett Lake on their way to Lake McCarrons, then off to the Gateway Trail to explore the northeast suburbs. Or a homeowner near Lake Josephine could bike to their job in downtown Minneapolis. The opportunities are limitless if we develop a safe network of pathways that connect to our neighboring communities.

Pathways are not a new concept, they are found throughout the metropolitan area. Numerous communities are developing pathways with every new development or redevelopment. Roseville alone has about 114 miles of on and off-road pathways. The sidewalk, once a lost idea, has made its way back into suburban development because it connects neighborhoods creating a healthier and more livable community.

The need is for a congruent system that links the existing pathways with each other creating a grid not unlike the street network. The goal is to provide a safe alternative to the automobile that can provide access as conveniently and efficiently as that allowed for the automobile. Every street within the City should have a facility that provides safe travel for pedestrians, cyclists and in-line skaters, whether it's a shared on-road facility or separated off-road facility.

The purpose of this document, the Roseville Pathway Master Plan, is to provide a set of guidelines for use in the development of a pathway network for our community. These guidelines provide policies and standards for the planning, design, construction, maintenance, promotion and regulation of the community's pathway facilities. This plan is not intended to define interior park paths, those will be defined on an individual basis as the parks are planned and developed, although, the guidelines will provide some of the necessary elements for proper design and development. The recommendations provided in this plan focus not only on the physical facilities, but also on education and enforcement as important components of a general program to promote safe pathway use. Once the master plan is adopted as part of the Roseville Comprehensive Plan it will serve as a planning

tool to assist the City Council on decisions regarding pathway issues.

Benefits

There are many factors that make up the perceived quality of life for a community; education, diverse recreation opportunities, strong economy, clean and healthy environment and convenient transportation are just a few. A successful pathway network can help make a community a better place to live, work, play or visit by improving the quality of life. Creating places for pedestrians and bicyclists means more than just special trails, though those might certainly be an important part of an overall plan. Creating an active community environment means taking a look at the broader scope of where there are, and aren't, opportunities to safely connect to destinations. It involves land use design, retrofitting the transportation infrastructure, funding and much more.

Of all the benefits that pathways can provide for a community, the most obvious are recreation and social. A growing urban population with increasing amounts of leisure time, combined with an overall surge in health consciousness, has led to an increasing demand for outdoor activities such as jogging, walking, biking and in-line skating.

Encouraging the development and use of alternative modes of transportation can benefit the community as well as the individual. Some benefits are:

- Safety
  - Pathways provide people, young and old, a designated space for accessing area destinations.
  - Pathways create safe alternatives to the school-busing program.
  - Pathways direct people to safe street crossings.

- Social
  - Pathways promote strong neighborhood connections creating a more livable community.
  - A pathways network can provide access and mobility to users of any age or ability.

- Economic
  - Bicycling and in-line skating, as well as walking, are an affordable and low maintenance alternative to automobile use.
  - Pathways, because of their size and construction, are less costly to develop and maintain than roadways.
  - Surveys have indicated that the value of a home goes up an average of 6% as a result of its close proximity to a trail.

- Transportation
  - A pathways system provides an increased convenience for non-motorized transportation to access local and regional destinations.
  - Pathway use, as an alternative, assists in the relief of roadway congestion and frees up parking spaces.

- Pathways provide another level of service in the desired multi-modal transportation system by providing connections to transit.

❖ Health
- Users of pathways, whether they walk, bike or in-line skate, improve their physical fitness and reduce personal stress.
- Pathway trips, when utilitarian, add fitness into one's daily routine.

❖ Environmental
- Using pathways as an alternative to motorized vehicles reduces air and noise pollution.
- Bicycling and in-line skating are energy efficient.
- Pathway use does not consume fossil fuels.

Process

Alongside the development of the 2040 Comprehensive Plan Update and the corresponding 2040 Transportation Plan Update, the Public Works, Environment, and Transportation Commission (PWETC) led the update of the Pathway Master Plan. Over the course of three PWTEC meetings, the PWETC discussed the current plan, reviewed and identified modifications to the policies and standards, discussed remaining pathway gaps, and provided an updated scoring and ranking criteria process in order to ensure a quantified scoring system for preferred pathway segments. City staff's role was to provide support and guidance by setting up meetings, gathering information, answering questions, editing the plan, and otherwise assisting the PWETC as needed.

Background

History of Roseville's Pathways

Trail development in Roseville started during the early 1970s with a small loop in Sandcastle Park which led to the construction of the very popular Central Park system, the 1995 construction of the County Road C pathway, and the 1997 expansion of the Acorn Park trails. In 1975, a comprehensive plan for trails was developed similar to the network that is being proposed with this document. The desire was to have an integrated system of paths that connected residents to area parks. The intent was mainly recreational.

The City's first pathway plan created a surge of development in the 1970s locating pathways mainly in the parks. City code was changed later to dictate that developers were responsible for providing pedestrian accommodations to their new facility, so sidewalks started to sprout up in commercial and industrial areas. Outside funding sources became more available in the 1980s, which also increased

the development of pathways including a growing interest in basic pathway facilities for bike commuters.

As a follow-up to Vista 2000, on September 11, 1995 the City Council appointed a volunteer advisory committee to work with staff to develop a comprehensive pathway master plan. The advisory committee was made up of fourteen Roseville residents and three staff members. This plan was approved by City Council in 1997 and updated in 2003. The main focus of the 2003 update was to re-prioritize the list of pathway project that were identified within the 1997 plan, eliminating the ones that had been constructed and creating new priorities. A similar process occurred in 2008 as part of the last Pathways Master Plan Update.

Current Conditions

Demographics

The 2015 American Community Survey (a five-year average of general population characteristics) indicates that Roseville has a stable population; this is mainly due to limited developable land. Some additional demographic information is provided below:

- Roseville's population was 33,690 in 2000. In 2015, the population was 34,948. This is approximately an increase of four percent since 2000.
- The City's forecasted 2040 population is expected to remain near current levels.
- The percent of the population over the age of 50 has continued to increase. However, Roseville is seeing an increase in younger residents and families as the percentage of residents in the 20 to 34 age group has also increased between 2000 and 2015.
- The overall age of Roseville is notably older than the county and the region. The 2015 median age of Roseville's population was 40.8 years. This compares with 34.6 years for Ramsey County and 36.9 years for the region.
- The aging resident stability indicates that Roseville is a desirable place to live and most are staying in the community.

The data indicates that seniors and empty nesters occupy most of the households. These demographics define the need for the creation of a pathway network that allows seniors the means to exercise and make short utilitarian trips.

The fact that the city is nearly developed also indicates that pathway construction and location will be somewhat restricted due to previously defined corridors and limited space.

Land Use

Roseville is virtually 100% developed. Origins, destinations and travel routes are well established. Understanding and defining land use is critical to pathways development in that these destination points are where people want to walk or bike - areas such as, major civic buildings, recreational and cultural facilities and shopping areas. See Attachment 1 for Existing Land Use Map.

Transportation System

With Roseville being completely developed, the transportation system and travel routes are well established. Because of its proximity to the core cities and its age, Roseville's development patterns have been mainly a continuation of the core grid. The major through traffic corridors that carry the bulk of the vehicles are laid out with half-mile spacing. These arterial roads are designed to carry the majority of the traffic and do it quite well. For the same reasons they also serve well as corridors for non-motorized transportation, providing commuter cyclists with an efficient means to their destination be it work, school or the store. But in the past they had not been designed to accommodate bicycle and pedestrian traffic thus making most of them dangerous for such travel due to the domination of vehicular traffic.

1) Roadways (See Attachment 2 for Roadway Functional Classification Map)

a) MNDOT: Major high volume roads, including Snelling, Interstate 35W, and Highway 36.
b) County: High volume roads that make up the 1/2 mile roadway grid pattern in Roseville.
c) City: Lower volume neighborhood streets and collectors.

2) Transit (See Attachment 3 for Transit Service Map)

Ninety percent of the City's population lives within a 1/2 mile of a bus route. Here is a brief description of the transit system that serves Roseville:

a) Transit Centers: Rosedale & Little Canada (Rice Street at Little Canada Road)
b) Park and Rides: Roseville Skating Center, Grace Church, & I-35W and County Road C
c) High-Frequency bus service: The A-Line provides bus rapid transit (BRT) high-frequency service every 15 minutes or better along Snelling Avenue from the Rosedale Transit Center south into St. Paul and ending at 46th Street Green Line light rail transit (LRT) station in Minneapolis.
d) Fixed route bus service: Metropolitan Council provides 16 fixed routes.
e) Non-fixed routes: There are transit options offering door to door service at reasonable rates. Each program has eligibility requirements. These services are provided by Metro Mobility and Roseville Area Senior Program.

3) Pathways (See Attachment 4 for Existing Pathways Map)

The City of Roseville currently has approximately 114 miles of both on and off-road pathways.

a) County: There are some on-road striped shoulders that meet the minimum standards as stated in the definitions. There are approximately 29 miles of on-road pathways.
b) State: Currently there are no State pathway facilities in Roseville. The closest facility is the Gateway Trail south and east of the City.
c) City: This system consists of the park interior pathway system and some connecting routes between destinations along major roads. There are approximately 81 miles of city owned and maintained off-road sidewalk and trail pathway facilities.

Described below are the major paths that make up the majority of the City's existing pathway system.

- <u>Central Park Pathways</u>
  The pathway system in Central Park has always been popular because of its proximity to

attractive and diverse natural amenities, its connection to numerous recreational areas and its size, which provides multiple access points and lengthy paved paths. The Central Park paths are heavily used and provide a very good trail experience for recreational users and a good thoroughfare for utilitarian users.

- County Road C Pathway
  The pathway in the County Road C corridor was constructed in 1995 with funding assistance from ISTEA. This path provides an essential central spine through the City, connecting users to a number of City amenities like commercial/retail centers, Central Park, Acorn Park, City Hall and the Lexington Avenue pathway.

