KENORA
LAKE OF THE WOODS

January 2026

ACTIVE TRANSPORTATION PLAN

Prepared For

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EXECUTIVE SUMMARY

The City of Kenora's Active Transportation Master Plan (ATMP) is designed to transform Kenora into a safe, connected, and multi-modal community, enhancing local character and respecting its history. By improving infrastructure and road safety, the plan aims to make walking and cycling attractive travel options, supporting a healthy, safe, and sustainable city.

The plan was developed over two years, involving extensive public and stakeholder engagement through surveys, mapping exercises, pop-up events, workshops, and ongoing dialogue. This engagement helped identify key issues and solutions reflected in the ATMP.

Kenora's history of supporting recreational trails has enabled a comprehensive trail system, but geographical barrier such as exposed rock, steep elevation changes, water crossings, and constrained rights-of-way, have limited the development of a fully connected active transportation network.

Financial challenges also exist, including the need to maintain aging infrastructure, manage 21 bridges, and support over 323 km of roadways, all with a limited tax base. The ATMP provides a cost-effective guide for future investments, recommending that improvements be integrated with road renewal projects to maximize efficiency and minimize costs.

Community feedback highlighted concerns about the lack of accessible walking and cycling facilities, especially for those unable to afford private vehicles. Rising vehicle costs and increased e-bike sales point to growing demand for safe cycling infrastructure, particularly for seniors and residents with mobility challenges. Key community desires also included improving access to community amenities via walking or cycling, providing safe, healthy, and sustainable active transportation infrastructure for all ages (especially children and seniors), and a significant desire (and passionate community) for more recreational trails for mountain biking and hiking.

The ATMP encourages consideration of new technologies like e-bikes and e-scooters as affordable, sustainable transportation options. Kenora has already shown innovation by adopting The Wave micro transit service, improving accessibility and demonstrating a willingness to pilot new transportation solutions.

The ATMP aligns with the City's Strategic Plan, focusing on infrastructure and environment, tourism and economic growth, and community recreation and safety. Active transportation infrastructure is less expensive and requires less maintenance than vehicle infrastructure, offering sustainable, low-emission solutions.

Tourism initiatives include new facilities like a waterfront pathway from downtown Kenora to Keewatin, modeled after successful trails in other resort communities.

The Active Transportation Master Plan serves as a strategic guide for Kenora's investment in active transportation and supports the creation of both all-season recreational facilities as well as well-designed, separated infrastructure. Implementing the ATMP will require resolve and commitment, but if actioned will result in a safer, healthier, more accessible, more financially resilient, and connected community in the years ahead.

1 OVERVIEW

Kenora is a lively community in Northwest Ontario on the shores of Lake of the Woods, about 50 kilometres from the Manitoba border. It is the largest community in the area with a population of about 15,600 as of 2023[1]. As part of the City's recently competed *Official Plan and Zoning By-law Background Report* (May 2025) it is estimated that Kenora's population will grow to 18,257 residents by 2041, with further growth to 19,013 by 2051. In the 2021 Census of Population conducted by Statistics Canada, Kenora had a population of 14,967 (representing a population change of -0.9% from its 2016 population of 15,096) living in 6,510 housing units of its 7,637 total private dwellings, with 1,127 dwellings being occupied by seasonal or temporary residents.

The area is rich in natural resources. Forestry, mining, and tourism are all important industries. Many visitors come to enjoy camping, cottage life, hiking, cycling, and other outdoor activities. The recent Parks and Recreation Master Plan notes that more people are moving away from traditional team sports to individual activities like hiking, running, and cycling. This is supported by the City's Active Transportation Master Plan.

The City offers a variety of recreational facilities and programs. These include the Moncrief Construction Sports Centre, the Bowman Electric Keewatin Memorial Arena, five city beaches, nine city-owned and operated parks, five nature trails, and four regional trails. The Trans-Canada Trail passes through the community from Anishinaabe Park in the east to two terminus points at the western edge of the city at Mink Bay wetland Trail and the end of Front Street at the Keewatin arena. The community features areas for tobogganing, bird watching, picnicking, snowshoeing, fat biking trails, and cross-country skiing trails.

In 2016, the community revised their Kenora Beaches, Parks and Trails Plan, to include the goal of enhancing the "network of on-road cycling facilities, trails, and pathways built on strong community connections and partnerships. This network is designed to connect residents, businesses, summer residents, and visitors of all ages and abilities to Kenora's many attractions, envisioning the city as a premier hiking and biking destination."

Active transportation design standards have changed a lot in the last seven years. Today's facilities are designed to meet an "All Ages and Abilities" (AAA) standard, which focuses on the safety and comfort of vulnerable road users like pedestrians and cyclists, making it safe and comfortable for everyone to move around.

1 Postcensal Population Estimate, Statistics Canada, 2023 (Draft City of Kenora, Ontario Population, Employment and Dwelling Prospects to 2051, 2024 (metroeconomics))

The Beaches, Parks, and Trails Plan notes that Kenora is in a good position to connect its existing mountain bike trails and promote the city as a cycling destination. Eastern Manitoba has built several new mountain biking trails in the past decade, including Blue Highway Trail in the Eastern Whiteshell and Falcon Trails near the Manitoba/Ontario border. Since many mountain bikers already visit these trails near the Ontario border, Kenora has a strong regional interest in mountain biking. This provides an opportunity to create new recreational and tourism activities for the city.

In 2022, the City completed a Parks and Recreation Master Plan, which provided important recommendations for investing in active transportation in Kenora:

- The top outdoor recreation needs identified were natural surface trails (53%) and paved trails (51%).
- The most popular outdoor activity was walking, hiking, or running, with 82% of respondents saying these were their main activities.
- Natural surface trails and paved trails were the top two priorities for both indoor and outdoor amenities.
- During the community engagement campaign, 82% of respondents said they regularly participate in hiking, walking, or running. Additionally, the Tourism Department noted that the Trails Guide is the most requested brochure.

The strong interest in walking, running, and cycling shown in the Parks and Recreation Master Plan clearly demonstrates that residents of the City value trails, sidewalks, and paths for these activities. This provides strong support for investing in these kinds of facilities.

The Active Transportation Master Plan is focused on making Kenora a leader in active transportation planning and development. The plan prioritizes creating connections to important places in the community, such as schools and recreational facilities, and ensures these connections are safe and accessible. By funding and implementing this plan, Kenora will offer residents and visitors many options for walking, biking, and other forms of active transportation throughout the year.

What is Active Transportation?

Active transportation means any way of getting around that uses human power, like walking, biking, using a wheelchair, or even paddling. It includes any active trip you take to get to places like work, school, or the store, or just to enjoy nature. It also covers new ways of getting around, like e-bikes and e-scooters, which can use the same trails and paths.

Building more places for active transportation makes communities healthier and more enjoyable to live in. The updated ATMP will guide Kenora in the future, ensuring that everyone, no matter their age or ability, can safely and easily walk, bike, and move around the city.

The ATMP has been divided into six sections:

- **Introduction** explains the main purpose, process, and community involvement in developing the Active Transportation Plan
- **Active Transportation Today** describes the current state of active transportation in Kenora, including factors that influenced the plan's themes and actions. It also looks at trends in active transportation, including demographic and land use trends, connections to other programs and policies, and the current conditions for walking, biking, and rolling in Kenora.
- **Future Direction** outlines the future plans for active transportation in Kenora based on the plan's main themes of Connect, Explore, and Include. It also includes specific strategies and actions for improvement.
- **Active Transportation Network and Priority Projects** includes the recommended long-term network and priority projects, as well as funding opportunities. The network was developed based on input from the community and key stakeholders, reflecting their needs and suggestions.
- **Implementation and Monitoring** outlines a plan for putting the strategies and actions into practice. This includes prioritizing actions, setting a timeline, and identifying leads for implementation. It also includes cost estimates and funding strategies.
- **Closing** summarizes the plan and outlines the next steps for ensuring successful implementation.

PLAN PROCESS

A high-level overview of the ATMP process is provided below. The project involved an iterative and collaborative process involving ongoing analyses, ideas generation, plan development, and feedback and review by Kenora residents, community stakeholders, City staff and Council, and the consulting team.

The ATMP was developed in collaboration with the City of Kenora through six phases, with comprehensive input and engagement from key stakeholders and the public throughout the entirety of the process.

Project Timeline

Summer 2023 – Project Initiation

- The core project team was formed consisting of City staff and a local professional transportation consulting team.
- A project kick-off meeting was coordinated with the consultant and City team.
- Initial site visits were conducted to understand current conditions.
- Desk research and mapping was conducted to understand current networks and infrastructure.

Fall 2023 – Understanding Current Conditions – Understanding Current Conditions

- An Active Transportation Plan project webpage was developed on the City of Kenora's website to provide information on the development of the City's Active Transportation Plan.
- This phase focused on developing a full and detailed understanding of the current state of active transportation in Kenora including a review of plans and policies, mapping of current facilities and community destinations, and a comprehensive review of available data.

Fall/Winter 2023 – Community/Interest Holder Engagement

- A range of community engagement activities were undertaken to gather input and understanding from a broad range of community interests. Activities included an open house, community survey, "pop up" events and a community workshop, as well as involvement from a stakeholder advisory committee.

Spring/Summer 2024 – Preliminary Plan Directions

- An overall framework was developed for the ATMP that included a plan vision and goals, long-term networks for each key travel mode and supporting design guidelines for transportation infrastructure. All plan directions were established based on background technical activities, input from the community, and consideration of best practices and lessons learned from other communities.

Fall/Winter 2024 – Implementation Strategy

- In consultation with City staff, an implementation strategy was developed to identify opportunities to pursue priority active transportation projects, determine the City's ability to fund investments in active transportation, and assign timelines and priority on this basis.

Spring/Summer/Fall 2025 – Active Transportation Plan Final Development

- Through a detailed review and refinement process, the final ATMP was developed with input and direction from Kenora residents, staff members and Council.

PLAN PURPOSE AND OBJECTIVES

The City of Kenora Active Transportation Master Plan will guide Kenora's future investments in active transportation. It aims to create a network that meets the needs of the growing population while considering the challenges of the current infrastructure. The plan includes a vision, goals, and targets along with strategies and actions for developing active transportation infrastructure and promoting tourism. These strategies provide guidance for improving policies, standards, infrastructure, and programs to make walking and cycling accessible, comfortable, and convenient for people of all ages and abilities.

The ATMP was developed over 18 months with robust input from the community and stakeholders. Using best practices and the feedback we received, the plan outlines policies, programs, and initiatives to promote active transportation in the City of Kenora. These are based on three main themes: **Connect**, **Explore**, and **Include**.

The plan includes an active transportation network that enhances the city's current trail and sidewalk system. It identifies key infrastructure projects, sets priorities for implementation, and provides cost estimates. This network aims to improve safety and comfort for walking and biking by adding sidewalks, crossing improvements, on-street bicycle routes, and multi-use pathways.

This active transportation master plan aims to develop a safe, accessible, and equitable network for walking, cycling, and other non-motorized transportation. By engaging the community, analyzing data, and researching best practices, we aim to create a roadmap that promotes physical activity, improves road safety, reduces air pollution, and enhances community connectivity in Kenora.

Key objectives of the ATNP include:

- Encouraging walking, bicycling, skiing, and rolling (using scooters, wheelchairs, or mobility aids) to ensure safe and comfortable non-motorized travel throughout Kenora.
- Promoting and facilitating active transportation for visitors by addressing barriers and motivators such as incentives, wayfinding, and end-of-trip facilities (secure bicycle parking, storage, and other amenities).
- Developing key network priorities, including identifying quick-win and major projects, to guide investments over the next 5, 10, and 20 years.

2 FUTURE DIRECTION

GUIDING PRINCIPLES

Throughout the planning process, it was crucial that recommendations supported Kenora in creating an inclusive and equitable active transportation culture and network. The development of the Active Transportation Master Plan (ATMP) is guided by the following principles:

- Active transportation is for **everyone**. Community members feel that it was important that the City of Kenora offer a wide range of transportation opportunities that support mobility independence at any age
- Active transportation is a **safe option** for residents and visitors. Improvements should be designed and built to be safe and comfortable for all users. Community members should feel safe using the network regardless of their mode, time of day, or time of year.
- Kenora is a livable and **well-connected** area: The network connects community members to key destinations. Transportation modes are integrated to facilitate multi-modal travel and support access for all to recreation and essential destinations throughout the region, regardless of physical ability or economic situations.
- Active transportation improvements **will not harm the environment**. Improvements should maintain or restore wildlife and aquatic habitats. Invest in the network to help increase the number of zero-emissions trips.
- Active transportation improvements should support our community's overall health. Improving access to active transportation opportunities **supports our community's physical and mental health**.
- Include **achievable and aspirational recommendations**. The Plan should include short- and medium-term recommendations so that community members can see and experience improvements quickly, as well as longer-term and aspirational recommendations that will have a large impact - but may take more funding and collaboration with key partners.

STRATEGIES AND ACTIONS

The strategies and actions below were developed on the basis on feedback and direction from community stakeholders, local residents, and city staff. These are intended to help guide initiatives, funding, and programming in the City of Kenora in the years ahead and will require cooperation and coordination amongst various city departments, with community organizations and stakeholders, and various levels of government.

These actions and strategies will also require regular monitoring and oversight to ensure they are being actioned and have the intended impact, and may need to be adjusted as context, technology, capacity, and available funding needs change over time.

Theme #1: Connect

The intention of this theme is to provide safe and comfortable connections throughout the City of Kenora, improve access to active transportation facilities, and ensure future active transportation facilities provide access to recreation and community destinations.

Action 1.1: Improve pedestrian connections

- 1.1.1 Opportunistically expand and enhance the pedestrian network as funding, new developments, and road renewal projects permit.
  - This includes adding, maintaining, and enhancing walkways and pedestrian connections throughout Kenora.
  - Consider prioritizing sidewalks on local roads in areas around schools, seniors centres, recreation areas, and other key destinations.
  - Include best practice guidelines for sidewalks in any new active transportation facility design guidelines the City develops.

Action 1.2: Improve bicycle and trail connections

- 1.2.1 As funding permits, expand and enhance the bicycle and trail network.
  - This includes adding, maintaining, and enhancing cycling routes and trails throughout Kenora.
- 1.2.2 Where possible (due to topography/elevation constraints in some areas), create a bicycle network that includes options for people of all ages and abilities.
  - Prioritize accessible routes to key destinations, including schools, recreation centres, senior centres, and hospitals.
- 1.2.3 Implement new and upgrade existing trail connections to build on the existing and proposed walking, cycling, and trails networks.
- 1.2.4 Develop a process for ensuring bicycle routes are considered (where appropriate) for new developments and road renewal projects.
  - Seek opportunities to implement new or improve existing bicycling routes and trails in conjunction with other projects and initiatives.
  - Utilize best practice guidelines such as the Ontario Traffic Manual (OTM book 18) for bicycle routes and trails in any new design guidelines the City develops.
  - Ensure bicycle routes consider how to facilitate drainage and snow removal.

Action 1.3: Improve intersections and crossings

- 1.3.1 Explore how the City can enhance safety and accessibility at priority intersections and crossings.
  - This could include reducing crossing distances with curb bump outs or median islands, activating audible pedestrian signals, and installing grade separated crossings, among others and as funding permits.
- 1.3.2 Monitor and address pedestrian and bicyclist safety concerns at intersections.
  - At hot spot collision locations, identify safety mitigation measures and explore how the City can implement improvements.
  - Continue to monitor, review, and adjust mitigation measures as necessary to ensure active transportation user safety.
- 1.3.3 Assess active transportation safety and accessibility at underpasses and overpasses, including assessment through a CPTED lens.
  - Where warranted and feasible, identify safety mitigation measures and explore how the City can implement improvements.

- 1.3.4 Seek opportunities to install new or improve existing active transportation crossings in conjunction with future projects, plans, and developments.
- 1.3.5 Identify where new pedestrian and bicycling crossing locations are warranted and would provide safe connections within the existing active transportation network.

Action 1.4: Connect to other modes and key destinations

- 1.4.1 Explore how active transportation connections can be integrated into parks, consistent with the City's Parks and Recreation Master Plan.
- 1.4.2 Seek opportunities to connect existing off-street paths and trails with walking and cycling facilities.
- 1.4.3 Incorporate active transportation into land use planning
  - Encourage active transportation routes in land use planning.
  - Support higher density, mixed use infill development that promotes and encourages active transportation.
  - Encourage storefronts to face onto sidewalks.
  - Encourage parking lots that avoid large expanses at the front of storefronts.
  - Explore opportunities within existing utility, railway, and surplus road rights-of-way to develop new pathways.

Theme #2: Explore

The intention of this theme is to encourage residents and visitors to travel by walking, biking, or rolling.

Action 2.1: Create great places and streets

- 2.1.1 Explore opportunities to create pedestrian-only streets temporarily, seasonally, or permanently.
- 2.1.2 Develop guidelines for the installation of public amenities, including lighting and benches, through new developments or in conjunction with other projects.
- 2.1.3 Encourage urban vibrancy by exploring opportunities to temporarily utilize or repurpose vacant or underused City-owned space.
- 2.1.4 This can include providing landscaping and public art in the right-of-way.
- 2.1.5 Use pilot projects to test out active transportation facilities for lower costs.
  2.1.6 Work with the Kenora & District Chamber of Commerce, Harbourtown Biz, and other business community partners to improve the streetscape and public realm in a way that recognizes the unique local identity of the City.

Action 2.2: Make it easy to get around

- 2.2.1 Enhance and expand active transportation wayfinding and signage downtown and in other areas with high pedestrian and bicyclist activity.
- 2.2.2 Work with partners to develop engaging maps that promote active trips and key destinations.
- 2.2.3 Maps should include sustainable trip strategy information to help people of all ages and abilities identify activities and routes that best meet their abilities.

Action 2.3: Promote active transportation education and awareness

- 2.3.1 Support school districts in creating Active and Safe Routes to School programs and initiatives.
  - This can include providing Bicycle Education and Skills Training (BEST) for students in elementary and secondary schools, participation in walking and biking to school events, and recording mode share using the BikeWalkRoll application.
- 2.3.2 Support programs that encourage adults to bicycle and promote road safety.
- 2.3.3 Lead by example to encourage and incentivize City employees to walk or cycling to work.
  - Explore bicycle financing programs.
  - Participate in nation-wide active transportation celebrations, such as Bike to Work Week and Pedal Poll.
  - Create encouragement activities, such as "Walk and Wheel Wednesdays".
- 2.3.4 Continue to ensure the City is informed of research and evaluation of the benefits of active transportation. Consider working with the Kenora Public Library to provide ongoing research opportunities.
- 2.3.5 Develop a positive messaging campaign to portray active transportation as a normal, everyday mode of transportation.
  - This can also include a "community challenge" to get community members involved.
  - Demonstrate the impacts of vehicle emissions on local air quality and highlight the positive impacts of active transportation on air quality in reducing overall vehicle emissions and improving public health.
- 2.3.6 Work with newcomer and immigrant organizations in Kenora to promote walking and bicycling as a safe, comfortable, and inexpensive mode of transportation.