- County Road B2 Pathway
  This off-road trail provides access from the Lexington Avenue trail through the Rosedale Mall shopping area. It was expanded, using federal funds, in 2005 to extend from Rosedale to the west city boundary where it connects up to the Minneapolis Diagonal Trail. This corridor is a major connector for students within the walking area for Roseville Area Schools, providing connections to Roseville High School, Parkview Elementary, and Roseville Middle School.

- County Road B Pathway
  This corridor consists mainly of off-road concrete sidewalks providing access to and from residential areas, HarMar shopping area and Lexington Avenue pathway. This sidewalk, from Rice Street all the way to Cleveland Avenue, provides an east/west pedestrian corridor.

- Dale Street Pathway
  This corridor is mainly an off-road bituminous pathway connecting County Road C to Larpenteur Avenue. This pathway briefly merges with the Roselawn/ Reservoir Woods Trail at Roselawn. The pathway was identified in the 1997 plan and constructed in 2000 using Federal funds. The segment of Dale Street from Roselawn to Larpenteur does not have an off-road pathway. The connection to Larpenteur Avenue is achieved through Reservoir Woods Park.

- Larpenteur Avenue Sidewalk
  Four segments of this sidewalk have been constructed along Larpenteur Avenue since the development of the 1997 plan. The segments are Hamline to Oxford (2000), Galtier to Rice Street (2001) and Oxford to Reservoir Woods (2003). The segment of Larpenteur between Reservoir Woods Park and Galtier was completed in 2017.

- Lexington Avenue Pathway
  This is the main north/south spine of the City. The corridor consists of both bituminous path and concrete sidewalk running from Larpenteur Avenue north through Roseville and into Shoreview. Shoreview's development of this pathway corridor provides a wonderful

opportunity to create a regional north/south link.

- Roselawn/ Reservoir Woods/ McCarrons Pathway
  This off-road trail was identified in the 1997 plan and constructed in 2000 using Federal funds. It follows Roselawn from Lexington Avenue through Reservoir Woods Park under Dale Street to McCarrons Blvd. This pathway then continues along both North and South McCarrons Blvd to connect to Rice Street.

- Rice Street Pathway
  This is an important north/south link from Roseville to St. Paul. The corridor has a bituminous path of varying width and condition. This is a critical feeder to the Trout Brook County Trail at McCarrons Park. The Trout Brook Trail connects to the Gateway State Trail.

4) User Groups

Users differ widely in their means of travel, ability and preference for travel environment. Some will place importance on their ability to get from one place to another, keeping their trip time short and not concerning themselves with the conditions around them. Others will favor traveling in a pleasant environment, even going out of their way to experience scenic and natural amenities. This plan for a linked pathway network will accommodate all user groups in some capacity. The major types of users are:

a) Commuter Bicyclists – desire to travel safely at higher speeds with minimal stops.
b) Recreational Bicyclists – desire a safe and scenic corridor with occasional rest areas
c) Pedestrians - Walkers, joggers, students, strollers, in-line skaters, skate boarders, people with disabilities, young bicyclists and tri-cyclists – desire a smooth surface, a safe facility, and scenic corridor
d) Cross-country skiers, snowshoers – desire a natural, scenic corridor, groomed snow
e) Skate-boarders – desire a smooth and often challenging surface

Pathway Types

On-Road Pathways

On-road paths are a paved portion of the roadway that provides space for the use of bicycle and some limited pedestrian activities. See Attachment 4 for Existing Pathways Map.

1) **Bike Route:** A shared right of way located on roadways designated with appropriate signage to encourage bicycle use and connectivity. (none in Roseville)
2) **Bike Lane:** A bike lane is a portion of the roadway or shoulder designated for exclusive or preferential use by people using bicycles. Bicycle lanes are distinguished from the portion of the roadway or shoulder used for motor vehicle traffic by striping, marking, or other similar techniques. (none in Roseville)
3) **Striped Shoulder:** A portion of the edge of a paved road surface that is contiguous with the

road surface and separated by striping at least 4 feet wide. (Approximately 29 miles)

4) **Shared lane:** Low traffic roads that have no additional space provided for bicyclists or pedestrians but that can be shared between automobiles, bicyclists, and pedestrians because of low traffic volumes and localized activity. Shared lanes are not designated as pathways although they do provide good access routes to other pathways.

Off-Road Pathways

While a community's streets and roadways typically provide the best means of accessing a variety of destinations by bicycle, off-road pathways can enhance the primary transportation system. Pathways that are separated from the motor vehicle traffic can be excellent transportation routes for bicyclists and pedestrians, especially users not comfortable with riding alongside vehicle traffic, and in many instances, can provide pathway users with linkages not available to motor vehicles.

5) **Trail** An off-road pathway that is generally 6-12 feet wide and has a paved bituminous or similar hard surface. Trails are typically located within dedicated right of way, within road right of way separated by a curb and or boulevard, or within parks. The surface type and width accommodate multiple users, including pedestrians, bicyclists, and in-line skaters. (Approximately 36 miles)

6) **Sidewalk** Concrete sidewalks, usually within the road right of way, generally 4-6 feet wide and running parallel to the road, intended for use by pedestrians. (Approximately 45 miles)

7) **Foot Path** Wood chip trails, ag-lime trails, and turf trails are not considered part of the pathway network because they are exclusive to parks. This document is not about park pathways. They are mentioned for inventory purposes only. (Approximately 2 miles)

8) **Other** Boardwalks are not considered part of the pathway network because they are exclusive to parks. This document is not about park pathways. They are mentioned for inventory purposes only. (Approximately 1 mile)

Supplemental Facilities

Bicycle and pedestrian facilities include more than just the paths themselves. Secure and appropriate bicycle parking and locker facilities, comprehensive maps of Roseville's pathway network, mass transit integration, rest areas, and trailheads are key components of a complete pathway network. Roseville has few supplemental facilities for pathway users. They consist mostly of:

A) Bicycle parking and lockers
- bike racks of obsolete design that are sporadically placed in some parks and public buildings
- occasional bike racks located at commercial buildings
- few if any, bike lockers

- current city code does not address the issues of bicycle parking

B) Pathways Map
- comprehensive pathways map showing all types of facilities within the City
- partnering with Active Living Ramsey County on comprehensive County pathway mapping

C) Trail Heads and Rest Area
- utilizes existing parks w/ restrooms, picnic areas, recreational areas, drinking fountains
- need intermittent rest stops with benches between destinations

D) Transit Accommodations
- abundant transit opportunities
- limited and often unsafe pedestrian access to transit stops and park and rides
- bus shelters at bus stops along high traffic roads
- bus benches at many bus stops

Current Operation & Maintenance Practices

Off-Road Pathways
The Parks and Recreation Department and its maintenance staff has the responsibility of making sure routine maintenance operations are completed. On occasion they will request assistance from the street maintenance staff.

Listed below are the maintenance operations performed for the City's off-road pathways.

- Plowing: Remove any accumulation promptly and continuously until cleared. Accumulation of two inches or more shall be removed within 24 hrs.
- Sanding: Sand any time ice or snow adheres to the pathway.
- Sweeping: Sweep three times annually, spring, summer and fall, or when safety is of concern.
- Sealing/ Patching: Fill cracks or holes as they occur.

On-Road Pathways
The Public Works Department and its maintenance staff are responsible for the maintenance of the on-road pathway facilities on City of Roseville streets. Listed below are the maintenance operations performed for the City's on-road pathways.

- Plowing: When there is an accumulation of two inches or more of snow it will be removed within 24 hrs.
- Ice control: apply ice control when ice or snow adheres to the pathway.
- Sweeping: Sweep three times annually, spring, summer and fall, or when safety is of concern.
- Sealing/ Patching: Fill cracks or holes as they occur.

On-Road pathways located on County Roads are maintained by Ramsey County.

Trail Management Program

Since 1999 the Public Works Department has had the responsibility to implement a long-term reconstruction and major maintenance program. The Trails Management Program (TMP) is modeled after the Pavement Management Program and consists of: Inspection/Evaluation, Maintenance, Sequential Planning and Financial Planning. The TMP utilizes state of the art pavement tools to help identify and prioritize pathway maintenance and rehabilitation. All of the pathways are broken down into segments that are surveyed approximately every 5 years and actual pavement distresses are measured and entered into a computer database. The measured distresses are used to determine the pavement condition index (PCI). The PCI is a numerical rating between 100, a new pavement, and 0, a completely failed pavement. This methodology was originally developed by the US Army Corps of Engineers and later revised by the Minnesota Local Road Research Board. It has become a standard method to evaluate pavement condition. A computer program that utilizes pavement research findings to predict the degradation of pavement with time then analyzes the pathway data. The rate of degradation has been calibrated to match our actual experience. In addition, the program allows us to model different maintenance strategies to gauge their impact on the overall system and budget. The program is quite flexible and allows us complete discretion in choosing the most appropriate maintenance technique.

As of the 2017 PCI survey, the average PCI rating for bituminous pathways was 62. The average PCI rating for concrete pathways was 89.

Issues

Over the last two decades, the City has continued to expand and enhance the pathway system. But it still lacks some important elements that will meet the needs of its users over the next two decades. These are the types of elements that come with time and public support and demand for a complete network. Periodic updates of this master plan is an important step in identifying and monitoring issues that can provide the City with a complete pathway network consistent with current demands and anticipated future needs. The following is an updated list of issues relevant to Roseville.

A) Safety

- Provide transportation facilities for all ages and abilities (children, senior citizens, people with disabilities, pedestrians, and bicyclists).
- Improve the ability to safely travel from one location to the next.