Action 2.4 Provide bicycle end-of-trip facilities

- 2.4.1 Provide bicycle parking and other end-of-trip facilities at City of Kenora owned and operated facilities.
  - This can include bicycle repair and maintenance stations located in key locations such as the Kenora Harbourfront.
- 2.4.2 Develop and implement a bike parking policy to establish requirements for short-term and long-term bicycle parking and end-of-trip facilities.
  - Recommend bicycle end-of-trip facilities be considered in all new developments.
  - Work with event coordinators and partners to provide temporary bicycle parking at community events.

Action 2.5 Incorporate active transportation into tourism opportunities

- 2.5.1 Explore opportunities to promote experiential tourism activities that celebrate local arts, culture, and heritage.
- 2.5.2 Support the expansion of bicycle and walking tourism activities, such as walking and cycling tours in the downtown and along the waterfront.

Theme #3: Include

Action 3.1 Create an active transportation network that provides options for everyone

- 3.1.1 Continue working with the City of Kenora's Accessibility Advisory Committee to ensure best practices in accessibility are considered for all new active transportation infrastructure projects and upgrades and implement where possible.
- 3.1.2 Apply an intersectional, equity-focused lens to the planning, design, and implementation of all active transportation facilities, amenities, and programs. Consider gender, ethnicity, class, sexuality, religion, disability, height, age, and weight as much as possible.
- 3.1.3 Continue to follow the Accessibility Standard for Transportation as identified under the Accessibility for Ontarians with Disabilities Act.
- 3.1.4 Support Committees of Council representing vulnerable and under-represented groups to identify their unique needs in utilizing active transportation in Kenora.
- 3.1.5 Provide accessible detours for people walking and bicycling during construction and maintenance.

Action 3.2 Implement and monitor the plan

- 3.2.1 Monitor the implementation of the active transportation network plan and report back on the successes.
- 3.2.2 Report annually to Council on growth in the active transportation network, annual spending on active transportation, and meeting (or exceeding) targets.

Action 3.3 Celebrate active transportation

- 3.3.1 Collaborate with schools and businesses to celebrate active transportation.

Action 3.4 Active transportation policy and programming support

- 3.4.1 Work with Ontario Provincial Police to produce a local road safety report and monitor pedestrian and cycling safety trends.
- 3.4.2 Review and update current minimum maintenance standards and ice-snow removal requirements for active transportation infrastructure including sidewalks, bicycle lanes, and multi-use pathways.
- 3.4.3 Develop a Transportation Demand Management (TDM) program to work with local businesses to encourage employees to use sustainable modes of transportation.
- 3.4.4 Investigate and address the impact of new and shared mobility on the active transportation network, facility design, and City policy.

3 ACTIVE TRANSPORTATION NETWORK AND PRIORITY PROJECTS

This section of the Active Transportation Master Plan is intended to provide facility design guidance for the City of Kenora as they seek to implement the ATMP – specifically the proposed network. While the design guidance below is based upon current best practice in Active Transportation design as of 2025, regular and reviews and updates should be conducted to ensure that the design of any pedestrian and cycling facilities in the City of Kenora in the coming years reflects updated research and design standards.

Design guidance in this section is provided from numerous sources, namely:

- Transportation Association of Canada (TAC) – *Geometric Design Guide for Canadian Roadways (2020).*
- British Columbia Ministry of Transportation and Infrastructure – *British Columbia Active Transportation Design Guide (2019) (BCAT).*
- North American Cities and Transit Agencies (NACTO) – *Urban Street Design Guide (2013).*
- Federal Highway Administration – *Small Town and Rural Design Guide (2016).*

While not all designs in these guides will be contextually appropriate for the City of Kenora, many of the identified designs will be – particularly the "Rural Pedestrian Design Considerations" and the "Rural Cycling Design Considerations" sections of the BCAT, as well as much of the design guidance in the *Small Town and Rural Design Guide.*

As noted in the sections below, the designs in this section are intended to provide guidance and should be used as such – to help inform future corridor study and design projects. However, it should be noted that each identified corridor or route for future active transportation facilities will require further study and design. Slope, drainage, utilities, existing property ownership, frequency of use, and intended usage will all need to be considered and accommodated for, and the identified facility types in the proposed Active Transportation Network may need to change as conditions dictate.

While the specific facility type may change, it is recommended that any alternate designs are informed by the design guidance below, and as much as possible – future facilities seek to provide space that is considered comfortable for all.

A good rule of thumb is that if you build transportation facilities that are safe and comfortable for 8-year-olds and 80-year-olds, you have built facilities that are safe and comfortable for everyone!

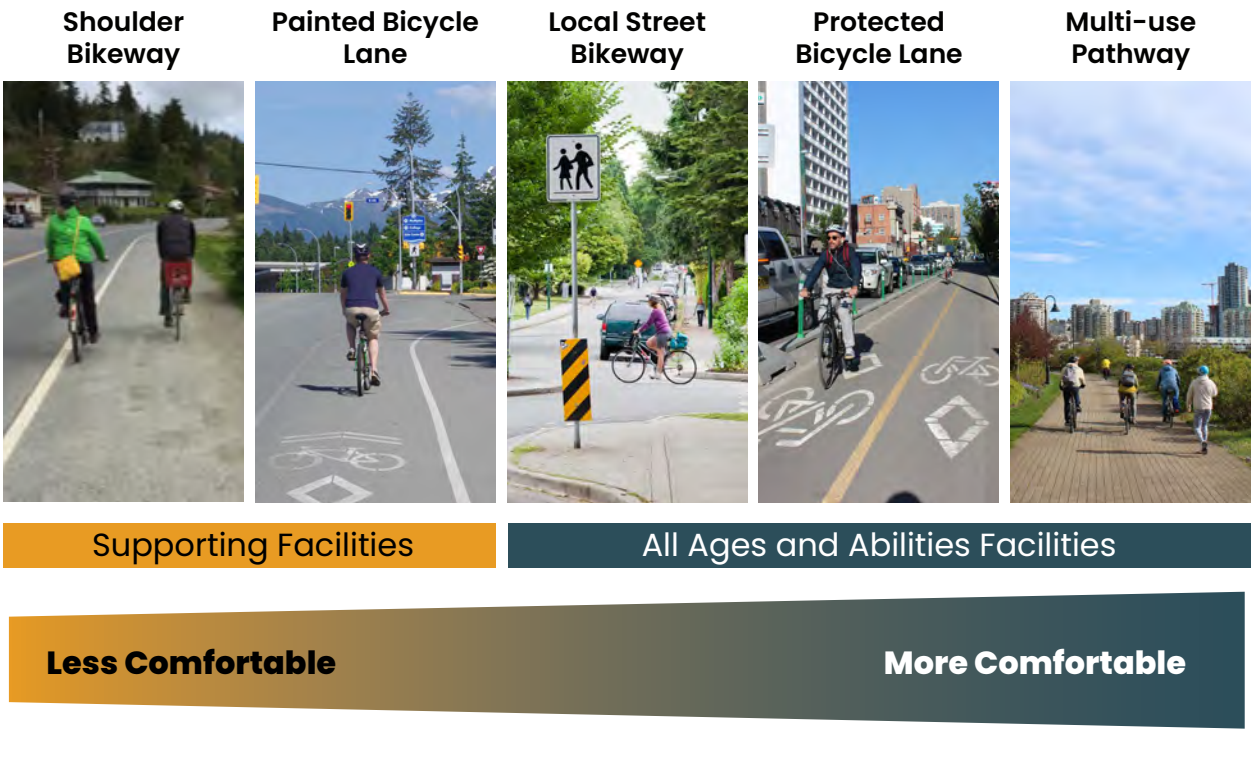
FACILITY TYPES

Choosing the right type of active transportation facility is key to making it safe and convenient for walkers and cyclists. Several factors are important when designing and locating active transportation facilities. **Motor vehicle speeds and traffic volumes are major considerations**. The higher the speeds and traffic, the more separation and protection are needed for a safe cycling facility. On streets with low traffic volumes and speeds, separated cycling or pedestrian facilities may not be necessary, but measures might still be required to ensure that traffic remains low and slow.

Additional considerations should include the connections to nearby pathways. Active transportation facilities must be easily accessible and well-connected to essential destinations such as residential areas, educational institutions, workplaces, and recreational zones. By establishing a comprehensive network of cycling paths, more individuals will be encouraged to opt for cycling as a mode of transportation, thereby reducing traffic congestion and enhancing air quality.

Furthermore, community engagement and feedback are crucial in the selection process of these facilities. Engaging with local residents, cycling organizations, and other stakeholders assists in understanding their needs and preferences, ensuring that the selected facility type aligns with the community's overall vision for cycling infrastructure.

Figure 1: Continuum of Bicycle Facilities



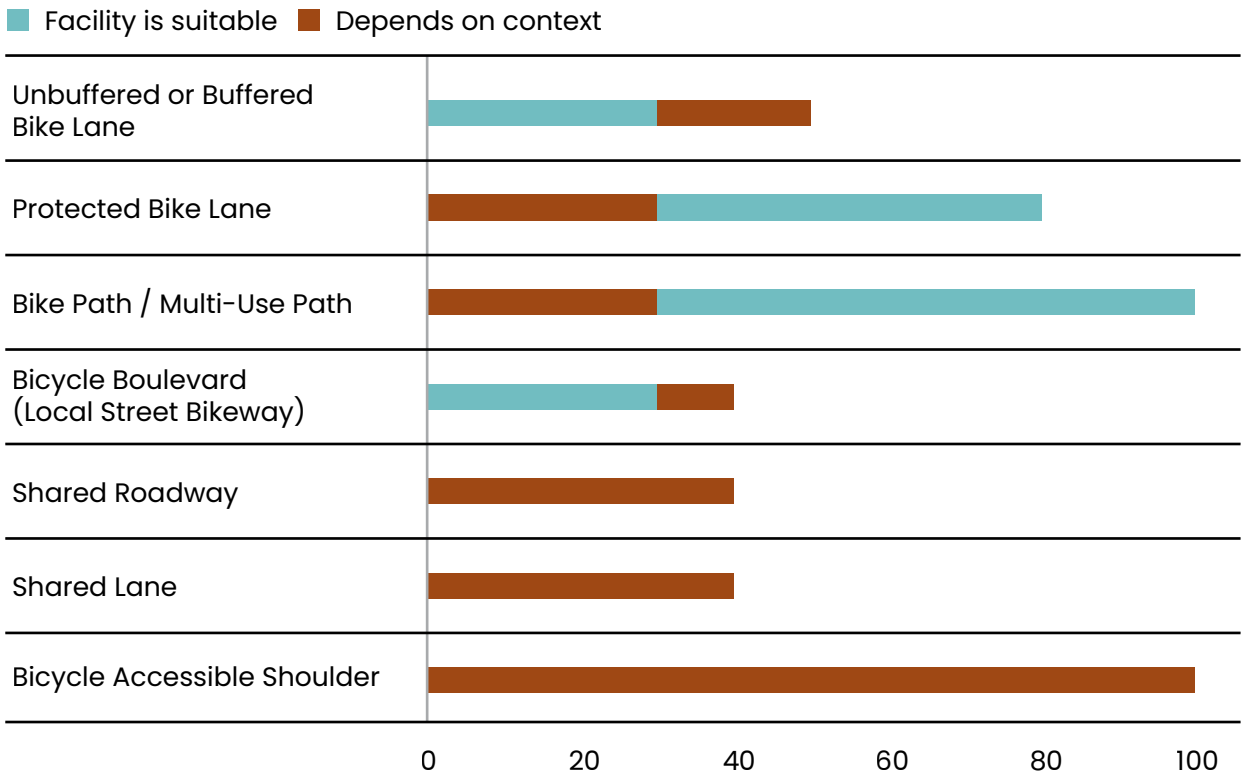
The image on the following page shows six different types of bicycle facilities, as well as their general level of comfort, from least comfortable on the right to most comfortable on the left, and are described below:

1. **Shared Use Lanes (Sharrow):** These are regular traffic lanes marked with bicycle symbols to indicate that cyclists and motorists share the same space. They are suitable for low-traffic streets where cyclists can safely ride with vehicles.
2. **Bicycle Lanes:** Dedicated lanes on the road exclusively for cyclists, usually marked with painted lines and symbols. These lanes provide a designated space for cyclists, improving safety and visibility.
3. **Buffered Bike Lanes:** Similar to painted bike lanes but with additional space (buffer) between the bike lane and the adjacent traffic lane or parked cars. This buffer increases safety by providing extra separation from moving vehicles.
4. **Local Street Bikeways:** Low-traffic streets optimized for bicycle travel. Traffic calming measures, such as speed bumps and diverters, are used to prioritize cyclists and reduce vehicle speeds.
5. **Separated Bike Lanes:** These lanes are physically separated from motor vehicle traffic by barriers such as curbs, bollards, or parked cars. They offer a higher level of safety and comfort for cyclists.
6. **Off-Street Pathways:** Off-road paths shared by cyclists, pedestrians, and other non-motorized users. These paths are typically wider and provide a safe, separated space for active transportation.

To determine the most suitable facility type for a particular context, a universal design principle is that the higher the VOLUME and SPEED of vehicles along a corridor, the higher the level of PROTECTION and/or SEPARATION required:

- Low volume (less than 1000 vehicles per day), and low speed (average speeds should be near 30 km/hr) corridors require less separation for cyclists and pedestrians.
- High volume (over 1500 vehicles per day) and high speed (average speeds 40 km/hr or greater) require more protection and/or separation.

Figure 2: TAC Geometric Design Guide – Bicycle Facilities, By Posted Speed



It's important to consider the risks associated with different types of facilities during the design process. Various facility types come with different levels of risk for injuries.

DESIGN GUIDANCE

Urban Systems project team members acted as expert advisors for the soon to be released Infrastructure Canada (INFC) funded *Cycling in Diverse Environments: A Supplement to The Canadian Bikeway Comfort and Safety (Can-BICS) Classification System Report* being developed by the Cities, Health & Active Transportation Research (CHATR) Lab at Simon Fraser University.

In 2019, the CHATR Lab developed the Canadian Bikeway Comfort and Safety (Can-BICS) classification system, with support from the Public Health Agency of Canada (PHAC). Can-BICS groups cycling paths into five types and three comfort levels. These categories and comfort levels were created by reviewing professional guidelines for biking path design and public health studies on the impact of different biking paths on road safety for cyclists and to encourage more people to ride bikes (Figure 14).

The comfort levels are:

High Comfort Bikeways include low stress routes comfortable for most people.

1. Cycle tracks alongside busy roads
2. Local street bikeways (or neighbourhood greenways)
3. Off-street bike paths (paved)

Medium Comfort Bikeways are low to medium stress routes which can be considered comfortable for some people.

1. Off-street multi-use pathway (MUP) (paved)

Low Comfort Bikeways are a high stress route comfortable for few people.

1. Painted bicycle lanes. (see #7 above)

****For the purposes of this report, the term "bikeway" will only be used in this section in reference to bikeway facilities as defined in the Can-BICS Report (cycle tracks, neighbourhood greenways, off road bike paths, multi-use paths, and painted bike lanes). In the rest of the report, the term "local street bikeways" will refer to traffic calmed roadways intended for shared use amongst cyclists, pedestrians, and vehicle drivers.*

Certain facilities did not meet the comfort and safety standards of the Can-BICS classification system. These include roads with only signs and major streets with shared lanes marked by sharrows. While these routes can connect to other paths, they do not offer much in terms of comfort and safety.

The 2024 report aims to clarify how the Can-BICS system applies to small towns, rural, and remote areas. It also provides a summary of cycling facilities by street class.

Although Kenora has a population fifteen times larger than the 1,000-person threshold mentioned in the table, its population density is only 17.5% of the threshold. This categorizes The City of Kenora as a "small town, rural, or remote community".

Table 1: Can-BICS Cycling Facilities for Small Towns, Rural, and Remote Communities

Street Class	Operational Context (14)	Motor Traffic Volumes and Speed	Cycling Facility
Local Street	Roads without lanes (undivided central traffic path) where motor traffic volumes and speeds are low. Primary function is adjacent land access.	Very low volume - Walking pace	Residential Shared Street[2,3] New route type for context of small towns, rural, and remote communities
		Low volume - Low speed	Local Street Bikeway
Collector Street	Two and three-lane roads with moderate motor traffic volumes and speed. Carries local trips within neighbourhoods and connects local streets to arterials.	Moderate volume and speed	Painted Bike Lanes
Arterial Street	Multi-lane roads with high motor traffic volumes and speeds. Primary mobility function. Carries municipal and regional trips.	High volume - High speed	Cycle Track or Multi-Use Path
N/A	Independent corridors away from roads.	N/A	Bike Path or Multi-Use Path[4]

The Can-BICS update also includes a new type of road for small towns, rural, and remote areas – Residential Shared Streets. These are residential streets without curbs or sidewalks and have a narrow profile meant for cars, bikes, and pedestrians to share. Signs and pavement markings guide users, showing that cyclists and pedestrians come first, and **cars are guests**. Different pavement materials may be used to show road spaces, but the whole street is accessible to everyone. Landscaping, street furniture like bollards and planters, and on-street parking (if present) help keep the road narrow, slowing down cars to walking speed (≤ 10 km/h). This new type of road falls under the Local Street Bikeway category below.

2 Motor vehicle volumes subordinate to pedestrian and cyclist volumes.
3 Heavy agricultural traffic (≥ 10 vehicles/peak hour) preclude use of residential shared roadways (p.34)(2).
4 Separate walking and cycling paths based on user volume and mix thresholds in Part IV.

Local Street Bikeways

Local street bikeways are designed to make it easier and safer for cyclists and pedestrians to travel. These bikeways are on streets with low traffic and low speeds, making them safer for everyone. They provide safe routes for biking and walking while reducing the risk of accidents with cars. Local street bikeways are usually found on streets with fewer than 1,500 vehicles per day and speeds under 30 km/h.