B) Connectivity

- Use of the pathway system for transportation-related trips as an alternative to the automobile.
- Enhance access to transit service and stops, and especially the A-Line BRT stations along Snelling Avenue.
- Provide linkages between major destinations and to the rest of the metropolitan area.
- Connecting to regional bikeways and the regional trail network.
- The continuation of bikeways into Roseville being developed by the City of St. Paul and Ramsey County along major north-south roadways including Rice Street, Dale Street, Lexington Avenue, and Cleveland Avenue.
- Provide neighborhood access to the City's pathway system.
- Complete pathway connections to City parks.
- Support connections to neighboring community's pathways.
- Provide pathway facilities along regional transportation corridors.
- Overcome barriers that deter pathway use:
  - Highway 36, Snelling Avenue, Interstate 35W, arterials,
  - Narrow bridge decks and underpasses,
  - Poorly defined crosswalks at intersections, and
  - Major intersections that have high traffic volumes and deter pedestrian activity.

C) Maintenance

- Maintain funding for equipment and personnel to support the City's pathway system.
- Meet the needs of a demanding traveling public during all four-seasons.
- Continue to preserve the current pathway facilities.

D) Education and Promotion

- Promote the pathway system using signage, maps, and on-line resources to increase pathways use and build public support.
- Continue to update the Pathway Master Plan and monitor its progress.
- Public and stakeholder engagement in the development of new pathways.

Policies and Standards

The policies (bold) and standards were developed to guide the City in the development of Roseville's pathway network. They are detailed statements that aid in the resolution of the previously defined pathway issues. The intent of this section is to define the minimum standards for pathway facilities in Roseville. In certain instances it may be necessary to increase the standards in order to provide a safe and efficient facility for the community. *Standards that were left undefined in this document are defined by MNDOT pathway guidelines.*

The various types of pathways include, but may not be limited to the following:

Bicycle Lane: *A portion of a roadway designed for exclusive use by people using bicycles. Bike lanes are distinguished from the portion of the roadway used for motor vehicle traffic by physical barrier or striping and pavement markings. The widths of these lanes vary between 5-10 feet, depending on speed and Average Daily Traffic on the road.*

Shared Lane: *Any roadway upon which a bicycle lane is not designated and which may be legally used by bicycles whether or not such facility is specifically designated as a bikeway. The standard driving lane is to be shared between vehicles and light traffic.*

Wide Outside Lane: *Any roadway upon which a bicycle lane is not designated and which may be legally used by bicycles whether or not such facility is specifically designated as a bikeway. A widened outside driving lane, 14 feet or greater, is to be shared between vehicles and bicycles.*

Trail: *An off-road pathway that is 8-12 feet wide that is generally shared use, designed for the use of bicycles, in-line skaters and pedestrians.*

Sidewalk: *An off-road pathway that is 6-8 feet wide that is generally designed for pedestrian use, although state law does allow the use of bicycles on these facilities outside of defined business districts.*

Striped Shoulder: *A portion at the edge of a paved road surface that is contiguous with the road surface and separated by striping at least 4 feet wide.*

LOCATION

1. **Inventory and acquire rights-of-way that have become available.**
   - 1.1. Where possible use available rights-of-way first.
   - 1.2. Use shared rights-of-way second.
   - 1.3. Purchase private rights-of-way last.
   - 1.4. Sharing pathway rights-of-way with underground utilities will be allowed as long as there is no interference with the function of the pathway.

2. Provide pathway facilities along all roads.

2.1. Develop a pathway along all arterial roads where equal alternate parallel routes are not available. For example, an adjacent parallel trail located within park boundaries but offset from the roadway corridor.

2.2. Strive to complete pathways along arterial roads and regional trail corridors on both sides of the roadway.

2.3. For standalone pathway projects, prioritize completing pathways along roadways where no pathway exists prior to completing pathways along both sides of the roadway.

2.4. As part of road reconstruction projects, explore the feasibility of adding or upgrading pathway facilities (both on-road and off-road as appropriate).

2.5. Pathways parallel to roads are preferred in zoned residential areas to ensure continuity of design and minimize overall impact to property.

2.6. Develop pathways using the following recommended standards as guidelines:

Pathway Design Selection for Urban (curb and gutter) cross section roads							
Motor Vehicle ADT (2 lane)		<500	500-1000	1,000-2,000	2,000-5,000	5,000-10,000	>10,000
Motor Vehicle ADT (4 lane)		N/A	N/A	2,000-4,000	4,000-10,000	10,000-20,000	>20,000
Motor Vehicle Speed	25 mph	SL	WOL	WOL	WOL	BL = 5 ft or T = 8 ft	N/A
	30 mph	SL w/ sign	WOL	BL = 5 ft or T = 8 ft	BL = 5 ft or T = 8 ft	BL = 6 ft or T = 8 ft	BL = 6 ft or T = 8 ft
	35-40 mph	WOL	BL = 5 ft	BL = 5 ft or T = 8 ft	BL = 6 ft or T = 8 ft	BL = 6 ft or T = 8 ft	BL = 6 ft or SS = 8 ft
	45 mph and greater	BL = 5 ft	BL = 5 ft	BL = 6 ft or T = 8 ft	BL = 6 ft or T = 8 ft	BL = 6 ft or SS = 8 ft	T or SS = 10 ft

BL = Bicycle Lane, SL = Shared Lane, WOL = Wide Outside Lane, T = Trail, SS = Striped Shoulder
ADT = Average Daily Traffic

Pathway Design Selection for Rural (shoulder and ditch) cross section roads							
Motor Vehicle ADT (2 lane)		<500	500-1000	1,000-2,000	2,000-5,000	5,000-10,000	>10,000
Motor Vehicle ADT (4 lane)		N/A	N/A	2,000-4,000	4,000-10,000	10,000-20,000	>20,000
Motor Vehicle Speed	25 mph	SS = 4 ft or SL	SS = 4 ft or SL	SS = 4 ft or WOL or T = 8 ft	SS = 4 ft or T = 8 ft	SS = 4 ft or T = 8 ft	N/A
	30 mph	SS = 4 ft or SL	SS = 4 ft or WOL	SS = 4 ft or T = 8 ft	SS = 4 ft or T = 8 ft	SS = 6 ft or T = 8 ft	SS = 6 ft or T = 8 ft
	35-40 mph	SS = 4 ft or SL	SS = 4 ft or WOL	SS = 6 ft or T = 8 ft	SS = 6 ft or T = 8 ft	SS = 6 ft or T = 8 ft	SS = 8 ft or T = 8 ft
	45 mph and greater	SS = 4 ft	SS = 4 ft	SS = 6 ft or T = 8 ft	SS = 8 ft or T = 8 ft	SS = 8 ft or T = 8 ft	T or SS = 10 ft

BL = Bicycle Lane, SL = Shared Lane, WOL = Wide Outside Lane, T = Trail, SS = Striped Shoulder
ADT = Average Daily Traffic

3. Develop pathways around lakes, to and in every park and open space.

3.1. Pathway development around lakes will be designed to provide, at minimum, views to the lake.

3.2. Pathways in parks and open spaces will be developed consistent with their individual park master plans.

3.3. Cross-country and showshoe locations will be designated by the Parks and Recreation Department.

3.4. Snowmobiles and other unauthorized motorized vehicles will not be allowed on off-road or paved surface pathways.

3.5. Loop pathways will be designated, measured and signed in coordination with the Parks and Recreation Department.

3.6. Where possible, develop continuous pathway loops that are unbroken by street crossings and other obstructions.

4. Develop a pathways system that is accessible from all areas of the city.

4.1. The pathways system should be designed to provide an unobstructed connection no further than 1/4 mile to a pathway from any given property. Where the 1/4 mile distance is not feasible, the resulting connection distance should be as close to 1/4 mile as reasonably possible.

CONNECTION

5. Provide a safe network of pathway linkages for pedestrians and cyclists to and between educational facilities, churches, business centers, transit stops, parks and open space.

5.1. Business centers shall have pathways connecting to the public pathway network.
5.2. Schools shall have off-road connections to the pathways network.
5.3. Parks, open space and transit stops shall have a pathway connecting them to the pathways network.
5.4. Include school property for possible pathway loops and linkages to the greater pathways network.
5.5. Provide public access to school facilities.

6. Provide access around/through major obstacles.

6.1. Major obstacles include Highway 36, Snelling Avenue and Highway 35W.
6.2. When bridge reconstruction takes place, bicyclist and pedestrian accommodations shall be integrated into the design.
6.3. Connections across major obstacles shall be provided at controlled intersections or be grade separated (pedestrian bridges and tunnels).

7. Provide pathway linkages for bicyclists and pedestrians to the regional pathway system.

7.1. To complete major linkages to the regional pathway system; utilize grade separations (pedestrian bridges and tunnels) to overcome major obstacles.
7.2. Signage shall be utilized to inform and direct users of regional trail linkages.

8. Provide a pathway system that promotes a sense of community through the connection of neighborhoods.

8.1. Utilize existing or purchase new easements to construct pathways between neighborhoods.

9. Provide a pathway system that connects to local and regional commercial destinations.

9.1. Provide pathway access from neighborhoods to commercial uses for consumers and employees.

IMPLEMENTATION

10. Coordinate planning and design of pathway connections with neighborhood groups, civic organizations, school districts, business districts and other governing agencies.

10.1. Make the Pathway Master Plan publicly available through multiple means and mediums.
10.2. When projects are implemented, stakeholders and impacted groups will be notified and provided an opportunity for input before plans are finalized.
10.3. Allow for phasing of some pathways to see them through stages of implementation and funding.

10.4. Develop landscape standards for enhancing existing pathways and developing new pathways.

11. Consider alternative pathway types, suitable to intended use.

11.1. Pathways intended for wheeled uses shall be paved.
11.2. Pathways in ecologically sensitive areas shall be designed to minimize their impact.
11.3. Pathways intended for winter activities will not have their snow removed.
11.4. Non-paved pathways will be limited in use (walking, hiking, etc.).

12. Pathways shall be designed to avoid user conflicts.

12.1. High use areas with multiple user groups (bicyclists, pedestrians, in-line skaters, etc.) may require separate pathways for separate uses.
12.2. In areas of potential or known conflict, pathways shall be signed for their intended use.
12.3. Direction of traffic flow, on high use pathways, will be defined and signed or marked.
12.4. Significant space, barriers or delineation shall be provided between pathways and conflicting adjacent uses.
12.5. Pathways where conflicts with speed occur shall have defined speed advisories that are properly signed.
12.6. Pathways shall be designed to provide for adequate visibility based on MNDOT standards for pathway facilities.
12.7. Best practices shall be considered when designing pathways on-road or adjacent to roadways to minimize conflicts between motorized vehicles and bicyclists and pedestrians.

13. Develop a consistent palette of design elements.

13.1. Design elements shall consist of signage, trail markings, curb cuts, driveway crossings, medians/dividers, intersections/crosswalks, furniture, lighting, walls, and typical pathway and roadway sections.
13.2. Develop a design goal to provide a boulevard between pathways and roadways that lends itself to civic beauty and traffic calming.

14. Establish a formal review process for new and renovated public and private development projects that addresses pedestrian and bicycle issues.

14.1. City staff will utilize the City Plan Review Process to ensure consistency with the Pathway Master Plan.
14.2. Staff will use a checklist to aid in the plan review process that shall be required to complete prior to plan approval.

15. Pathways shall be part of roadway design and construction.

15.1. The City shall consider pathways as part of the transportation system.
15.2. The City recognizes that residents adjacent to the pathways may not be the only beneficiaries.

16. Seek ways to encourage businesses to address bicyclist and pedestrian issues through the

redevelopment of their property.

16.1. Provide incentives (low interest loans) for Roseville businesses to redevelop their property with improvements for pedestrians and bicyclists.

MAINTENANCE

17. Pathways will be kept in good repair and useable.

17.1. During winter, the highest use pathways shall be cleared of snow to bare pavement.
17.2. During winter, the medium use pathways shall be cleared of enough snow to allow passage.
17.3. During winter, the low use pathways will not be cleared of snow.
17.4. Pathways will be cleared within 24 hours after a snowfall.
17.5. All paved pathways shall be swept once during the spring and once during late summer.
17.6. Vegetation encroaching in a pathway corridor shall be trimmed to allow safe passage according to MnDOT standards.
17.7. All pathways and their related facilities shall be inspected annually. Inspection data shall be entered into a management system to help guide the maintenance and replacement decisions.

18. Maintenance responsibilities will be assigned based on function and use of the facilities.

18.1. The City will be responsible for all pathway maintenance under City jurisdiction.
18.2. Per City Code, all property owners except taxable properties zoned R-1 or R-2, are required to clear snow from "non-motorized pathways" within 12 hours after snow and ice have ceased to be deposited thereon." (City Code 407.03)
18.3. Commercial and institutional property owners will be responsible to clear snow from adjacent pathways when event is 2 inches or greater.

19. The City will develop and implement maintenance practices that will minimize the burden on adjoining properties.

19.1. City will minimize property damage during pathway maintenance practices.
19.2. City will reestablish turf damaged as a result of pathway maintenance.
19.3. City will replace or repair mailboxes on City streets damaged by direct contact by City snow removal machinery.
19.4. No more snow will be deposited on private driveways and sidewalks then would be typically deposited by street snow removal.
19.5. City will make efforts to schedule snow removal to minimize double shoveling.

EDUCATION/INFORMATION/REGULATION

20. The City shall regularly update this Plan.

20.1. The Pathway Master Plan will be adopted by reference into the City's Comprehensive Plan.

20.2. The Plan should be reevaluated once every three years.

21. Utilize pathway projects to educate the community about the benefits of a well-planned pathways system.

21.1. Staff will pursue grants when available to assist in funding the implementation of pathway networks.

21.2. Staff will report successes in pathway projects to the local papers as an educational and promotional practice.

22. Provide proper signage for a safe, user-friendly pathway network.

22.1. Regulatory and warning signs for pathway users and for roadway users adjacent to pathways shall be placed and designed to current national and state regulations and standards.

22.2. Promote the use of wayfinding devices (including on-line mapping resources) and signage to better orient users to the Roseville system and encourage pathway etiquette.

23. Develop regulations for pathway use and enforcement.

23.1. Staff will develop pathway regulations to be published and posted to further improve pathway usability.

24. Develop and provide events that promote non-motorized modes of travel.

24.1. Add a pathway safety program to the Safety Camp.

24.2. Continue to promote Roseville's pathway facilities with events like the Rosefest "Tour de Roses."

25. The City will develop a promotion and education plan.

25.1. Provide a "safe biking" class in the Community Education program.

25.2. Encourage area cycling shops to support and promote the City's pathway network.

25.3. Utilize the OVAL for cycling events both competitive and educational.

25.4. Gather and/or develop educational and promotional videos for use at schools, promotional events or local cablecasts.

25.5. Collaborate with school officials on ways to educate students on pathway safety and use.

25.6. The City will widely circulate pathways plan and maps.

25.7. The City will encourage citizen volunteers to aid in pathway maintenance and improvements.

25.8. Utilize the City's webpage to educate, inform and promote alternative modes of travel and the Roseville pathway network.

Preference List of Pathway Segments

Previous versions of the Pathway Master Plan included a list of priority projects and ranking based on qualitative evaluation criteria as defined by the Pathway Advisory Committee (a defunct group of citizens that served as a steering committee for the Pathway Master Plan). Committee members identified the list of priority projects and individually scored them based on the evaluation criteria. The scores were then weighted and added up to provide a composite score and rank for each project. While the ranking process was beneficial, there was concern that scoring system provided inconsistent results, and that future updates could result in different ranking results.

As part of the 2017 Pathway Master Plan update, the PWETC revised the scoring system and evaluation criteria for use in this plan. The updates were intended to be simplified, quantitative, and easily replicated for future use. The PWETC assessed and consolidated the 10 previous evaluation criteria down to 6 criteria. The PWETC then modified the scoring for each criterion and established quantifiable measurement tools using readily available GIS data and City maps. In addition, the PWETC revised the list of projects for evaluation to eliminate previously completed pathway segments and divide up longer segments to reduce the potential for over-scoring due to project length. Based on the updated evaluation criteria, City staff utilized GIS data to apply the scoring system to the updated list of preferred projects.

The following evaluation criteria were used by the PWETC to rank projects based upon the applied scoring system.

Evaluation Criteria

A. Connects multiple destinations.

Provides safe and convenient access to businesses, schools, churches, work, parks and other community amenities and destinations.

Add one point for each type of destination within 1/4 mile of pathway

- *1-Each-Institutional use (school, university) within 1/4 mile*
- *1-Each-Park/Open Space use within 1/4 mile*
- *1-Each-Public facilities within 1/4 mile*
- *1-Total-Industrial/Office use (employment centers) within 1/4 mile*
- *1-Total-Commercial use within 1/4 mile*

Measurement tool: City's Future Land Use Map

B. Volume of usage.

The pathway corridor has shown a consistent need for facility development based on its ability to serve the surrounding population and employment base.

Total population within 1/4 mile of pathway

- *3-Population is 3,000 or greater*
- *2-Population is 2,000 to 2,999*
- *1-Population is 500 to 1,999*
- *0-Population is less than 500*

AND

Total employment within 1/4 mile of pathway

- *3-Employment is 3,000 or greater*
- *2-Employment is 2,000 to 2,999*
- *1-Employment is 100 to 1,999*
- *0-Employment is less than 100*

Measurement tool: US Census Block Dataset

C. Connects to regional system.

Provides linkage to the larger network of pathways that extend beyond Roseville. The pathway serves longer trips within Roseville and into neighboring cities.

- *3-Regional corridor (county road, regional/state trail, RBTN route)*
- *2-Local pathway that directly connects to regional corridor*
- *1-Pathway provides local connection only*

Measurement tool: City's Pathway map and regional bikeways mapping

D. Addresses a gap or barrier in the transportation network.

Addresses a pathway network gap along the transportation network and/or crosses a major barrier. Eliminates a major barrier or safety concern in the pathway network that may inhibit bicycle or pedestrian travel.

- *5-Provides enhanced safe crossing (grade separated or improved intersection) of major highway (I-35W, TH 36, Snelling Avenue) or railroad*
- *4-Completes pathway along A-Minor Arterial roadway*
- *3-Completes pathway along Other Arterial roadway*
- *2-Completes pathway along Major Collector roadway*
- *1-Completes pathway along a Local roadway*

Measurement tool: City's Roadway Functional Classification Map

E. Connects to Transit

Connects bus stops, transit hubs, or provides a connection to other transit.

- *3-Transit Center or park and ride within 1/4 mile of pathway*
- *2-A-BRT Station within 1/4 mile of pathway*
- *1-Bus stop within 1/4 mile of pathway*

Measurement tool: GIS, transit routes and stops

F. Connects High-Density Residential to Transit or Parks (Max 5 Points)

Improves access for densely populated areas to the City's transit and park facilities.

- *2-Per 100 units-Pathway connects multi-family residential or mixed use area to transit stop or park within 1/8 mile walking distance*
- *1-Per 100 units-Pathway connects multi-family residential or mixed use area to transit stop or park within 1/4 mile walking distance*

Measurement tool: GIS, City's Existing Land Use Map, transit routes and stops

Scoring Results

The following table shows the cumulative results of scoring the preference list of pathway projects using the evaluation criteria established by the PWETC. See Attachment 6 for a more detailed Project Preference List and Scoring Results.