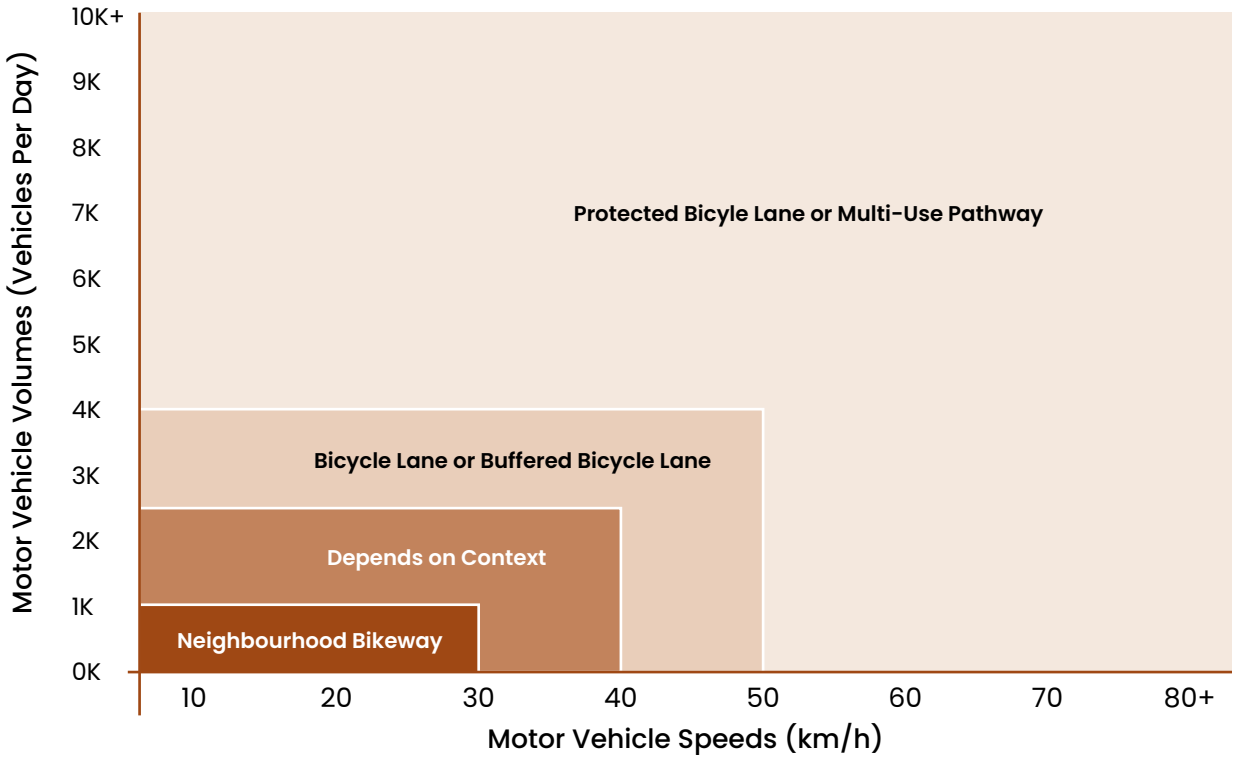
The advantages of Local Street Bikeway facilities include:

- Enhancing bicyclist comfort by lowering motor vehicle speeds and traffic volumes.
- Improving pedestrian conditions with the addition of sidewalks and better pedestrian crossings.
- Improving residents' quality of life by calming traffic and making crossings safer.
- Linking local residential streets to commercial areas and community services like schools.
- Potentially reducing serious injury rates by lowering travel speeds.
- Being less visually intrusive compared to separated facilities.

Key considerations include:

- May need extra paved surfaces to accommodate pedestrian sidewalks.

Figure 3: Preferred and Potential Vehicle Volumes and Speeds for Local Street Bikeways, Bicycle Lanes, and Multi-Use Pathways *(Adapted from the British Columbia Active Transportation Design Guide)*



Local Street Bikeways often incorporate various traffic calming measures and design features to ensure a comfortable, low-stress environment for cyclists. Typical elements of these greenways include:

Traffic Calming: Implementation of speed tables and raised crosswalks to decelerate motor vehicle traffic, thereby creating a safer atmosphere for cyclists.

Typical cross section required: These facilities integrate seamlessly within existing roadways and do not necessitate additional right of way.

Figure 4: Examples of Traffic Calming. L: Speed table on a Rural Road, R: Raised crosswalk
(Photo credit: Small Town and Rural Design Guide)

Intersection Improvements: To enhance safety at intersections, local street bikeways may feature traffic signals with bicycle-specific amenities, such as advanced stop lines or bike boxes. These elements grant cyclists priority and elevate their visibility to motorists. Additional intersection enhancements include painted crosswalks, crosswalks outfitted with rectangular rapid flashing beacons (RRFBs), and pedestrian corridors, all of which bolster pedestrian and cyclist safety at critical intersections or crossing points. As illustrated in Figure 5, a separated facility with a half-signal facilitates the halting of vehicle traffic to allow pedestrians and cyclists to cross safely.

Item	Industry Standards	Notes
Traffic Speeds	Maximum: 40 km/h Preferred: 30 km/h or less	Speeds up to 40 km/h are considered acceptable if traffic volumes are 1,000 veh/day or less
Traffic Volumes	Maximum: 2,500 veh/day Preferred: 1,500 veh/day	

Figure 5: Intersection Improvements - Signalized (half signal) bicycle and pedestrian crossing *(Photo credit: Jamie Hilland, Urban Systems)*

Wayfinding and Signage: Clear and concise signage, along with wayfinding markers, are typically installed along local street bikeways guide both pedestrians and cyclists, helping them follow the preferred route and connect to other cycling infrastructure or key destinations.

Figure 6: Wayfinding Signage (Photo credit: Halifax Regional Municipality)

Existing signage: The City of Kenora currently posts WC-19 "Share the Road" signage along key routes such as Hwy 17 and should continue to explore utilizing this signage along designated shared use roadways and greenways. The proposed Rabbit Lake facility would be a suitable location for this signage to help encourage sufficient clearance is given to vulnerable road users.

Figure 7: Existing City of Kenora signage along Hwy 17 (Photo credit: Urban Systems)

Table 2: Cost, Comfort, AAA (All Ages and Abilities), Road Safety Rating for Local Street Bikeways

Cost (per km)	Level of Comfort	All Ages and Abilities	Road Safety Level
Low - $52,000 per km	Medium - (if vehicle speeds and volumes reduced to <1500 VPDs and average vehicle speeds <30 km/hr)	Yes – if vehicle volumes and speeds meet design targets	Medium – no physical separation between cyclists and vehicles

Paved Shoulders

Paved shoulders are cycling and pedestrian facilities that are just as they sound – expanded shoulders on roadways that can serve as a functional space for bicyclists and pedestrians to travel in the absence of other facilities with more separation.

These facilities are often used in rural areas where there is space, difficult terrain, and limited funds for separated paths. While these are cheaper and easier to build, they are not considered suitable for all ages and abilities as they do not provide comfort for many pedestrians and cyclists, offering no protection and little separation from vehicles. However, several design features can enhance safety and comfort for those using these facilities:

- **Edge line rumble strips:** These alert drivers that they are entering a pedestrian and cycling zone and also warn drivers who may be drowsy and drifting off the travel lane.
- **Contrasting pavement:** Colored or contrasting pavement can make the shoulder stand out from the roadway.
- **Bicycle accommodation:** Bicyclists should travel in the same direction as the adjacent lane.
- **Enhanced longitudinal markings:** Wide solid white lines or buffer areas enhance visual separation.
- **Land use:** Appropriate outside and within built-up areas, near school zones, and where pedestrian and bicycle activity is expected. Walkable shoulders should be provided along both sides of county roads and highways frequently used by pedestrians.
- **Speed and volume:** Appropriate on roads with moderate to high volumes and speeds, and on roadways with a large amount of truck traffic. They may function on multilane roads with heavy traffic but do not provide a low-stress experience in such conditions.

Benefits of paved shoulder facilities include:

- Improves the experience for bicyclists on roads with higher speeds or heavy traffic.
- Reduces the risk of pedestrian accidents when walking along the roadway.
- Offers advantages for all road users by providing distinct spaces for bicyclists, pedestrians, and vehicles.
- Provides a stable surface for pedestrians and cyclists when sidewalks are not available.
- Can decrease the number of “bicyclists hit from behind” accidents, which are common on rural roads.

Key considerations include:

- Adding more striping and signs may conflict with the rural area’s uncluttered look.
- Requires wider roads to accommodate accessible shoulder space.

Figure 8: Preferred and Potential Vehicle Volumes and Speeds for Shared Roadways, and Bicycle Accessible shoulders *(Adapted from the British Columbia Active Transportation Design Guide)*

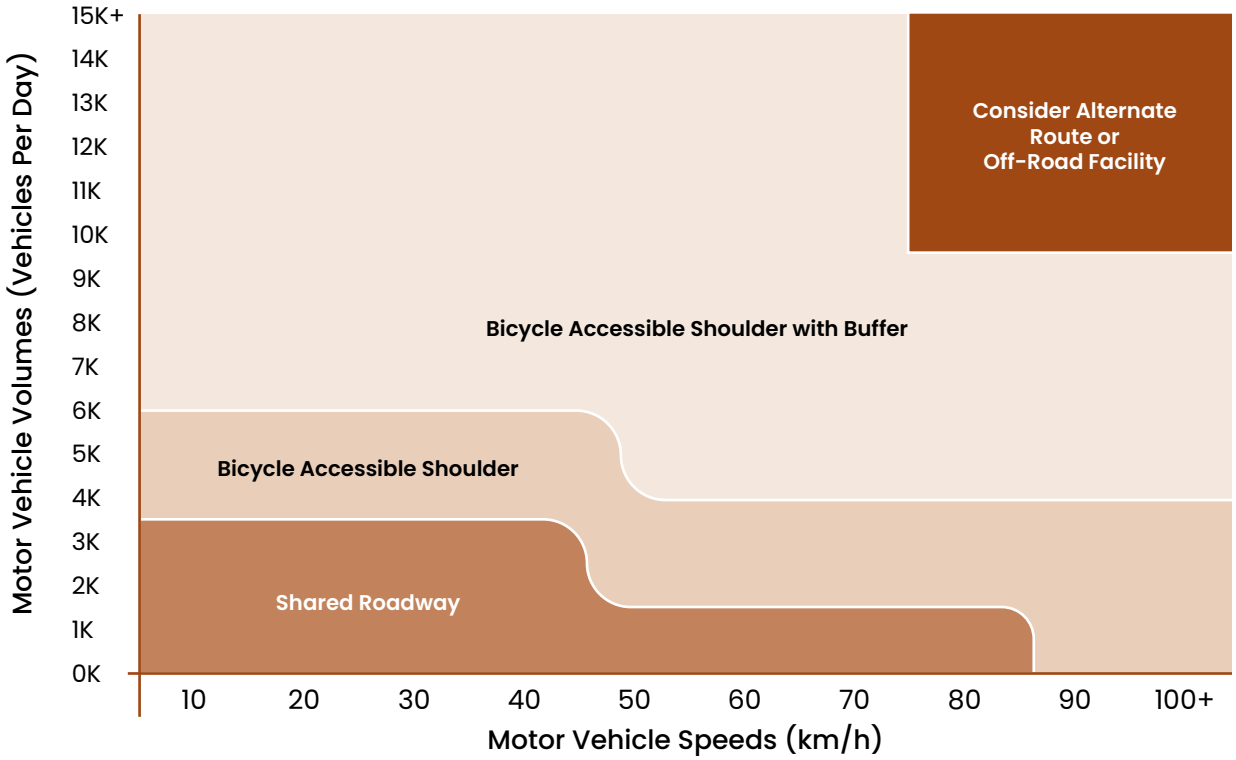


Table 3: Cost, Comfort, AAA (All Ages and Abilities), Road Safety Rating for Paved Shoulders

Cost (per km)	Level of Comfort	All Ages and Abilities	Road Safety Level
Medium - $133,000 per km for recent project in a similar sized community in Ontario	Low/Med - no physical protection, only visual.	No – but is appropriate on roads with moderate to high volumes and speeds and on roadways with a large amount of truck traffic.	Low– no physical separation between cyclists/ pedestrians, and vehicles.

Figure 9: ***Pigmented, stamped asphalt that looks like bricks is used to emphasize a paved shoulder.*** *(Photo Credit: Small Town and Rural Design Guide). Different or colored pavement materials can be used to distinguish the shoulder from the travel lanes beside it. Colored pavement on a paved shoulder is a visual treatment to increase awareness and is not meant to convey regulatory, warning, or guidance messages to road users.*

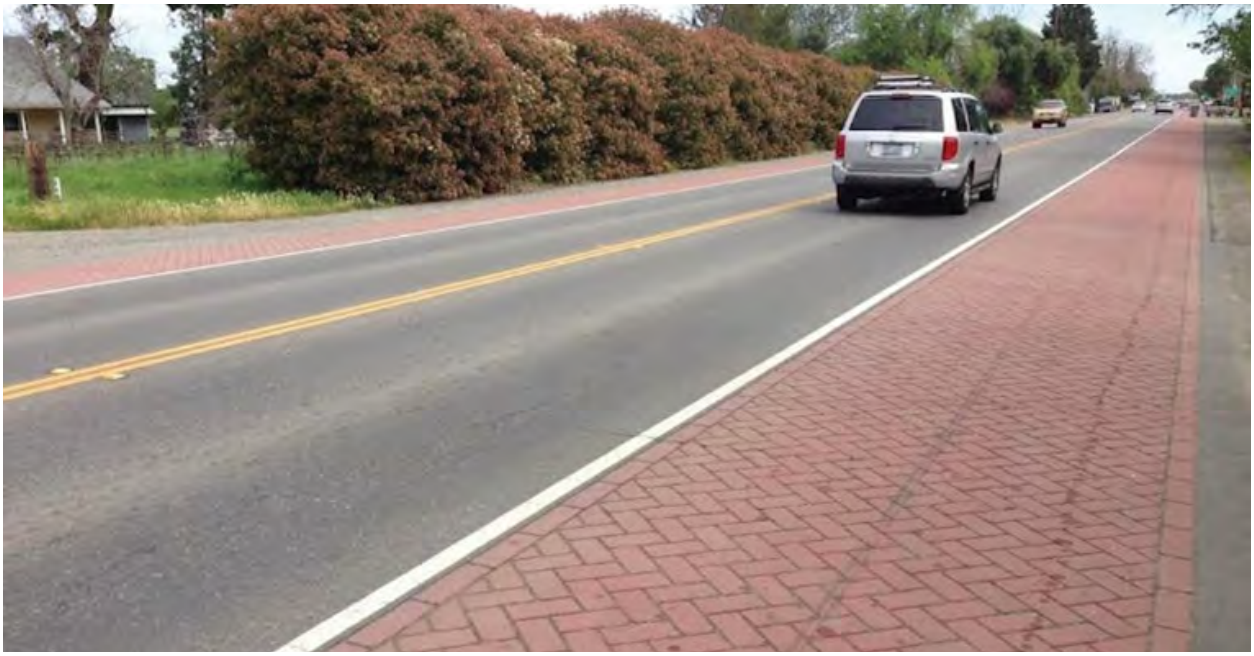


Figure 10: ***A buffered rumble strip zone creates a more comfortable buffered bike lane using a paved shoulder*** *(Photo credit: Small Town and Rural Design Guide)*

Table 4: Recommended Minimum Paved Shoulder Widths by Roadway conditions
(Calculations assumes 1 travel lane per direction, outside lane width of 3.35 metres, 2 percent heavy vehicle mix, average pavement quality, and no on-street parking)

Functional Classification	Motor Vehicle Volumes (Vehicles Per Day)	Speed (km/hr)	Recommended *Minimum* Paved Shoulder Width
Minor Collector	Up to 1100	55 km/hr	1.5 m
Major Collector	Up to 2600	70 km/hr	2.0 m
Minor Arterial	Up to 6000	90 km/hr	2.1 m
Principal Arterial	Up to 8500	100 km/hr	2.4 m

Clear Paved Shoulder Area

While any amount of paved shoulder width can aid pedestrians and bicyclists, a width sufficient for their safe use is crucial. To properly accommodate bicyclists and pedestrians, a paved shoulder should be at least 1.2 meters wide, measured adjacent to the road edge or curb, excluding any buffer or rumble strip. For greater comfort, the ability for users to pass one another, and to allow for side-by-side riding, it is advisable to provide a wider shoulder when possible.

Rumble Strips

Rumble strips are a proven safety measure for reducing roadway departure crashes. Research shows that installing rumble strips can reduce severe crashes, but they may negatively impact bicycle travel if constructed poorly.

If rumble strips are to be placed on bike routes, ensure their dimensions, design, and placement are more tolerable for cyclists:

- 0.3 m spacing center-to-center
- 0.15 - 0.2 m long, perpendicular to the roadway
- 15 cm wide, measured parallel to the roadway
- 1 cm deep

Position rumble strips to overlap the road edge line, also known as edge line rumble strips or rumble stripes.

Provide a gap pattern in the rumble strips to allow cyclists to enter and exit the shoulder area easily. The gap pattern typically consists of a 3.3 m clear gap followed by rumble strips, with a typical sequence of 12.1–18.2 m (according to NCHRP Synthesis 490, 2016).

Multi-use Pathways

A multi-use pathway is an off-street route that allows for various forms of non-motorized transportation, including walking, cycling, skating, and jogging. These pathways offer a secure and convenient space for both active transportation and leisure activities.

Key features of multi-use pathways include:

- **Shared Space:** Multi-use pathways (MUPs) are intended for use by various user groups, providing a single corridor for pedestrians, cyclists, and other non-motorized travelers. The pathways are typically wide enough to comfortably support different modes of transportation. Best practices suggest ensuring sufficient width for marked, separate pedestrian and cycling areas to minimize conflicts and reduce the risk of accidents caused by mixing users traveling at different speeds.
- **Surface and Width:** Multi-use pathways can be built with different materials, such as asphalt, concrete, or compacted gravel, depending on the setting and available budget.
- Separation from Motor Vehicles: The main goal of a multi-use pathway is to provide a safe space away from motorized traffic. These pathways are often located away from roads or include physical barriers (like curbs or landscaping) to create a clear separation from vehicle lanes.
- **Signage and Markings:** These pathways usually feature signs and markings to guide users and indicate proper usage. This may include signs for right-of-way, speed limits, directional arrows, and designated zones for specific activities and travel modes.
- **Accessibility:** Multi-use pathways are designed to be accessible to people of all abilities. They often incorporate features such as tactile indicators to accommodate individuals with disabilities or those using mobility aids.
- **Amenities:** Amenities along multi-use pathways enhance the user experience and convenience. These can include rest areas, benches, water fountains, bike racks, and lighting for safety during low-light conditions.

Multi-Use Pathways are often found in parks, urban areas, suburban neighborhoods, and recreational zones. These pathways offer several benefits, including:

- Providing a dedicated space for users of all ages and abilities.
- Offering access to areas that are otherwise only accessible by limited-access roads.
- Giving low-income people access to recreation and natural areas through nonmotorized transportation.
- Serving as a shortcut between cities or neighborhoods in some cases.
- Supporting tourism by providing easy access to natural areas or as a recreational activity itself.
- Maintaining a small footprint and displaying a distinctly rural character in certain settings.

Key considerations include:

- Enhancements with increased levels of striping and signs might disrupt the simple, uncluttered appearance characteristic of rural environments.
- A wider road is needed to provide adequate shoulder space for accessibility.

Table 5: Multi-use Pathways Design Guidance

Item	Industry Standards	Notes
Multi-Use Pathway Width	Min: 2.5 m Preferred: 3.5 – 4.5 m	2.5m acceptable in constrained locations 4.5m width allows for 3.0m painted bikeway and 1.5m painted walking path

Geometric Design

The geometric design of multi-use paths should support the speed and volume of expected user types.

- A width of 3.0 meters is recommended in most situations and will be sufficient for moderate to heavy use.
- A 0.6-meter shoulder should be provided on each side of the path, kept clear of vertical elements or obstructions.
- A minimum width of 2.4 meters is allowed for a two-way bicycle path and is only advisable for low traffic situations or short distances.
- For heavy use scenarios with high concentrations of various users, a width of 3.6 to 4.3 meters is recommended.
- Wider paths can accommodate maintenance vehicles, provide comfort on steep grades for passing and meeting, and offer more operating space through curves.

Table 6: Recommended Path Width by User Volumes

Volume and User Mix	Recommended Minimum Path Width
Low volume (less than 50 users in one direction per hour), low mix (75 percent bicyclists, 25 percent pedestrians)	2.4–3.0 m
Low volume (less than 50 users in one direction per hour), heavy user mix (50 percent bicyclists, 50 percent pedestrians)	3.6 m
High volume (150 or more users in one direction per hour), low mix (75 percent bicyclists, 25 percent pedestrians)	3.6–4.2 m

Vehicle Speeds and Volumes – Multi-use paths are designed to be completely separate from traffic and are usually found in independent corridors. The creation of these paths is often driven by the opportunity to enhance connectivity rather than their proximity to roadways. Sometimes, these independent corridors can offer similar connectivity and access to key destinations as nearby roads.