Map Ref.	Project Name	Description	Total Points	Rank
28	Snelling Avenue	Develop off-road pathway between County Road B and County Road C.	25	1
16	Rosedale to HarMar Connection	A pedestrian bridge across Highway 36 and pathway connection between Rosedale and HarMar Mall.	24	2
4A	County Road C (Segment A)	Construct an on-road pathway from Lexington Avenue to Victoria Street.	23	3
10C	Lexington Avenue (Segment C)	Complete off-road pathway on the east side of Lexington Avenue from County Road C to County Road D.	22	4
9	Snelling Avenue South of Highway 36	Complete pathways along Snelling Avenue for improved access to A-Line BRT transit stations.	22	4
10A	Lexington Avenue (Segment A)	Complete off-road pathway on the east side of Lexington Avenue from Larpenteur Avenue to County Road B.	21	6
4B	County Road C (Segment B)	Construct an on-road pathway from Victoria Street to Dale Street.	20	7
10B	Lexington Avenue (Segment B)	Complete off-road pathway on the east side of Lexington Avenue from County Road B to County Road C.	19	8
4C	County Road C (Segment C)	Construct an on-road pathway from Dale Street to Western Avenue.	19	8
4D	County Road C (Segment D)	Complete both on- and off-road pathways within the County Road C alignment from Western Avenue to Rice Street.	18	10
3A	County Road C-2 East of Snelling (Segment A)	Complete both on- and off-road pathways within the County Road C-2 alignment from Snelling Avenue to Hamline Avenue.	18	10
25A	Hamline Avenue (Segment A)	An off-road trail from County Road C to County Road C-2.	17	12
6	Cleveland Avenue	Complete off-road pathway segments between County Road C and County Road D.	16	13

Map Ref.	Project Name	Description	Total Points	Rank
11	Victoria Street North of County Road C	Develop an on- road and off-road pathway from County Road C to County Road D.	16	13
13	Rice Street	Complete an off-road pathway from County Road C to the northern city boundary.	16	13
3B	County Road C-2 East of Snelling (Segment B)	Complete an off-road pathway within the County Road C-2 alignment from Lexington Avenue to Victoria Street.	15	16
25B	Hamline Avenue (Segment B)	An off-road trail from County Road C-2 to County Road D.	15	16
8	TH 51 connection to Old Snelling (Arden Hills)	Work with Arden Hills to develop a regional pathway connection along Snelling Avenue to Old Snelling Avenue in Arden Hills connecting Roseville to Mounds View High School, Valentine Hills Elementary School, Bethel College, Lake Johanna Park and County Road E2 commercial businesses.	15	16
26	County Road B-2 & Snelling Avenue	Install a sidewalk along the north side of County Road B-2 between the Snelling Avenue ramps.	15	16
27	Tamarack Park Connection	Install a pathway connection from North McCarrons Boulevard to Tamarack Park.	14	20
7	Fairview Avenue (North of County Road C-2)	Development of off-road pathways between County Road C-2 and County Road D.	14	20
2	County Road C-2 West of Snelling	Develop both on-and off-road pathways within the County Road C-2 alignment from the western city boundary to Snelling Avenue. This corridor would include a pedestrian bridge across I-35W.	13	22
5	County Road C Sidewalk	Construct a sidewalk on the north side of County Road C from Western Avenue to Rice Street.	12	23
12	Dale Street South	The construction of an off-street pathway from Reservoir Woods Park to Larpenteur Avenue.	11	24
1	County Road D	Develop pathway facilities, both on- and off-road, between Cleveland Avenue and Fairview Avenue.	10	25
18	Judith to Iona Connection	Develop a pathway connection between Judith Avenue and Iona Lane.	10	25

Map Ref.	Project Name	Description	Total Points	Rank
19	Lovell to Minnesota Connection	Develop a pathway connection between Lovell Avenue and Minnesota Street.	10	25
21	Millwood to County Road C-2 Link	Develop a pathway connection that creates a link between the corner of Millwood Avenue and Chatsworth Street through the Ramsey County open space to County Road C-2.	10	25
24	Alta Vista Drive	Develop a pathway connection along Alta Vista Drive between Larpenteur Avenue and Reservoir Woods Park.	10	25
23	Cohansey Street to HANC Connection	Develop a pathway connection between Cohansey Street and Harriet Alexander Nature Center (HANC).	9	30
15	NE Diagonal RR Connection (Walnut to County Road C)	Develop a pathway connection between Cleveland Avenue and Walnut Street along County Road C or along the railroad right-of-way south of County Road C.	9	30
14	Langton Lake Loop	Develop a pathway that goes around all of Langton Lake.	8	32
20	Villa Park Connections	Develop a pathway connection from Shryer Avenue and from Ryan Avenue into Villa Park.	8	32
17	Heinel Drive Connection	Develop a pathway connection between South Owasso Boulevard and County Road C along Heinel Drive.	7	34
22	Eustis to St. Croix Connection	Develop a pathway connection between Eustis Street and St. Croix Street.	6	35

The results of the scoring exercise will be used by the City to assist in prioritizing future pathway projects as part of the annual capital improvement program update. However, it is important to note the list of preferred projects will not be implemented based on the ranking results, as this list is intended to be updated periodically. In addition, there are several factors that can affect the timing and cost of developing pathway projects. These factors include coordination with planned roadway improvements (when it may be most feasible to construct new pathway segments), the availability of right-of-way, utilities, constructability, and magnitude of project in terms of both length and cost. For example, if a proposed pathway project is located along a roadway that is programmed for reconstruction, then coordinating the pathway improvements with the road improvements is the best opportunity to implement the project (regardless of project ranking). Likewise, the ability for a proposed pathway project to obtain external funding could also accelerate the development of such a project.

Recommendations

The following recommendations are intended to continue supporting the City's efforts in developing an appropriate and well-guided pathway network for the community.

A. Formally adopt the Roseville Pathway Master Plan as part of the City of Roseville's Comprehensive Plan to guide the City in all pathway-related issues.

B. Support the effort to maintain a growing system of pathways through proper funding of equipment, personnel or contracted services.

> *With the recommended promotion and continued development of pathway facilities in Roseville should come the dedication and support to maintain the facilities as highly beneficial recreation and transportation amenities. Through the commitment of improved operational maintenance the City is assuring, for the future of Roseville, a well-maintained transportation and recreation pathway network.*

C. Demand conscientious development through strict policies and standards defining the City of Roseville's goal for pathways and pathway related issues.

D. Continue implementing a funding program for the development, management and maintenance operation recommendations laid out in this document. Pursue external funding sources to support the development of new pathway segments.

E. Re-evaluate the Pathway Master Plan at least every three years to review the impact of the Roseville Pathway Master Plan. **This will ensure that the plan remains consistent with the community's goals.**

F. Continue working with neighboring cities, Ramsey County, MnDOT, and other regional agencies to **support development of the regional bikeway network and local connections** to and from the City's pathway system.

Attachments

Attachment 1: Existing Land Use Map

Attachment 2: Roadway Functional Classification Map

Attachment 3: Transit Services Map

Attachment 4: Existing Pathways Map

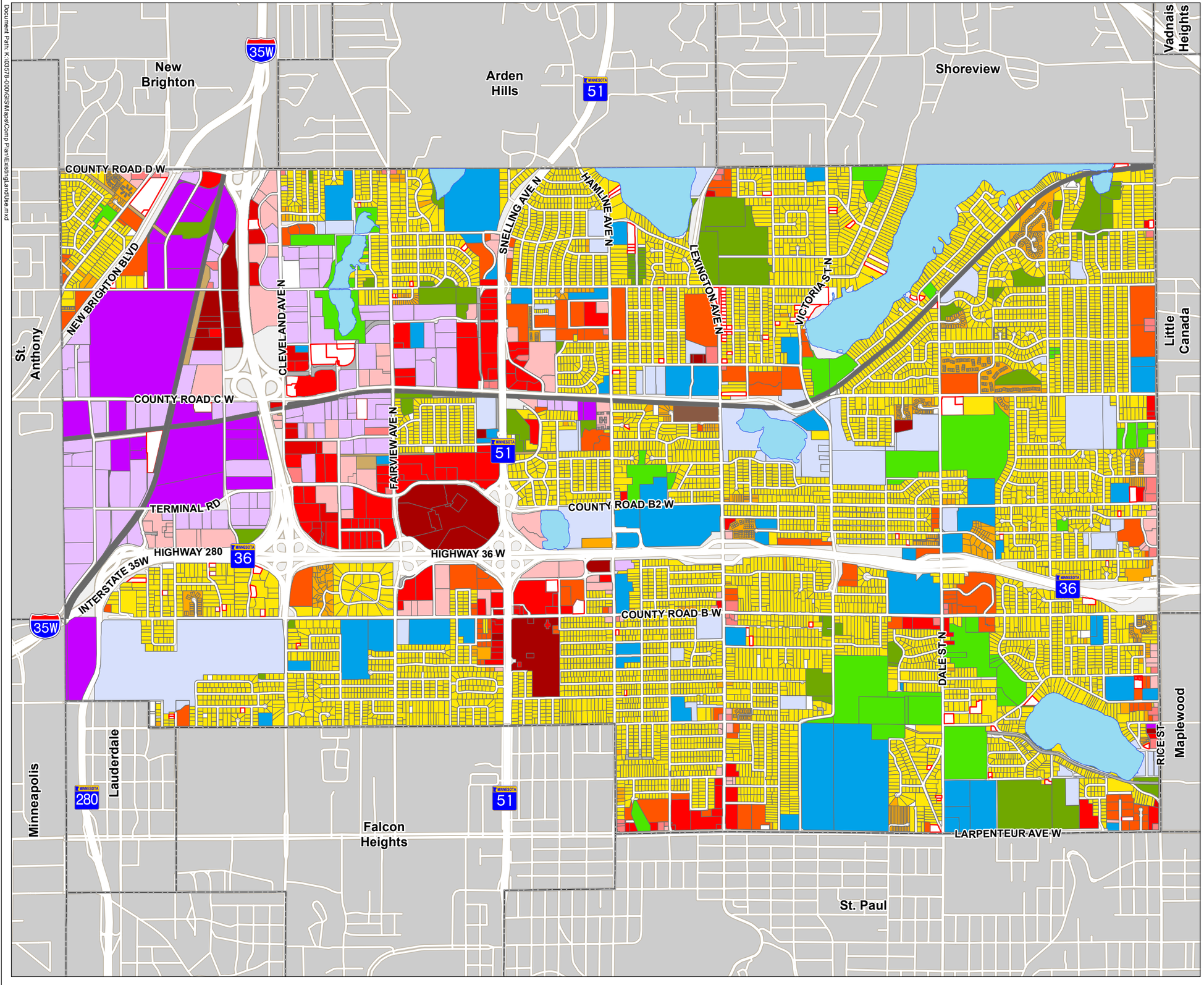
Attachment 5: Pathway Master Plan Map

Attachment 6: Project Preference List and Scoring Results

ATTACHMENT 1

ROSEVILLE 2040
our future together

Roseville Comprehensive Plan
Existing Land Use
Roseville, MN



- Roseville Boundary

Existing Land Use (Parcels)