Markings

Striping: Generally, center line markings aren't needed, as most users will naturally stay to the right unless passing. However, on shared use paths with high traffic during peak hours or seasons, a center line stripe can help manage pathway traffic.

- When striping is necessary, use a 10 cm broken yellow center line stripe with 10 cm solid white edge lines.
- Solid center lines can be added on tight or blind corners and near roadway crossings.
- Edge lines should be marked on paths expected to be used in the evening.

Signs: In environments with mixed users, Yield etiquette signs can be beneficial. Many communities design customized signs to cater to local user groups and conditions. "Bikes Yield to Peds" (R9-6) signs can be placed at the entrances of path segments to remind bicyclists of the need to yield.

Figure 11: Signs can clarify yielding rules in shared use environments and may be modified based on expected user types

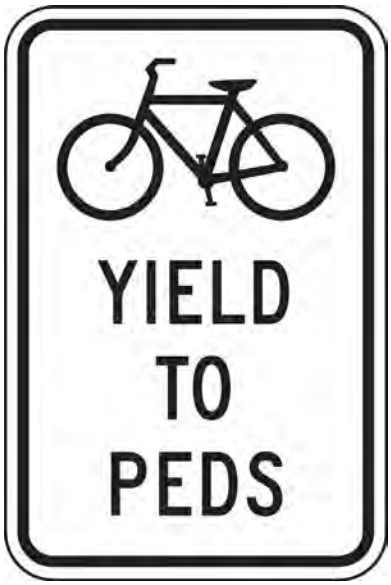


Figure 12: *Multi-use Pathways (Note: the pathway on the left is multi-use and not separated by mode, while the pathway on the right has a larger space and uses different materials to separate pedestrians and cyclists)*

Trails

Trans Canada Trail defines a "Trail" as a specially designed path used for various recreational activities or active transportation. To be officially recognized, a trail must be endorsed by the landowner, mapped out, clearly signposted, and regularly maintained.

Trails typically refer to paths designed for leisure activities, outdoor adventures, or non-motorized transportation like walking and biking. They offer many benefits, including better physical health, mental well-being, and access to nature.

Trails can be found in cities, parks, forests, valleys, and rural areas, allowing people to enjoy physical activity and explore the outdoors. Various types of trails serve different purposes and user groups, such as:

- **Hiking Trails:** These paths are for pedestrians and hikers, varying in difficulty from easy, well-maintained routes for beginners to challenging, rugged trails for experienced hikers. They often lead to scenic views, natural landmarks, or points of interest.
- **Biking Trails:** These are designed for cyclists and mountain bikers, ranging from paved paths for casual riders to technical single-track trails for advanced riders. Biking trails can be found in parks, forests, or designated biking areas.
- **Multi-Use Trails:** Accommodating various activities, these trails are used by pedestrians, cyclists, and sometimes equestrians. They have wider paths to allow different modes of transportation and include design features to ensure safe interactions among users.
- **Nature Trails:** These trails offer educational experiences highlighting natural features, plants, and wildlife. They often include informative signs, observation points, or guided tours to enhance visitors' understanding and appreciation of the environment.
- **Urban Trails:** Located in cities, these trails provide paths for pedestrians and cyclists, connecting parks, waterfronts, and neighborhoods. They promote active transportation and offer alternative routes for commuting or leisure.

Trans Canada Trail also developed a "Recreation Setting Spectrum" to determine the appropriate trail type and development level based on the recreation setting.

Figure 13: TCT "Recreation Setting Spectrum" for Trails

Given the level of development and recreational settings in Kenora, most of the trails can be classified as "Developed," "Frontcountry," or "Midcountry." There are a few "Backcountry" trails in the city, but they are largely unmaintained and rarely used.

Table 7: Trails Design Guidance

Item	Industry Standards	Notes
Trail Width	2.5 – 3.5 m	

Sidewalks

Sidewalks provide dedicated space intended for use by pedestrians that is safe, comfortable, and accessible to all. Sidewalks are physically separated from the roadway by a curb or unpaved buffer space.

Characteristics

- Sidewalks are essential for pedestrian safety and comfort in areas with a mix of land uses and in parts of the community where the roadway network has high traffic volumes or speeds.
- Legal crosswalks exist at all intersections, whether marked or not. A crosswalk at an intersection is defined as the extension of the sidewalk across the intersection.
- Unmarked Crosswalks: Lane markings, stop lines, yield lines, or other traffic control markings should be placed outside of the unmarked crosswalk area. The only way a crosswalk can exist at a midblock location is if it is marked.
- Marked crosswalks are located at intersections or midblock crossings based on engineering judgment. They should not be used indiscriminately.
    - The minimum width for a marked crosswalk is 1.8 meters.
    - For better visibility, the preferred crosswalk marking pattern at uncontrolled and midblock locations is the high visibility “continental” crosswalk marking.
    - Use of transverse line crosswalk markings should be limited to signalized intersections, or crossings of side streets controlled by stop signs.
    - Minor crossings of local streets may be unmarked.
- Rapid Rectangular Flashing Beacons (RRFBs) have become extremely popular as they are relatively inexpensive, can be solar powered so installed anywhere, and have proven to dramatically increase vehicular stopping compliance rates.
- Sidewalks are suitable for all types of roadways where pedestrian activity is likely.
- Sidewalks are strongly recommended inside built-up areas. They may also serve short-distance travel between built-up areas, for example, along or near highways in rural areas near pedestrian-generating development, such as neighborhoods, schools, and businesses.

Benefits of Sidewalks

- Provides a dedicated place within the public right-of-way for pedestrians to travel safely and reduces pedestrian collisions in rural areas.
- Reduces "walking along roadway" crashes.
- May significantly increase levels of walking in areas with high traffic speeds and/or volumes.

Considerations

- Sidewalks may not support a rural visual character when configured with curb and gutter and no landscaped separation.
- Requires a moderate-width roadside environment to provide for separation and sidewalk area outside of the adjacent roadway.

Figure 14: Pedestrian Facility Selection Decision Support Tool (*Source: British Columbia Active Transportation Design Guide*)

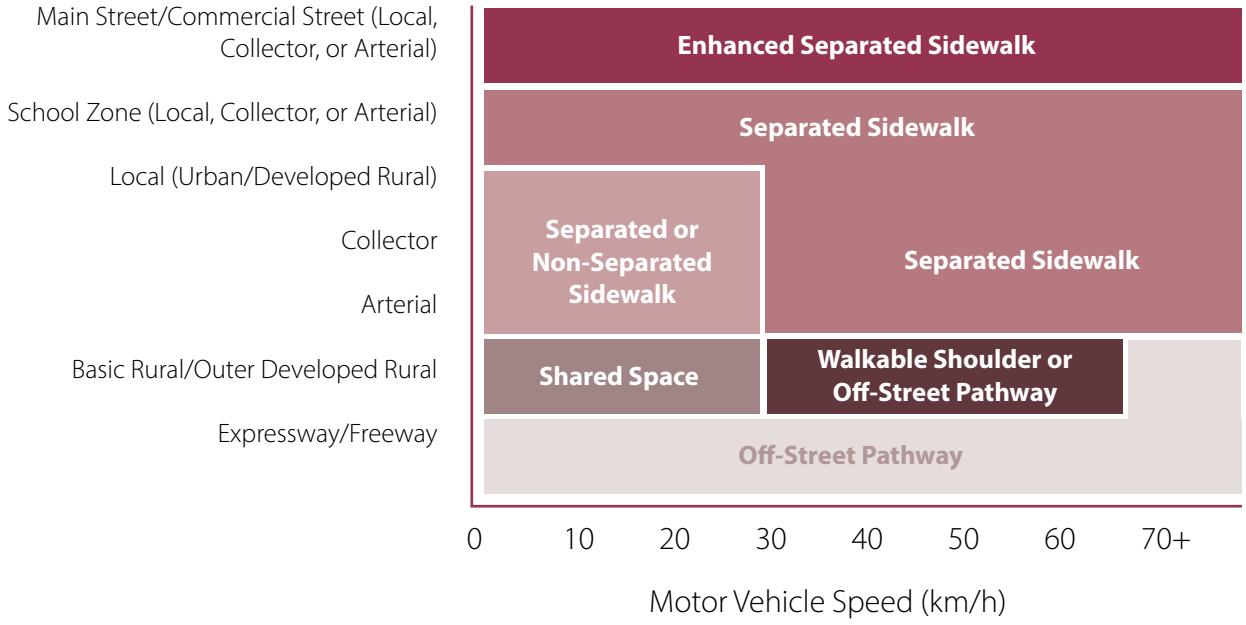
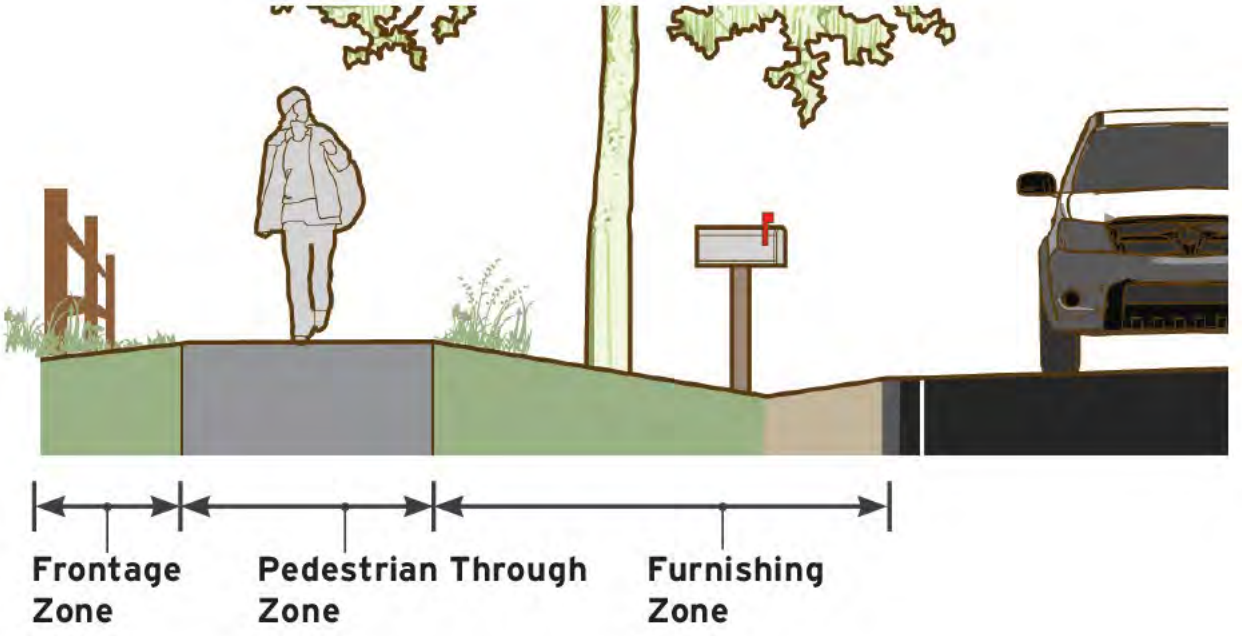


Figure 15: Sidewalks should be physically separated from the roadway by an unpaved buffer separation, barrier or curb edge *(Source: Small Town and Rural Design Guide)*



ACTIVE TRANSPORTATION NETWORK PLAN

The City of Kenora Active Transportation Master Plan (ATMP) proposes to use the existing recreational trails system to develop a fully integrated network for walking and cycling throughout Kenora. Recommendations in the Plan follow national and international best practices to create an all ages and abilities (AAA) network using a variety of facility types:

- **Local Street Bikeways:** Low-traffic streets optimized for bicycle travel, often featuring traffic calming measures to prioritize cyclists.
- **Paved Shoulders:** Additional paved areas on the edges of roads that provide space for cyclists, enhancing safety without requiring a full-width lane.
- **Multi-Use Pathways:** Wide paths designed to accommodate various users, including pedestrians, cyclists, and sometimes other non-motorized forms of transport, promoting safe and shared use.

The proposed active transportation improvements are described in detail in the following sections, with an explanation for why each corridor was selected and the recommended facility types to help inform the future study and design process required for each corridor.

All the corridors included in the Recommended Active Transportation Network were identified by community members and stakeholders as part of the public and stakeholder engagement process. Each corridor was then assessed in terms of feasibility, community benefits, network integration, and community demand.

Overall, the Recommended Active Transportation Network will expand the existing trail and sidewalk network to connect directly with more residential and commercial areas, close significant and ongoing gaps in the network, and create opportunities for residents and visitors alike to connect with the City in all its forms at a more human scale. Creating spaces for people to walk, wheel, and cycle by constructing the recommended network will help promote tourism, support improved community health, and improve road safety for all road users.

Along with extensive public, stakeholder, and administrative feedback, the following guiding principles were used in the development of the Active Transportation Network for the City of Kenora:

1. **Feasibility:** Factors including available space, surrounding topography, existing infrastructure, and budget constraints were considered.
2. **Connectivity:** Streets were selected to help enhance the overall connectivity of the active transportation network. This includes linking key destinations and filling gaps in the existing network.
3. **Demand and Usage:** Streets with high potential demand for walking and cycling were prioritized. This included areas with dense residential populations, schools, workplaces, and commercial centers.
4. **Safety:** Corridors with a high risk of pedestrian and cyclist accidents (due to increased vehicle speed and volumes), were included in the proposed network to help reduce risk and improve safety.
5. **Transportation Equity:** To address disparities in mobility and access to employment and recreational opportunities, priority was given to underserved and marginalized communities that may lack safe and accessible active transportation options.
6. **Accessibility:** Streets that can be easily accessed by people of all ages and abilities were also selected. This included considering the needs of individuals with disabilities and ensuring that the proposed infrastructure is inclusive.

An overview of the active transportation network plan is illustrated below in Figure 16.

Figure 16: Proposed Active Transportation Network - Overview

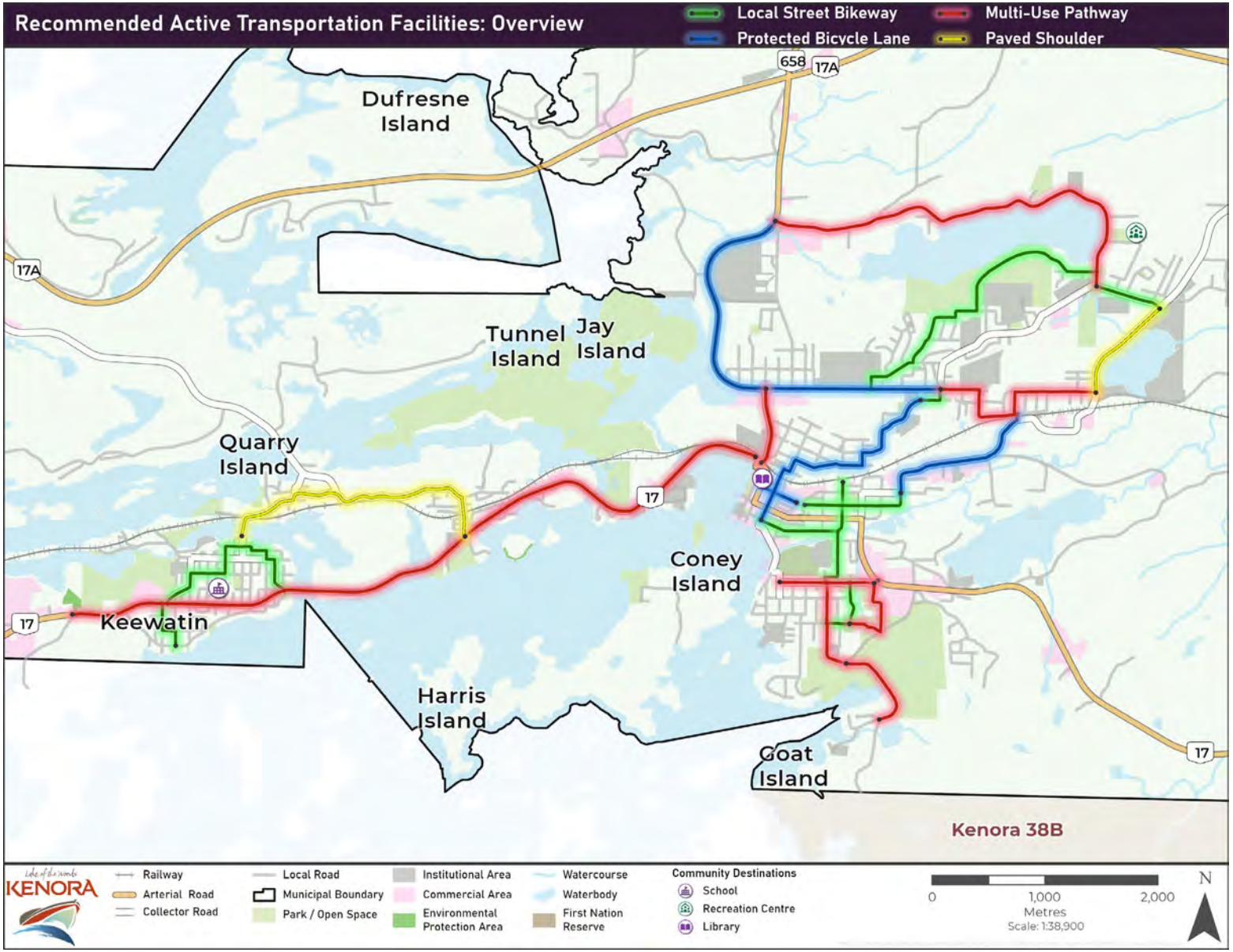


Figure 17: Proposed Active Transportation Network – Central

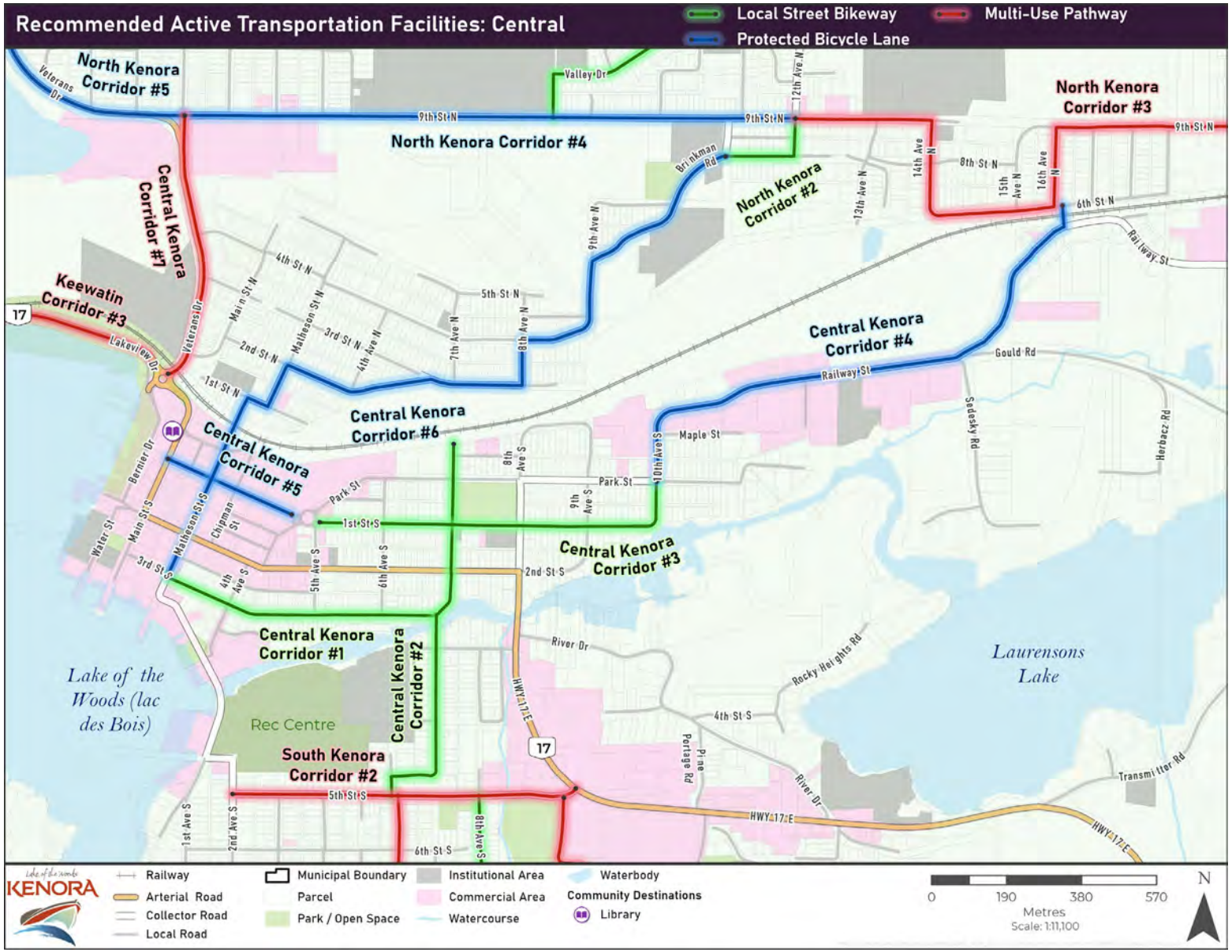


Figure 18: Proposed Active Transportation Network – Keewatin

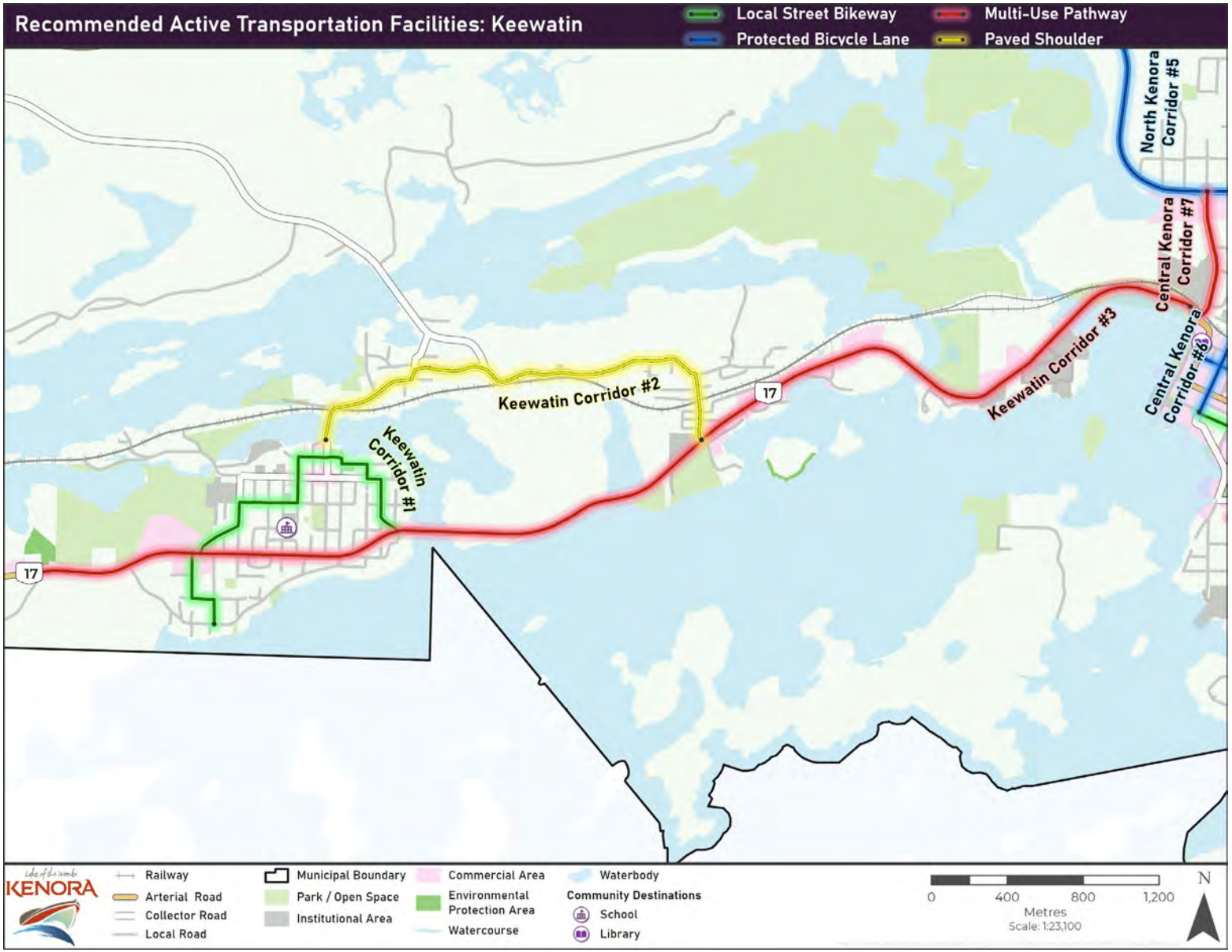


Figure 19: Proposed Active Transportation Network – South

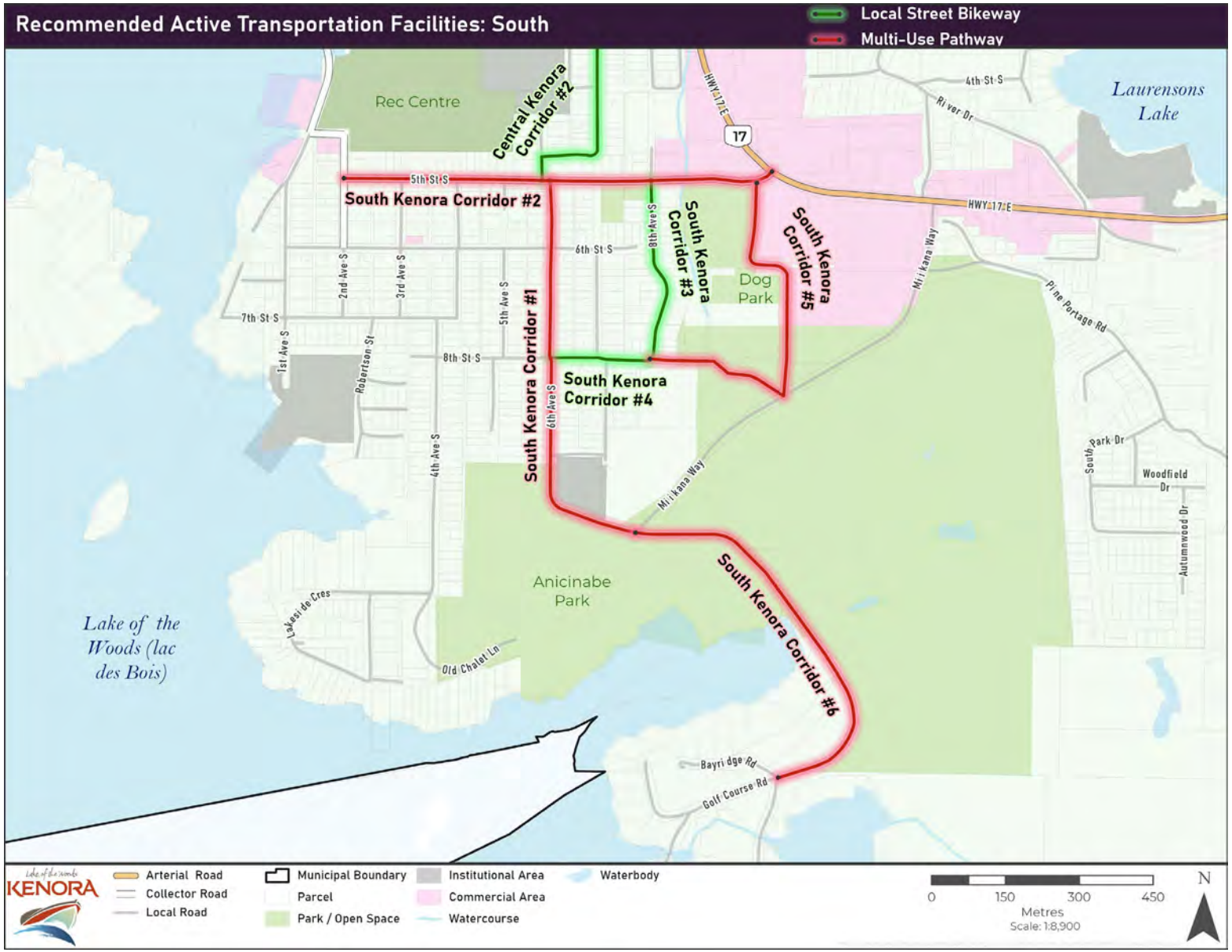


Figure 20: Proposed Active Transportation Network – North

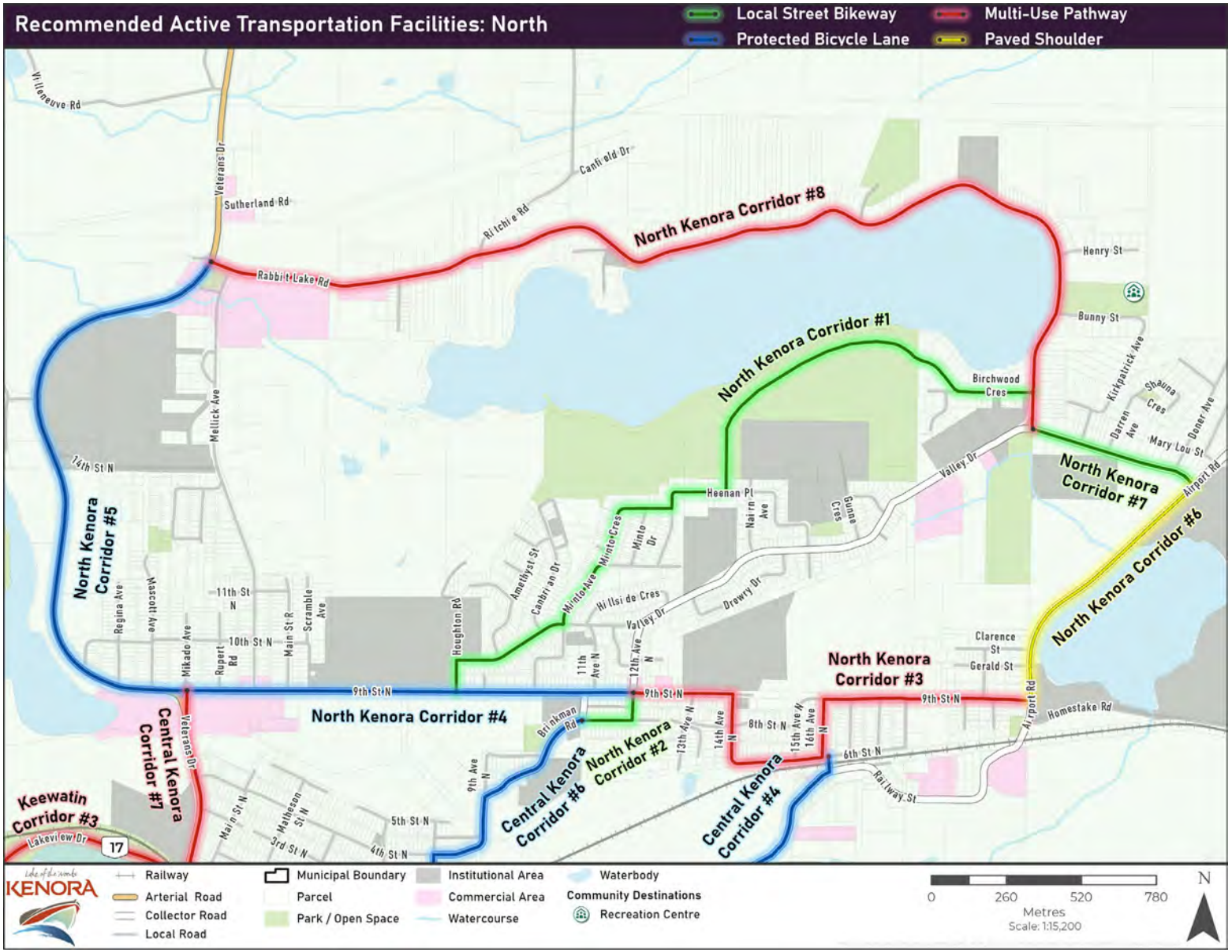
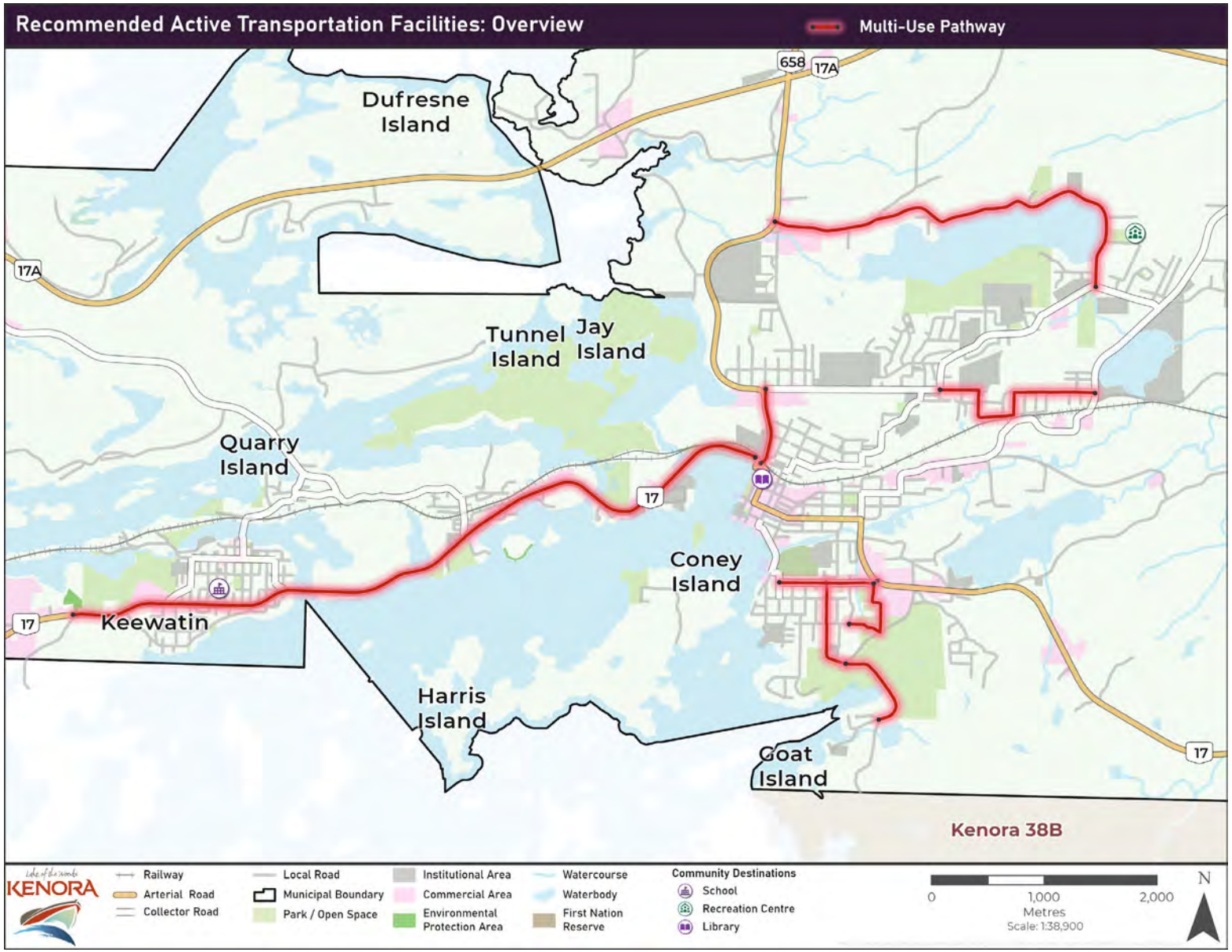


Figure 21: Proposed Pedestrian Network Expansion - overview



ACTIVE TRANSPORTATION UNIT COSTS

The cost estimates presented below are based on typical unit costs from recent transportation construction projects in the City of Kenora, as well as recent operation and maintenance pricing within Kenora in 2025. Intersection enhancements are context specific and will require additional study and detailed design. Intersection enhancements can range from 5K for a marked crosswalk to 500K for traffic signals.