- Community Commercial
- Heavy Industrial
- Highway Commercial
- Institutional
- Light Industrial
- Manufactured Housing Park
- Multi-Family
- Neighborhood Commercial
- Office
- Open Space (Natural)
- Open Space (Passive)
- Railroad
- Regional Commercial
- Right of Way
- Single Family Attached
- Single Family Attached Common Area
- Single Family Detached
- Sport and Recreation (Outdoor)
- Utility
- Vacant
- Vacant Developable
- Open Water/Wetlands

N

0 2,250 Feet

WSB

ATTACHMENT 2

ROSEVILLE 2040
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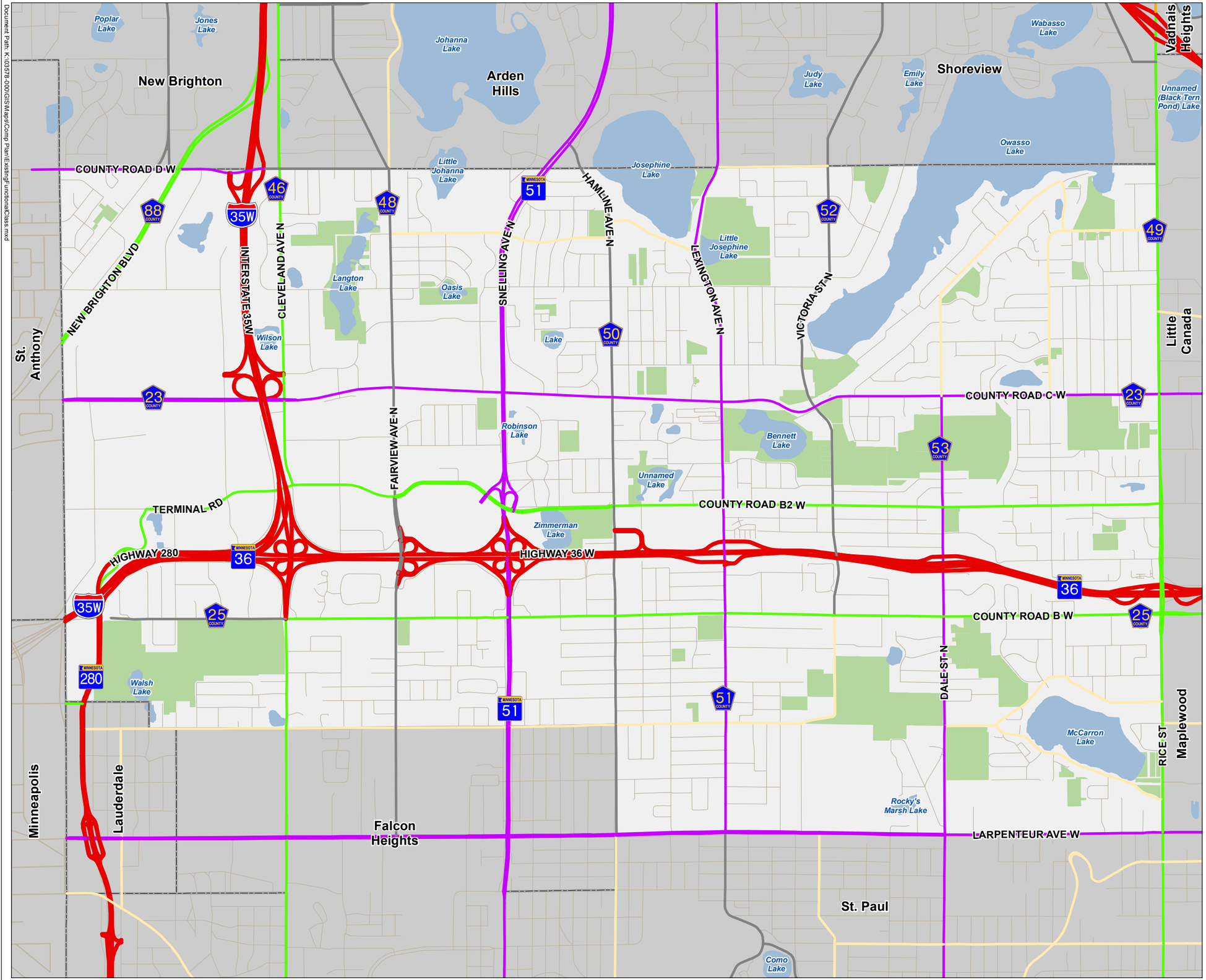
Roseville Comprehensive Plan
Existing Functional Classification
Roseville, MN



Existing Functional Class Roads

- Principal Arterial
- A Minor Augmentor
- A Minor Reliever
- A Minor Expander
- A Minor Connector
- Other Arterial
- Major Collector
- Roseville Boundary

N

0 2,250 Feet

WSB

ATTACHMENT 3

ROSEVILLE 2040
our future together

Roseville Comprehensive Plan
Transit Services
Roseville, MN

Rosedale Transit Center
Park and Ride
A-Line BRT Transitway
A-Line BRT Stations
Bus Stop

Existing Bus Route

141	272
223	288
225	3
227	30
250	32
252	4
261	61
262	62
263	65
264	68
270	71
	801
	83
	84
	860
	87

N

0 2,000 Feet

WSB

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ATTACHMENT 4

ROSEVILLE 2040
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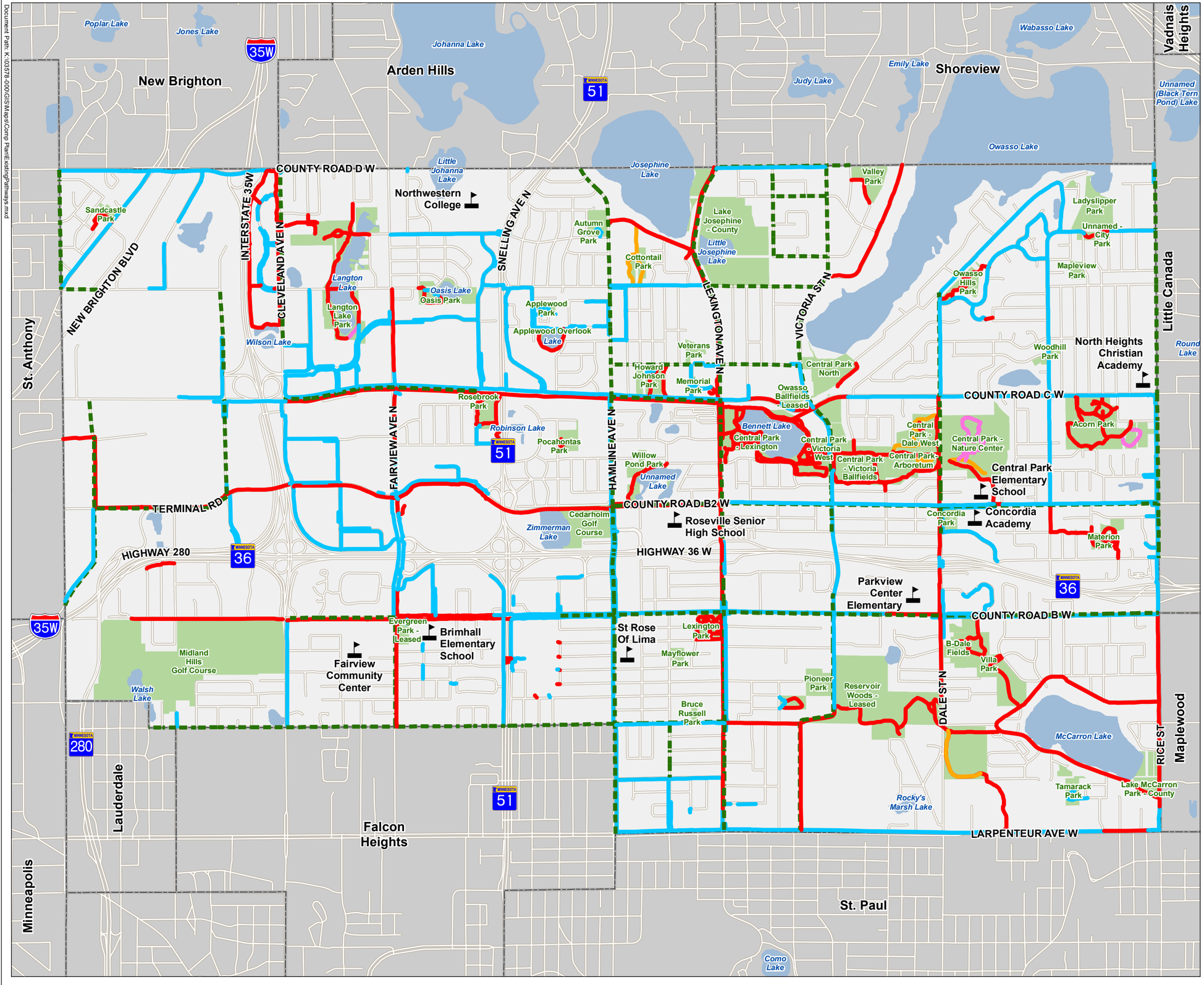
Roseville Comprehensive Plan
Existing Pathways
Roseville, MN



- Existing Trail (36.43 miles)
- Existing Sidewalk (45.28 miles)
- Footpath (1.93 miles)
- Existing Striped Shoulder (29.14 miles)
- Other (Boardwalk 0.94 miles)