****NOTE: All cost estimates below are Class "D" cost estimates, and local pricing may vary. As such, a contingency of 30-50% of estimated costs should be included in all cost estimates for these projects.*

Table 8: Corridor Treatment Capital and Operating Unit Costs

Facility Type	Capital Cost (per km)	Assumptions	Annual Operation and Maintenance Unit Cost - (per km) - Year-round Maintenance
Local Street Bikeway	$40,000	Assuming improvements limited to signage, pavement markings, and speed humps.	$2,000
Multi-use Pathway Adjacent to roadway – Asphalt or Concrete surfacing (new)	$500,000	Assuming no curb and gutter or drainage modifications required. Excludes lighting and property impacts.	$10,000
Multi-use Pathway Adjacent to roadway – Crushed limestone or gravel surfacing (new)	$125,000	Assuming no curb and gutter or drainage modifications required. Excludes lighting and property impacts.	$7,000

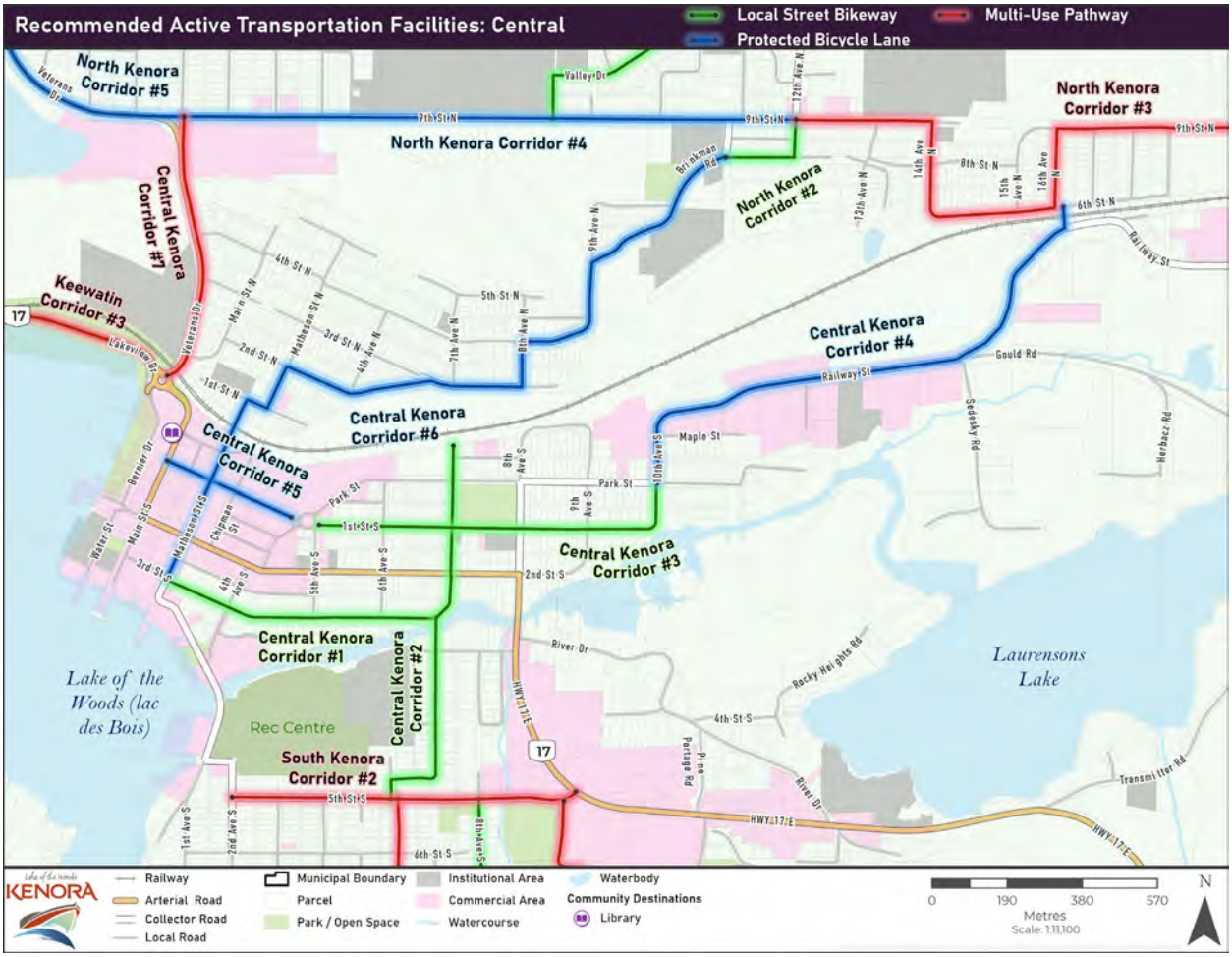
Facility Type	Capital Cost (per km)	Assumptions	Annual Operation and Maintenance Unit Cost - (per km) - Year-round Maintenance
Multi-use Pathway Adjacent to roadway – Crushed limestone or gravel surfacing (utility relocation/drainage required)	$250,000	Excludes property acquisition	$7000
Protected Bike Lane	$800,000	Assuming no curb and gutter modifications and resurfacing to accommodate bike lane width only.	$15,000
Sidewalk (curb and gutter)	$870,000	Excludes property acquisition.	$1,000
Paved Shoulders	$160,000	Includes utilities and drainage improvements and minimum 50 mm asphalt depth	$2,000

Table 9: Intersection Treatment Capital Cost

Intersection Enhancement	Cost Per Location
Marked Crosswalk (one crosswalk)	$2,500 to $5000
Rectangular Rapid Flashing Beacon (RRFB) / Enhanced Crosswalk	$20,000 to $75,000
Full Signal (four-way traffic signal)	$250,000 to $750,000
Curb Extensions (one side of crossing)	$10,000 to $20,000

Central Kenora

Figure 22: Proposed Cycling Network - Central Area



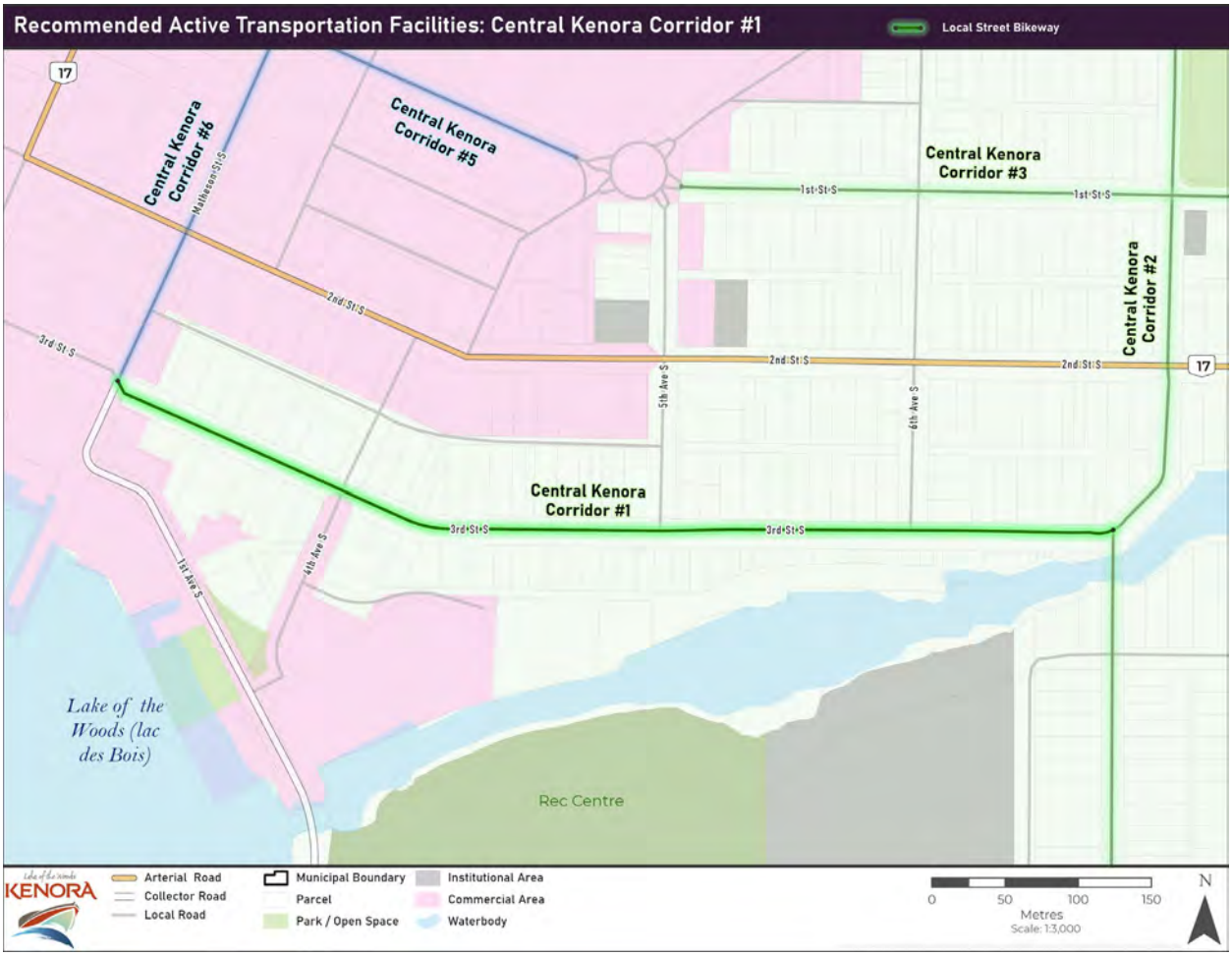
Key connections: Implementing active transportation facilities in the central core of Kenora is essential due to the area's role as the heart of the city, encompassing the downtown commercial hub, a vibrant waterfront area, numerous parks, and diverse residential properties. This central region, illustrated in Figure 22 above, serves as a focal point for business, tourism, and daily urban life, making it imperative to provide safe and accessible transportation options. By developing well-integrated sidewalks, cycling facilities, and multi-use pathways, we can enhance connectivity between key destinations, promote a healthier and more active lifestyle, and reduce dependency on motor vehicles.

Length of New Facilities in this area: Approximately 7.5 kms total

Class D (-20% to +30%) Cost Estimate of all facilities in this area: Approximately $4,470,000

Recommended Facility Types: Local Street Bikeways, Protected Bicycle lanes, Multi-use Pathways

Figure 23: Central Kenora Corridor #1 - 3rd Street S



Corridor Extent: Matheson St S to 7th Ave S

Corridor Length: 700 m

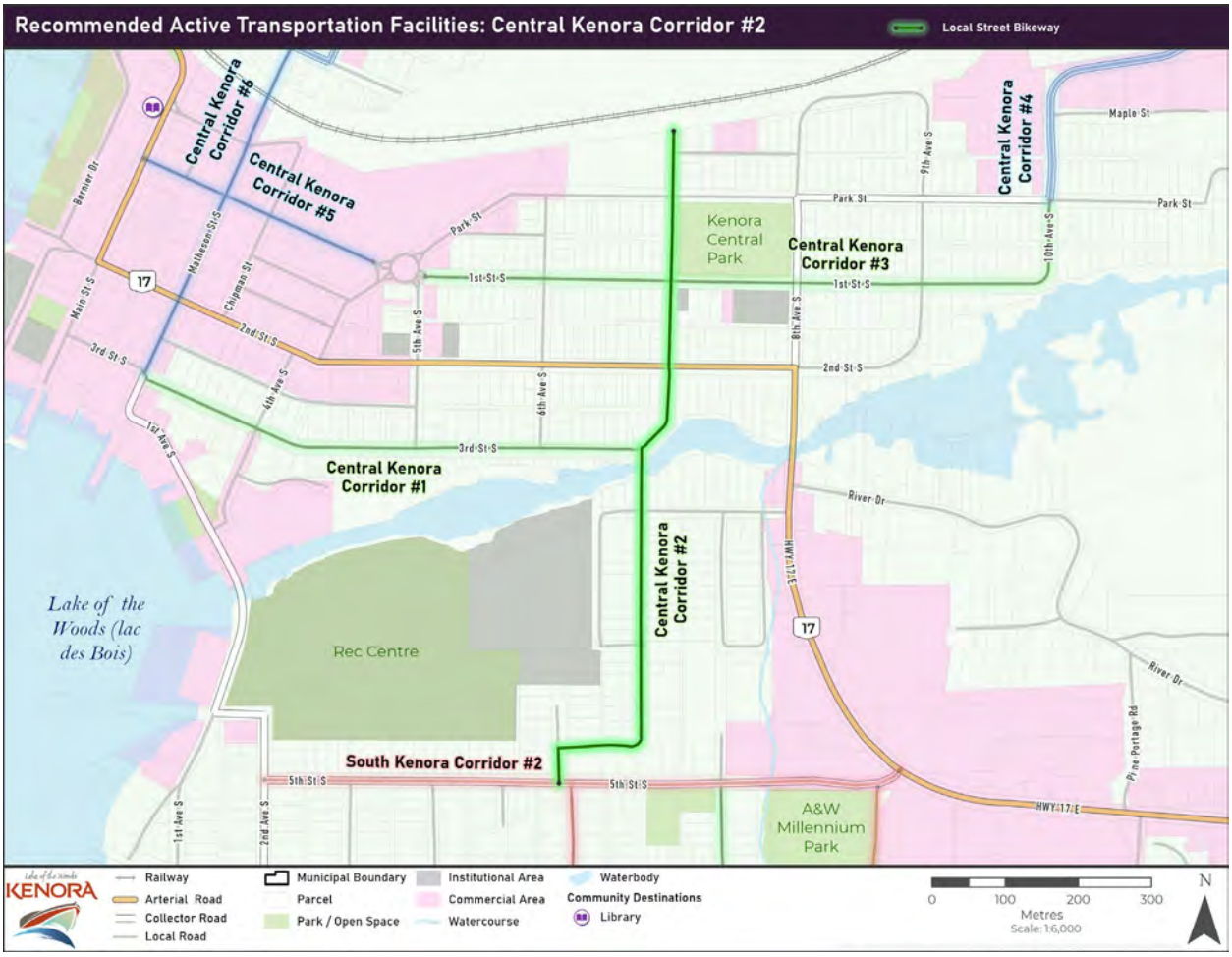
Key Connections: This section of the proposed network provides improved access through the southwest corner of downtown Kenora. It ties into the proposed Matheson Street S protected bike lane at the western end of the corridor, and into the proposed 7th Avenue S local street bikeway to the east and provides access to the downtown and waterfront areas of the City (including the Safeway and for residents living in Southern Kenora.

Recommended Facility: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $28,000 (without curb bump outs)

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5 years). Acquisition of private property or easements is not required.

Figure 24: Central Kenora Corridor #2 - 7th Avenue S / River Drive



Corridor Extent: Park St to 5th St S

Corridor Length: 990 m

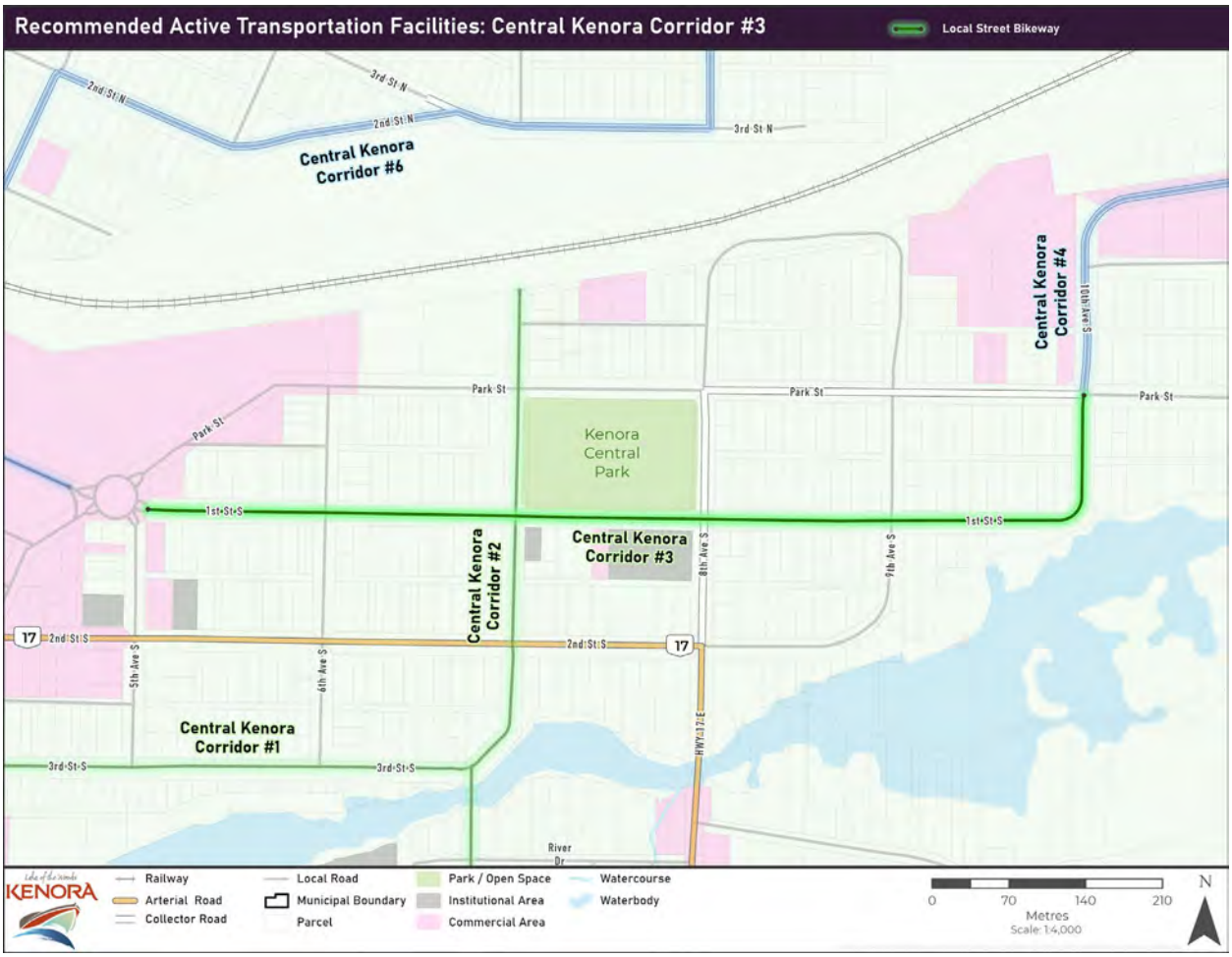
Key connections: This corridor provides a critical active transportation connection between North Kenora and the Southern areas of the City, including the commercial area along highway 17 that has some of the larger commercial business in the area – including Wal-Mart, Canadian Tire, and Home Hardware. This North-South corridor also connects other active transportation facilities that run East-West and connect to the downtown and waterfront areas of the City, as well as to the Moncrief Construction Sport Centre – a major recreational facility for Kenora.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $40,000 (without curb bump outs)

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5years). Acquisition of private property or easements is not required.

Figure 25: Central Kenora Corridor #3 - 1st Street S / 10th Avenue S



Corridor Extent: Park St roundabout to Park St / 10th Ave S intersection

Corridor Length: 940 m

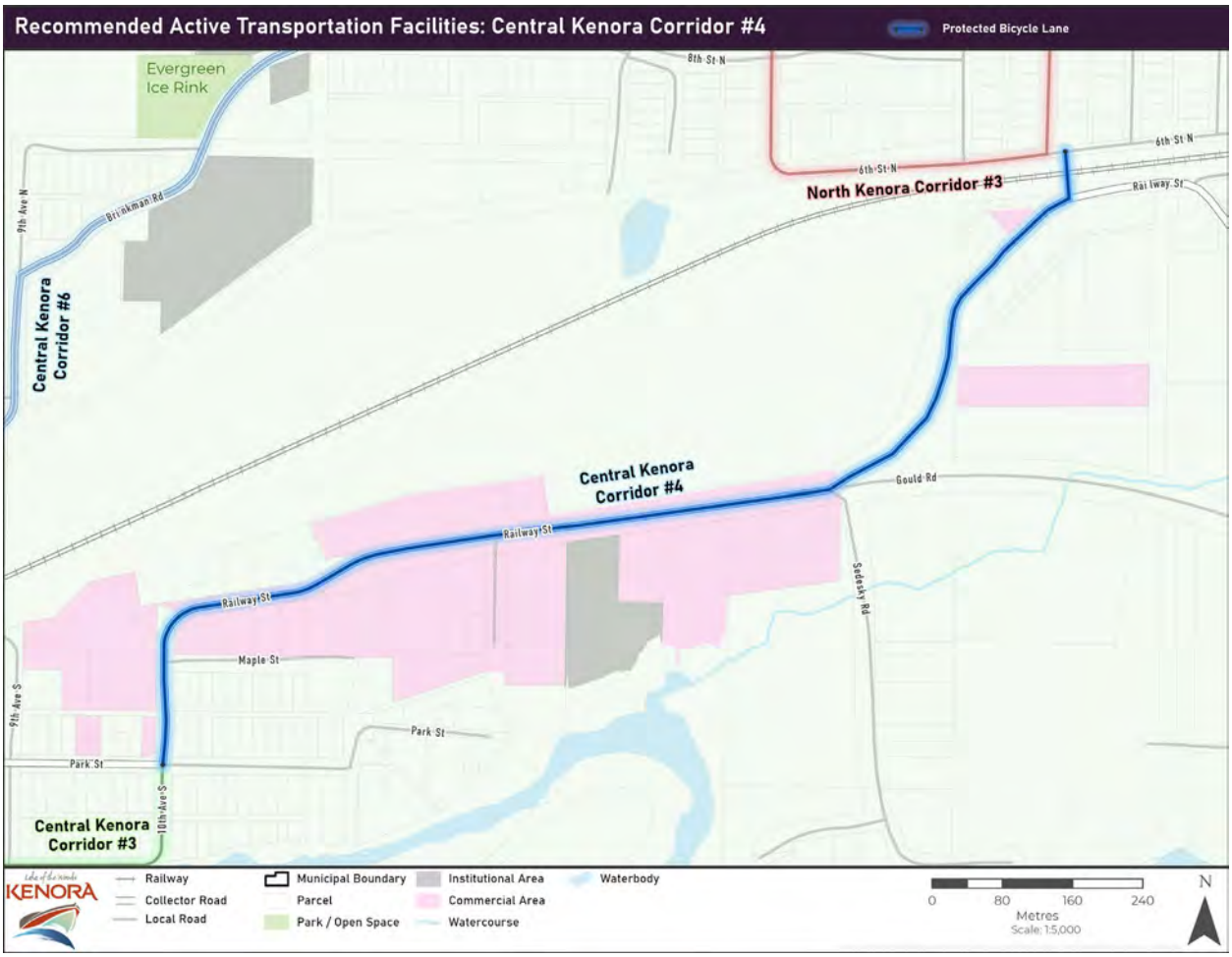
Key connections: This facility serves an important role connecting the active transportation corridor between Central Kenora Corridor #5 (on 1st Street S) and Central Kenora Corridor #4 (on Railway Street). This corridor allows residents in Northeast Kenora to safely access the downtown on bicycle or foot as well as other important community amenities such as the Central Community Club and downtown mall.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes. It should be noted that the intersection of First St S and 8th Avenue will require traffic signal upgrades to allow for the safe movement of cyclists and pedestrians along First Street S as the existing intersection is unsignalized and unsigned. A half signal is recommended at this location, or alternatively a cyclist/pedestrian initiated (and clearly visible) RRFB.

Class D (-20% to +30%) Cost Estimate: $38,000 (without curb bump outs)

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5 years). Acquisition of private property or easements is not required.

Figure 26: Central Kenora Corridor #4 - Railway Street / 10th Avenue South



Corridor Extent: Park St to 6th St N railway crossing

Corridor Length: 1,450 m

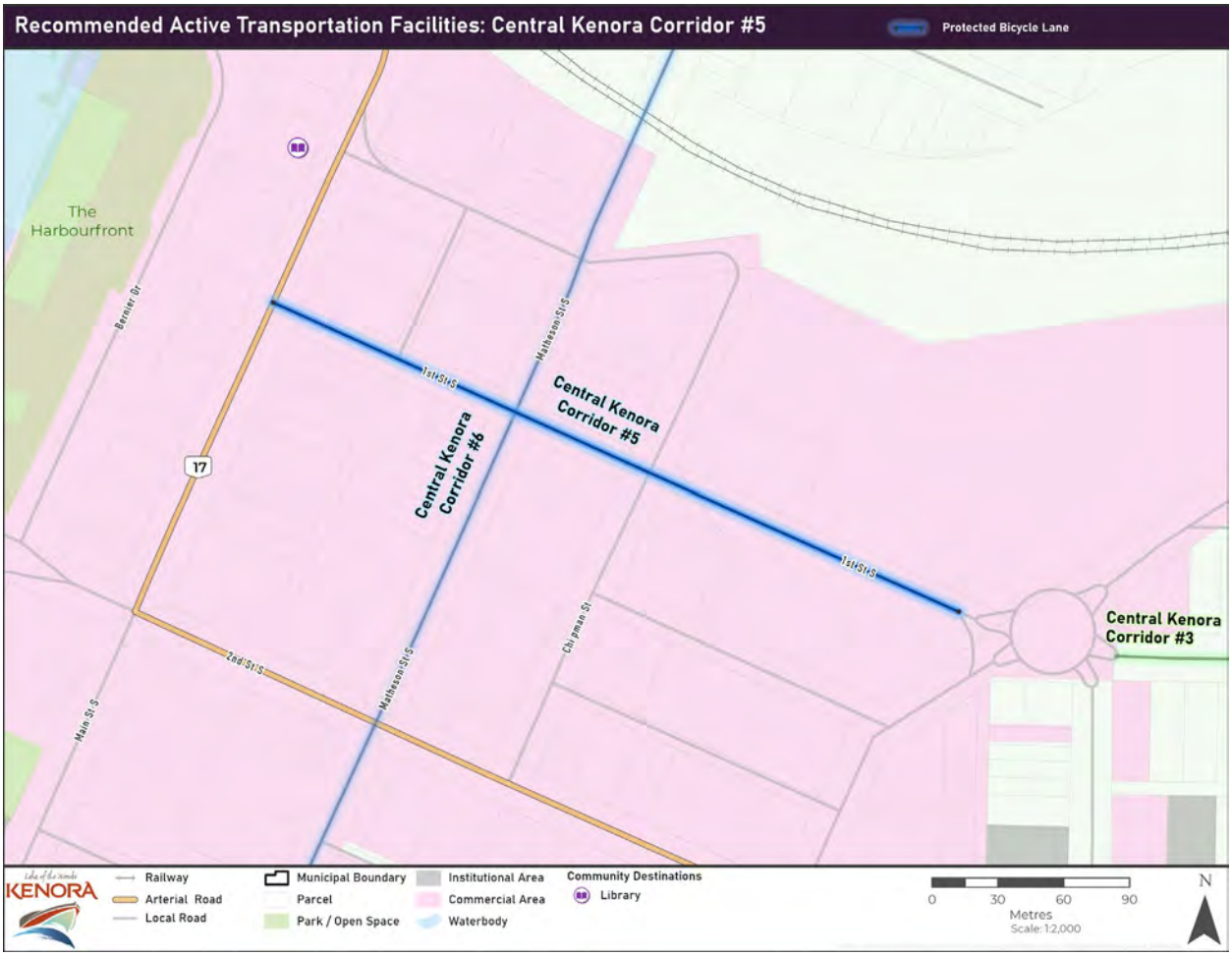
Key connections: This corridor extends through the commercial area along Railway Street connecting Kenora's downtown (via 10th Street S and 1st Street S), to the airport Road North of Kenora. Implementing this route will provide residents in Northeast Kenora with a dedicated active transportation route to the rest of the community in the South and improve access to Valley View school and the Kenora Sportsplex to the North.

Recommended Facility Types: Protected Bicycle Lanes. Given the available right of way, vehicle speeds, and vehicle volumes along this corridor, it is recommended that a separated facility be provided to reduce the risk of collision as well as help encourage "interested but concerned" riders to try cycling in this area of the city.

Class D (-20% to +30%) Cost Estimate: Approximately $1,160,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years).

Figure 27: Central Kenora Corridor #5 – 1st Street S



Corridor Extent: Highway 17 to Park St

Corridor Length: 330 m

Key connections: This corridor is the first link in the East-West connection from downtown Kenora to the North and Northeast parts of the City. This facility provides a safe, separated facility from Kenora's waterfront to major commercial areas along First St S and Park St to the East. This facility was also identified through public engagement as an important connector for residents in the eastern end of the city along Park St.

Recommended Facility Types: Protected Bicycle Lanes – given the volume of vehicles along this corridor, as well as the available right-of-way, a separated and protected facility is recommended in this location.

Class D (-20% to +30%) Cost Estimate: $264,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5 years).

Figure 28: Central Kenora Corridor #6: Matheson Street, 2nd, 3rd, 4th, 6th, and 8th Streets N

Corridor Extent: 9th St N to 3rd St S

Corridor Length: 2,350 m

Key connections: This corridor provides an important north/south cycling facility through downtown Kenora, connecting Central Kenora Corridors #1 and #5 with North Kenora Corridor #2. This corridor allows people on bikes to connect to the Rabbit Lake loop from downtown Kenora and the residential area north of the rail line.

Recommended Facility Types: Protected Bicycle Lanes. Due to the numerous curves and obstructed sightlines along the corridor, it is recommended that a separated facility be constructed to help make this route as safe as possible for road users outside of vehicles.

Class D (-20% to +30%) Cost Estimate: $1,880,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5 years).

Figure 29: Central Kenora Corridor #7 - Veterans Drive

Corridor Extent: 9th St N to Highway 17

Corridor Length: 700 m

Key connections: This corridor was frequently identified by stakeholders and members of the public as a key connection from downtown Kenora to the residential areas north of the rail line and 9th street. This corridor is also adjacent to an important educational (Seven generations Education Institute), future development at the corner of Veterans Drive and 9th St N and also connects downtown Kenora to the Rabbit Lake cycling loop.

Recommended Facility Types: Paved Multi-use Pathway. Given the proximity to downtown and the available right of way, it is recommended that a multi-use path be constructed along this corridor to provide a walking and cycling route to the downtown and waterfront for residents and students in this area. A corridor specific study and design process is recommended to determine the most suitable location for the MUP (on either the east or west side of veteran's way), as well as the alignment of the MUP at the south end of the corridor as it enters the underpass and roundabout at the intersection of Hwy 17/Bernier Dr/Veterans Dr.

Class D (-20% to +30%) Cost Estimate: $700,000 – Utility relocation would be required with an east side alignment, while significant fill would be required with a wet side alignment.

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5 years).

South Kenora

Figure 30: Proposed Cycling Network – South Kenora

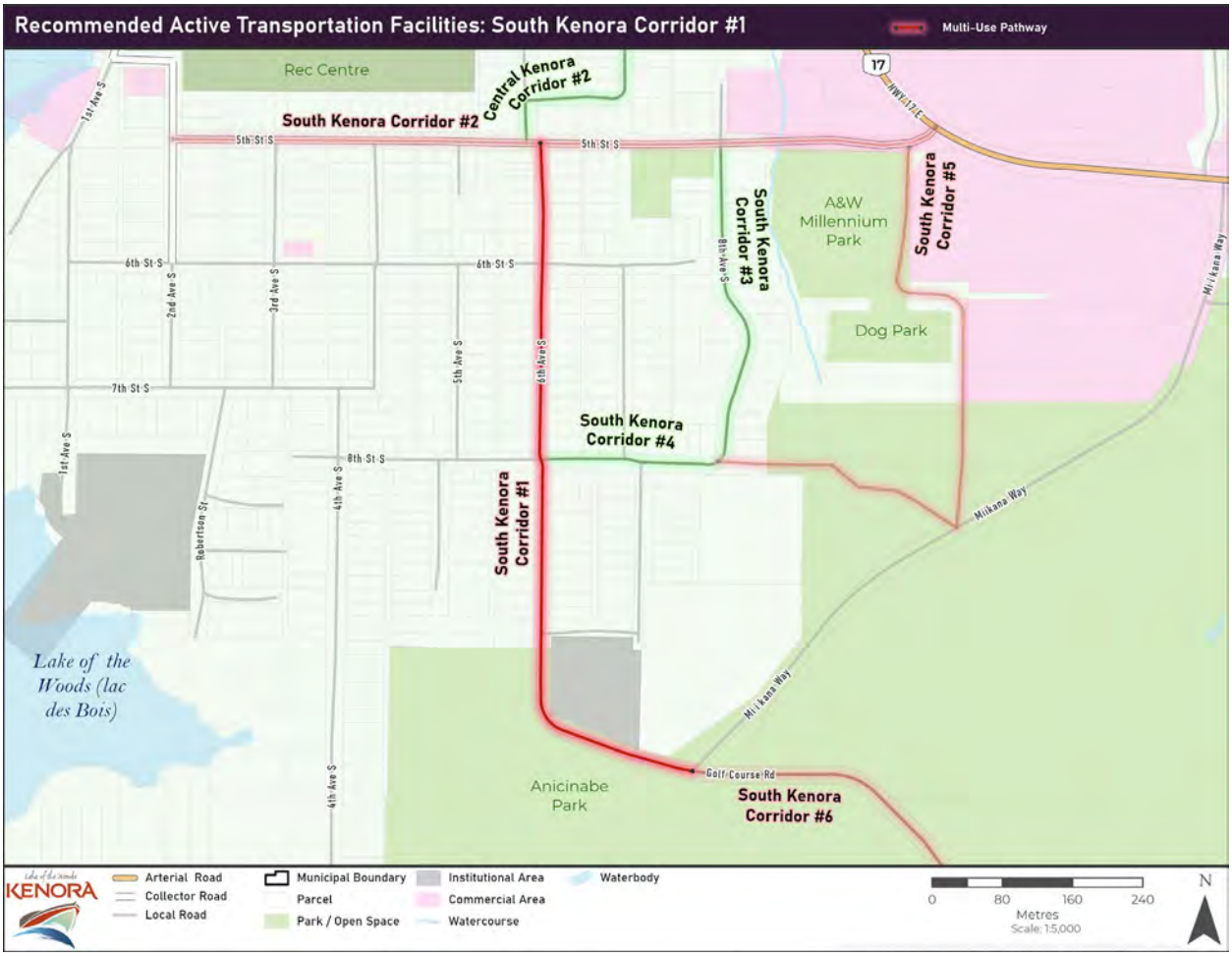
Key connections: Providing active transportation facilities within the southern area of Kenora is crucial due to its diverse mix of parks and green spaces, schools, the Moncrief Construction Sports Centre, the commercial sector along Highway 17, and residential areas. This area serves as a vital hub for community activities and everyday conveniences, making safe and accessible transportation options a priority.

Length of New Facilities: Approximately 4.1 kms total

Class D (-20% to +30%) Cost Estimate of all facilities in this area: Approximately $816,000

Recommended Facility Types: Local Street Bikeways, Multi-Use Pathways

Figure 31: South Kenora Corridor #1 - 6th Avenue S



Corridor Extent: 5th St S to Mikana Way

Corridor Length: 850 m

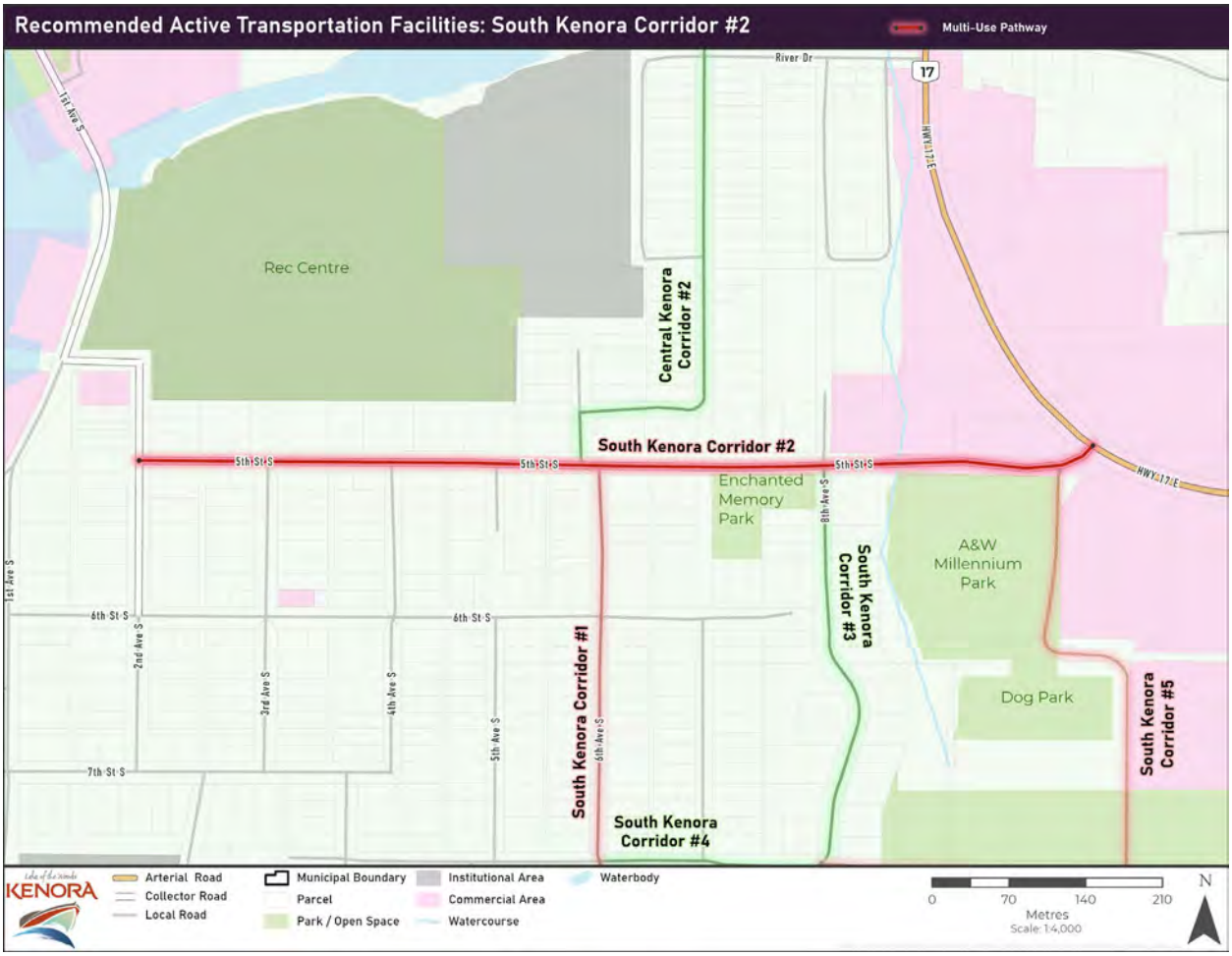
Key connections: This corridor is the main (and only) north/south connector from areas in southern Kenora (including Anicinabe Park) to Kenora's downtown. A major trip generating facility at the south end of this corridor is Confederation College, providing an opportunity for students and staff to travel to and from school using active modes. This corridor also provides a link to the Anishinabe of Wauzhushk Onigum Nation, allowing residents of this community to access the rest of Kenora via safe, sustainable modes in future years.

Recommended Facility Types: Paved Multi-Use Pathway This corridor has a reasonable cross section with which the existing sidewalk (located on the east side of 6th Avenue) can be expanded (as part of road renewals or as a stand-alone project as available funding dictates) to create a multi-use path with enough space for cyclists and pedestrians to travel comfortably. This facility type would provide a higher level of comfort for less experienced road riders wanting to cycle to and from Anicinabe park – a significant recreational draw in Kenora.