TOTAL 113.72 miles

N

0 2,000 Feet

WSB

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ATTACHMENT 5

ROSEVILLE 2040
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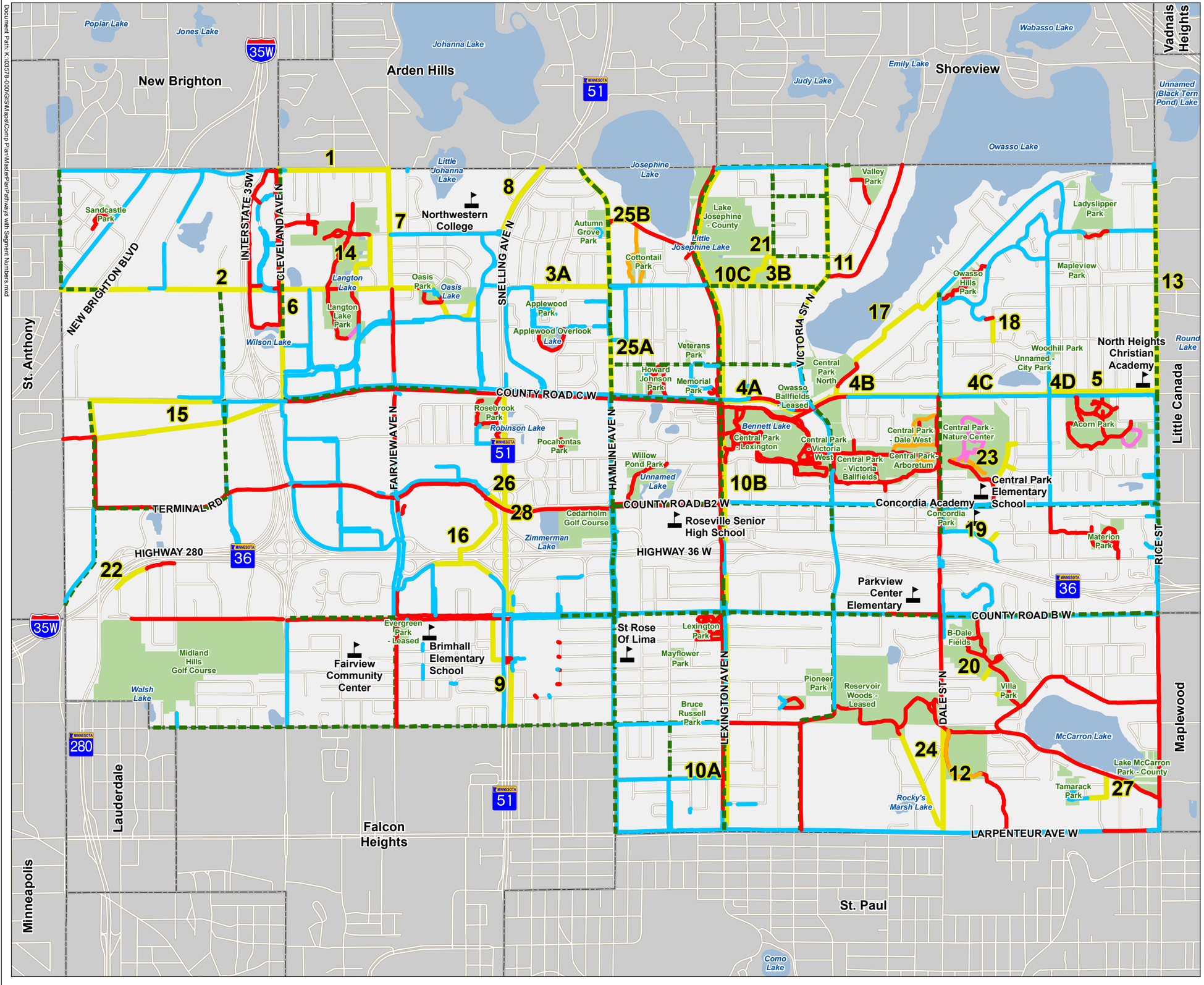
Roseville Comprehensive Plan
Pathway Master Plan
Roseville, MN



- Existing Trail (36.43 miles)
- Existing Sidewalk (45.28 miles)
- Footpath (1.93 miles)
- Existing Striped Shoulder (29.14 miles)
- Other (Boardwalk- 0.94 miles)
- Proposed Pathway Segments (20.0 miles)
- Roseville Boundary

N

0 2,000 Feet

WSB

ROSEVILLE 2040
our future together

Roseville Comprehensive Plan
Pathway Master Plan
Quadrant 1
Roseville, MN

- Existing Trail (36.43 miles)
- Existing Sidewalk (45.28 miles)
- Footpath (1.93 miles)
- Existing Striped Shoulder (29.14 miles)
- Other (Boardwalk- 0.94 miles)
- Proposed Pathway Segments (20.0 miles)
- Roseville Boundary

N

0 1,000 Feet

WSB

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ROSEVILLE 2040
our future together

Roseville Comprehensive Plan
Pathway Master Plan
Quadrant 2
Roseville, MN

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Arden Hills
Shoreview
Josephine Lake
Little Josephine Lake
Lake Josephine - County
Owasso Lake
Valley Park
Ladyslipper Park
Autumn Grove Park
Cottontail Park
Applewood Park
Applewood Overlook
Lake
Veterans Park
Howard Johnson Park
Memorial Park
Central Park North
Owasso Ballfields - Leased
Mapleview Park
Owasso Hills Park
Woodhill Park
Unnamed - City Park
North Heights Christian Academy
Acorn Park
Central Park - Lexington
Bennett Lake
Central Park - Victoria West
Central Park - Victoria Ballfields
Central Park - Arboretum
Central Park - Dale West
Central Park - Nature Center
Central Park Elementary School
Concordia Academy
Concordia Park
Materion Park
Parkview Center Elementary
Roseville Senior High School
Cedarholm Golf Course
Zimmerman Lake
Rosebrook Park
Robinson Lake
Pocahontas Park
Willow Pond Park
Unnamed Lake
Lexington Park
Mayflower Park
St Rose Of Lima
Bruce Russell Park
Pioneer Park
Reservoir Woods - Leased
B-Dale Fields
Villa Park
McCarron Lake
Little Canada
Maplewood

GLENHILL RD
WOODLYNN AVE
CLARMAR LN
SNELLING AVE N
JOSEPHINE RD
LYDIA AVE W
BELAIR CIR
LEXINGTON AVE N
COUNTY ROAD D W
BRENNER AVE
LYDIA DR
CHATSWORTH ST N
MILLWOOD AVE
OWASSO BLVD W
SANDY HOOK DR
OWASSO BLVD S
HIGHPOINTE CRV
KENT ST
HEINEL DR
MAPLE LN
OWASSO HILLS DR
CENTENNIAL DR
LINCOLN DR
SNELLING DR
ASBURY ST
ARONA ST
SIMPSON ST
COUNTY ROAD C2 W
ORCHARD LN
HURON ST
DELLWOOD AVE
MERRILL ST
FERNWOOD ST N
GRIGGS ST N
CHURCHILL ST
OXFORD ST N
AGLEN ST
LAKEVIEW AVE
VICTORIA ST N
JUDITH AVE
PRIMROSE CRV
SHELDON ST
WOODHILL DR
TERRACE DR
WHEATON AVE
IONA LN
IONA CIR
VIRGINIA AVE
FARRINGTON ST
MATILDA ST
GALTIER ST
MARION ST
WOODBRIDGE ST
RICE ST
MACKUBIN ST
WESTWOOD VLG
COUNTY ROAD C W
WESTERN AVE N
COHANSEY ST
EWERS RD
ROSE PL
OAKCREST AVE
FERNWOOD AVE
WILLOW CIR
WILLOW LN
BROOKS AVE W
DUNLAP ST N
HOLTON ST
SNELLING CRV
FISK ST
AVON ST N
GROTTO ST N
ALADDIN ST
DALE ST N
SEXTANT AVE W
SAINT ALBANS ST N
COUNTY ROAD B2 W
GRANDVIEW AVE W
NANCY PL
LOVELL AVE
COPE AVE W
DALE ST N TO WB HWY36 W
DALE ST N TO EB HWY36 W
SHERREN ST
MILTON ST N
LAURIE RD W
COMMERCE ST
HIGHWAY 36 W
COLONIAL DR
PASCAL ST N
ALBERT ST N
HAMLINE AVE N
DELLWOOD ST
COUNTY ROAD B W
BURKE AVE W
ELDRIDGE AVE W
BELMONT LN W
SKILLMAN AVE W
SHRYER AVE W
RYAN AVE W
LINDY AVE
PARKER AVE
ALAMEDA ST
TRANSIT AVE
IRENE CT
IRENE ST
VIRGINIA CIR
MATILDA CIR
GALTIER CIR
IDA AVE N
AUERBACH ST
MINNESOTA AVE
SANDHURST DR W
BOSSARD DR
RICE ST TO WB HWY36 W
COHANSEY BLVD
HAND AVE
GIESMAN ST
WILLIAM ST
ELMER ST
ALBEMARLE ST
MCCARRONS BLVD N

8
25B
21
10C
11
3A
3B
13
17
18
25A
4A
4B
4C
5
4D
10B
23
19
20
10A
28
26
16
9

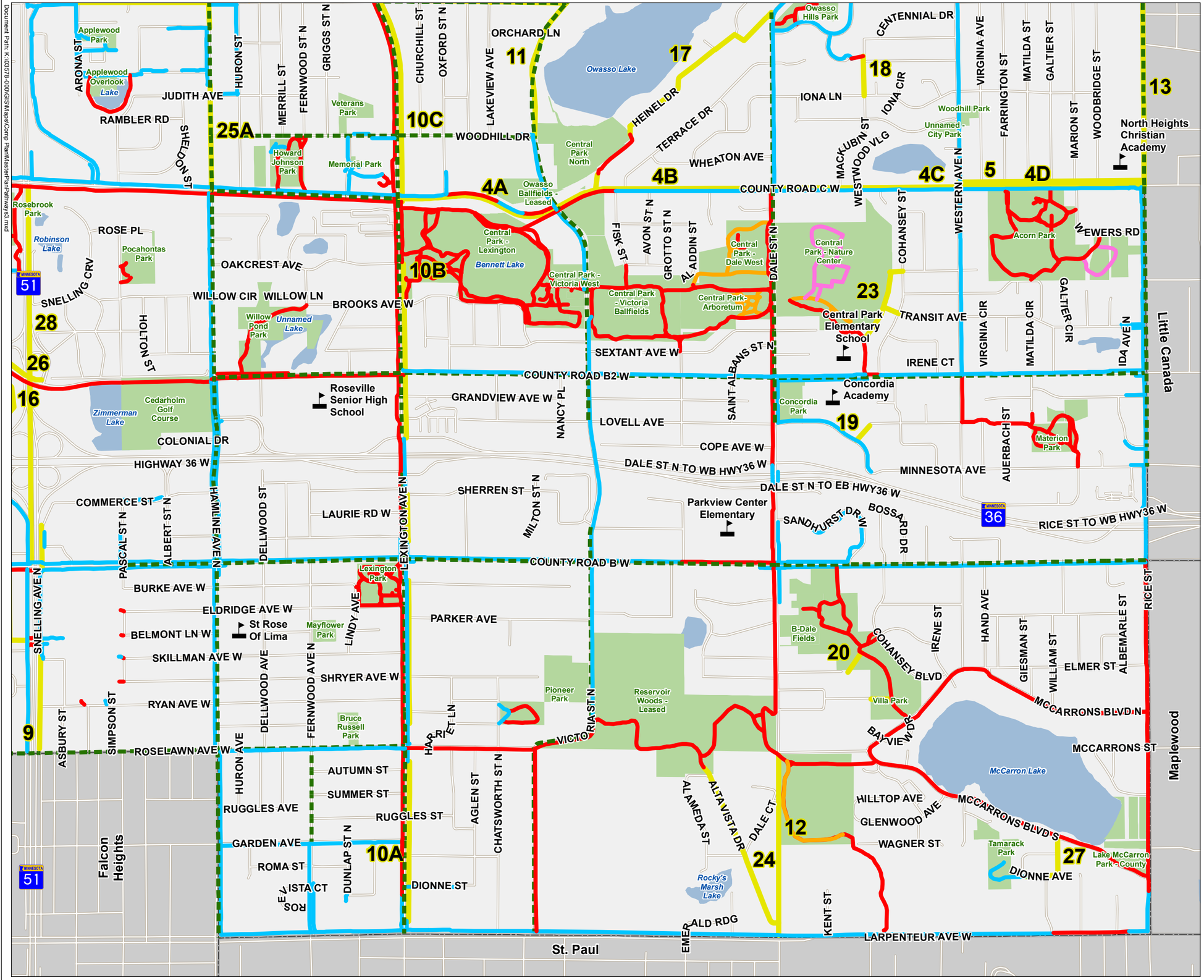
Existing Trail (36.43 miles)
Existing Sidewalk (45.28 miles)
Footpath (1.93 miles)
Existing Striped Shoulder (29.14 miles)
Other (Boardwalk- 0.94 miles)
Proposed Pathway Segments (20.0 miles)
Roseville Boundary

N
0
1,000
Feet

WSB

ROSEVILLE 2040
our future together

Roseville Comprehensive Plan
Pathway Master Plan
Quadrant 3
Roseville, MN



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N

0 1,000 Feet

WSB

Document Path: K:\10578-000\GIS\Maps\Comp Plan\MasterPlan\Pathway3.mxd

ATTACHMENT 6

Project Preference List and Scoring Results

Map Ref.	Project Name	Description	Connects Multiple Destinations	Volume Usage - Population	Volume Usage - Employment	Connects to Regional System	Addresses a Gap or Barrier in the Transportation System	Connects to Transit	Connects High Density to Transit or Parks	Total Points	Rank
28	**Snelling Avenue**	Develop off-road pathway between County Road B and County Road C.	5	1	3	3	5	3	5	25	1
16	**Rosedale to HarMar Connection**	A pedestrian bridge across Highway 36 and pathway connection between Rosedale and HarMar Mall.	2	1	3	2	5	6	5	24	2
4A	**County Road C (Segment A)**	Construct an on-road pathway from Lexington Avenue to Victoria Street.	5	1	1	3	4	4	5	23	3
10C	**Lexington Avenue (Segment C)**	Complete off-road pathway on the east side of Lexington Avenue from County Road C to County Road D.	4	1	1	3	4	4	5	22	4
9	**Snelling Avenue South of Highway 36**	Complete pathways along Snelling Avenue for improved access to A-Line BRT transit stations.	2	1	3	2	5	4	5	22	4
10A	**Lexington Avenue (Segment A)**	Complete off-road pathway on the east side of Lexington Avenue from Larpenteur Avenue to County Road B.	5	2	1	3	4	1	5	21	6
4B	**County Road C (Segment B)**	Construct an on-road pathway from Victoria Street to Dale Street.	5	1	1	3	4	1	5	20	7
10B	**Lexington Avenue (Segment B)**	Complete off-road pathway on the east side of Lexington Avenue from County Road B to County Road C.	5	1	1	3	4	1	4	19	8
4C	**County Road C (Segment C)**	Construct an on-road pathway from Dale Street to Western Avenue.	4	1	1	3	4	1	5	19	8
4D	**County Road C (Segment D)**	Complete both on- and off-road pathways within the County Road C alignment from Western Avenue to Rice Street.	4	1	1	3	4	1	4	18	10
3A	**County Road C-2 East of Snelling (Segment A)**	Complete both on- and off-road pathways within the County Road C-2 alignment from Snelling Avenue to Hamline Avenue.	5	2	1	3	1	1	5	18	10
25A	**Hamline Avenue (Segment A)**	An off-road trail from County Road C to County Road C-2.	3	1	1	3	3	1	5	17	12
6	**Cleveland Avenue**	Complete off-road pathway segments between County Road C and County Road D.	3	0	2	2	3	4	2	16	13
11	**Victoria Street North of County Road C**	Develop an on- road and off-road pathway from County Road C to County Road D.	6	1	1	2	3	1	2	16	13
13	**Rice Street**	Complete an off-road pathway from County Road C to the northern city boundary.	3	1	0	3	3	1	5	16	13
3B	**County Road C-2 East of Snelling (Segment B)**	Complete an off-road pathway within the County Road C-2 alignment from Lexington Avenue to Victoria Street.	3	1	1	3	1	1	5	15	16
25B	**Hamline Avenue (Segment B)**	An off-road trail from County Road C-2 to County Road D.	3	1	1	3	3	1	3	15	16
8	**TH 51 connection to Old Snelling (Arden Hills)**	Work with Arden Hills to develop a regional pathway connection along Snelling Avenue to Old Snelling Avenue in Arden Hills connecting Roseville to Mounds View High School, Valentine Hills Elementary School, Bethel College, Lake Johanna Park and County Road E2 commercial businesses.	5	1	1	2	4	1	1	15	16
26	**County Road B-2 & Snelling Avenue**	Install a sidewalk along the north side of County Road B-2 between the Snelling Avenue ramps.	3	0	1	2	3	6	0	15	16
27	**Tamarack Park Connection**	Install a pathway connection from North McCarrons Boulevard to Tamarack Park.	4	1	1	1	1	1	5	14	20
7	**Fairview Avenue (North of County Road C-2)**	Development of off-road pathways between County Road C-2 and County Road D.	5	1	2	3	3	0	0	14	20
2	**County Road C-2 West of Snelling**	Develop both on-and off-road pathways within the County Road C-2 alignment from the western city boundary to Snelling Avenue. This corridor would include a pedestrian bridge across I-35W.	2	1	1	2	1	1	5	13	22
5	**County Road C Sidewalk**	Construct a sidewalk on the north side of County Road C from Western Avenue to Rice Street.	2	1	1	2	3	1	2	12	23
12	**Dale Street South**	The construction of an off-street pathway from Reservoir Woods Park to Larpenteur Avenue.	1	1	1	3	4	1	0	11	24
1	**County Road D**	Develop pathway facilities, both on- and off-road, between Cleveland Avenue and Fairview Avenue.	3	0	1	2	3	1	0	10	25
18	**Judith to Iona Connection**	Develop a pathway connection between Judith Avenue and Iona Lane.	1	1	0	1	1	1	5	10	25
19	**Lovell to Minnesota Connection**	Develop a pathway connection between Lovell Avenue and Minnesota Street.	3	1	1	1	1	0	3	10	25
21	**Millwood to County Road C-2 Link**	Develop a pathway connection that creates a link between the corner of Millwood Avenue and Chatsworth Street through the Ramsey County open space to County Road C-2.	2	1	1	1	1	1	3	10	25
24	**Alta Vista Drive**	Develop a pathway connection along Alta Vista Drive between Larpenteur Avenue and Reservoir Woods Park.	1	1	1	3	1	1	2	10	25
23	**Cohansey Street to HANC Connection**	Develop a pathway connection between Cohansey Street and Harriet Alexander Nature Center (HANC).	3	1	1	1	1	1	1	9	30
15	**NE Diagonal RR Connection (Walnut to County Road C)**	Develop a pathway connection between Cleveland Avenue and Walnut Street along County Road C or along the railroad right-of-way south of County Road C.	2	0	2	3	1	1	0	9	30
14	**Langton Lake Loop**	Develop a pathway that goes around all of Langton Lake.	4	0	2	1	1	0	0	8	32
20	**Villa Park Connections**	Develop a pathway connection from Shryer Avenue and from Ryan Avenue into Villa Park.	3	1	0	1	1	1	1	8	32
17	**Heinel Drive Connection**	Develop a pathway connection between South Owasso Boulevard and County Road C along Heinel Drive.	2	1	0	1	1	1	1	7	34
22	**Eustis to St. Croix Connection**	Develop a pathway connection between Eustis Street and St. Croix Street	1	0	1	1	1	1	1	6	35