Class D (-20% to +30%) Cost Estimate: $425,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

Figure 32: South Kenora Corridor #2 - 5th Street S, 2nd Ave S, Mike Richards Way



Corridor Extent: Hwy 17 to 1st Ave S

Corridor Length: 995 m

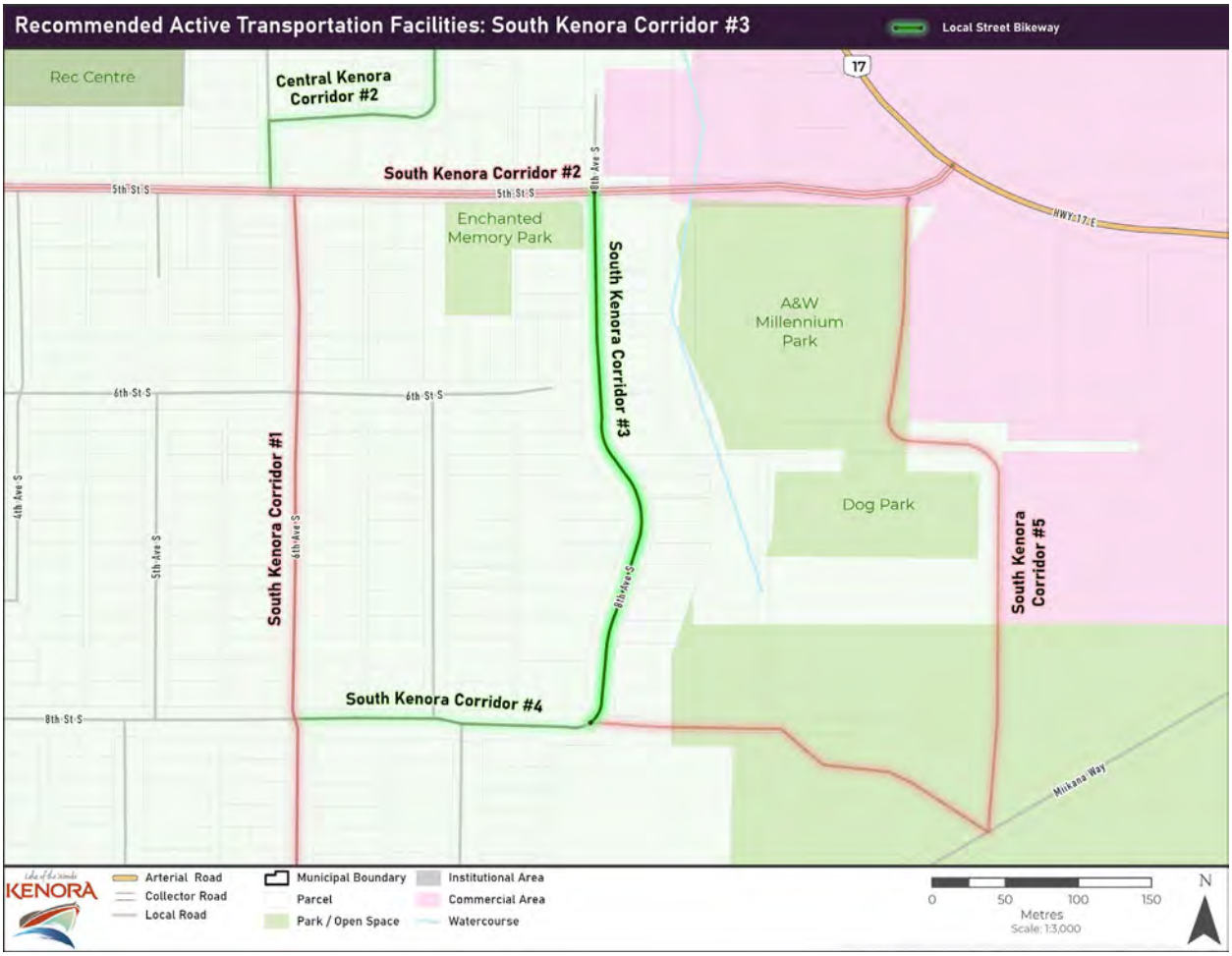
Key connections: Cycling facilities on 5th Street South will provide connections to the Moncrief Construction Sports Centre to the west, and to the commercial business along the Trans-Canada highway to the east. It also provides an important east/west cycling facility that connects to South Kenora Corridor #1 on 6th Ave S, South Kenora Corridor #3 on 8th Ave S, and South Kenora Corridor #5 near the City of Kenora dog park. This corridor is a critical link in completing the network and providing safe access from the commercial/industrial areas in the east of Kenora to the rest of the city.

Recommended Facility Types: Paved Multi-Use Pathway Given the existing constraints along this corridor (including numerous rock cuts) and the existing sidewalk on one side of the street, it is recommended that the existing sidewalk be expanded to the width of a multi-use pathway, and that existing vertical separation be maintained to provide protection for (and accommodate) both pedestrians and cyclists.

Class D (-20% to +30%) Cost Estimate: $497,500

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years). Acquisition of private property or easements is not required.

Figure 33: South Kenora Corridor #3: 8th Avenue S



Corridor Extent: 5th St S to 8th St S

Corridor Length: 380 m

Key connections: With a new senior's centre being constructed towards the south end of this corridor and restaurants and services at the north end (including the Kenora Association for Community Living), reducing traffic volumes and speeds along this street would both improve safety for these vulnerable residents as well as provide a walking/cycling loop with South Kenora corridors #2 and #5.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $16,000 (without curb bump outs)

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years). Acquisition of private property or easements is not required.

Figure 34: South Kenora Corridor #4 - 8th Street S

Corridor Extent: 4th Ave S to 8th Ave S

Corridor Length: 200 m

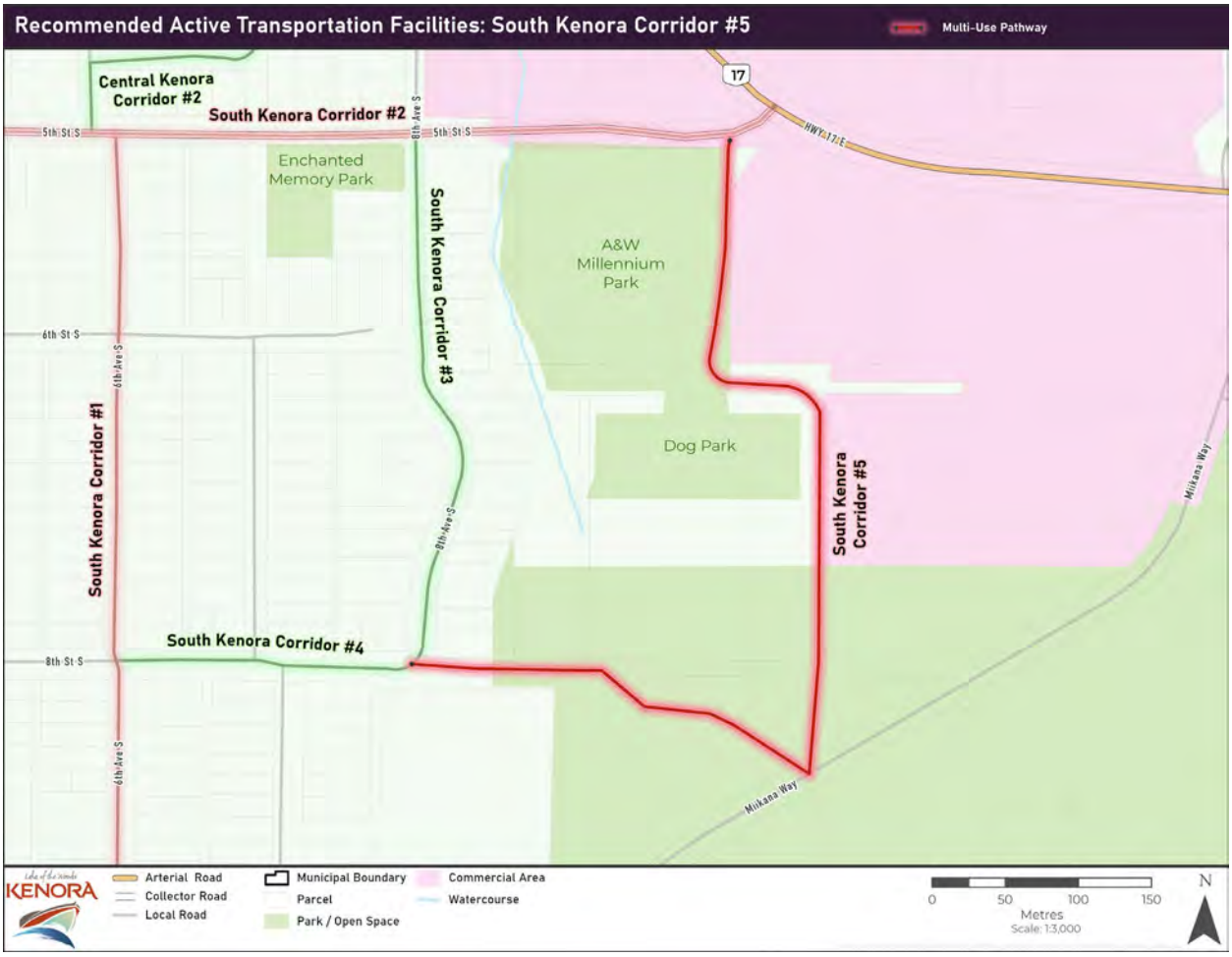
Key connections: Cycling facilities along this corridor would provide a connection from the commercial business along the trans-Canada highway via South Kenora corridor #5, as well as link South Kenora corridors #5 and #3 with South Kenora corridor #1.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $8,000 (without curb bump outs)

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years). Acquisition of private property or easements is not required.

Figure 35: South Kenora Corridor #5 - Pine Portage Road / 8th Street S



Corridor Extent: 8th Avenue S to Mikana Way to Dog Park to 5th Street S

Corridor Length: 760 m

Key connections: This facility was identified in public engagement as an existing, informal route for residents living in the area looking to walk to the Kenora dog park as well the commercial businesses nearby. In addition, the construction of a large senior's centre at the corner of 8th Ave S will result is a significant number of residents looking for safe walking routes in close proximity to their home.

Recommended Facility Types: Paved Multi-use Pathway. Given the existing land use patterns and lack of parallel roadways (for much of the corridor) on which to add active transportation facilities, a multi-use pathway is the only design option in this location.

Class D (-20% to +30%) Cost Estimate: $380,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

Figure 36: South Kenora Corridor #6 - Golf Course Road

Corridor Extent: Mikana Way to Glen Cameron Dr

Corridor Length: 860 m

Key connections: The primary connections for this corridor are to Anishinabe of Wauzhushk Onigum Nation at the southern terminus of this corridor, Anicinabe Park to the west for much of its length, and to South Kenora corridor #1 (the major north/south connection to Kenora's downtown) at the northern terminus.

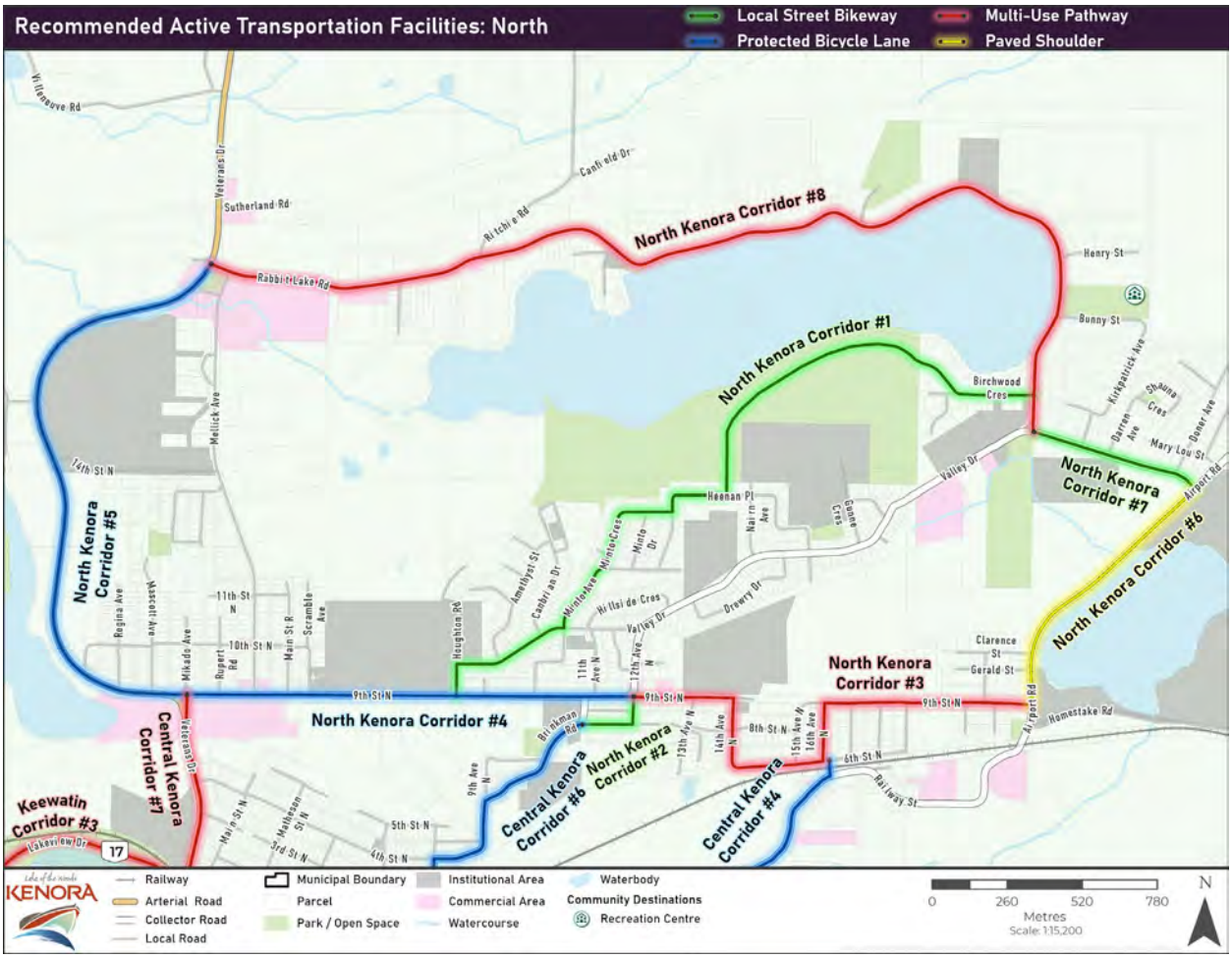
Recommended Facility Types: Paved Multi-use Pathway with an unpaved surface (crushed granular surface). This corridor has a reasonable right-of-way in which to construct a multi-use pathway, and this facility type would provide a higher level of comfort for less experienced road riders wanting to cycle to and from Anicinabe park – a significant recreational draw in Kenora. *It is recommended to undertake intersection improvements at the intersection of Golf Course Road and Mikana Way to accommodate increased cyclist and pedestrian movements along the Multiuse Pathway. A pedestrian/cyclist crossing is also recommended near the Kenora gold club to allow for safe crossing from the MUP to the clubhouse.

Class D (-20% to +30%) Cost Estimate: $430,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

North Kenora

Figure 37: Proposed Cycling Network – North Area



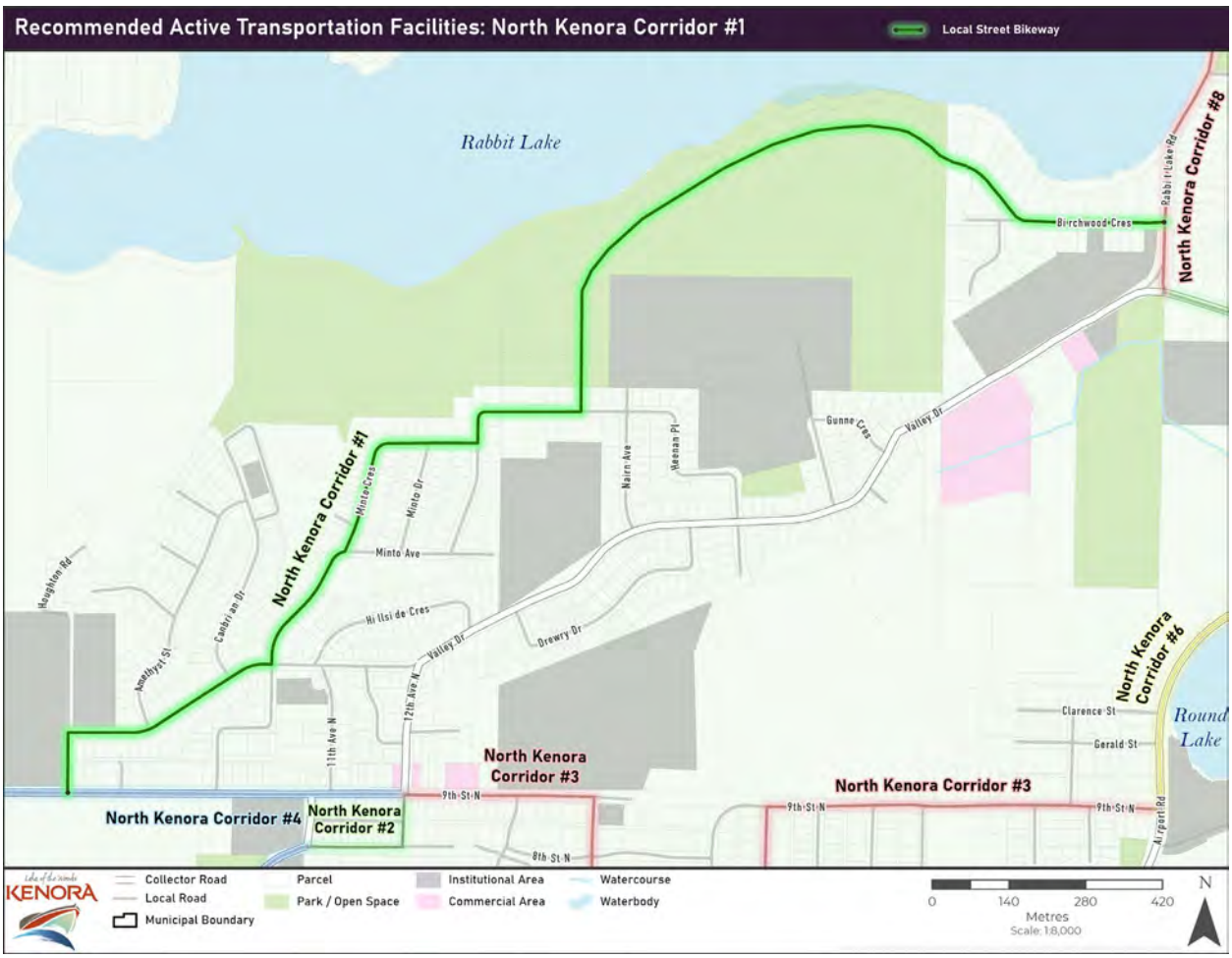
Rationale: Providing active transportation facilities within the northern area of Kenora is important due to its mix of parks and green spaces, schools, residential areas, and the scenic environment of Rabbit Lake. This area serves as an important area for recreation and sight-seeing, while enabling residents to connect to the downtown core.

Length of New Facilities: Approximately 12.5 kms total

Class D (-20% to +30%) Cost Estimate of all facilities in this area: Approximately $7,395,000

Recommended Facility Types: Local Street Bikeways, Protected Bicycle Lanes, Paved Shoulders, Trails, Bicycle Paths

Figure 38: North Kenora Corridor # 1 - Rabbit Lake Connector



Corridor Extent: Houghton Road, Valley Drive, Minto Avenue, Minto Crescent, Minto Avenue, Nairn Avenue

Corridor Length: 1.5 kms

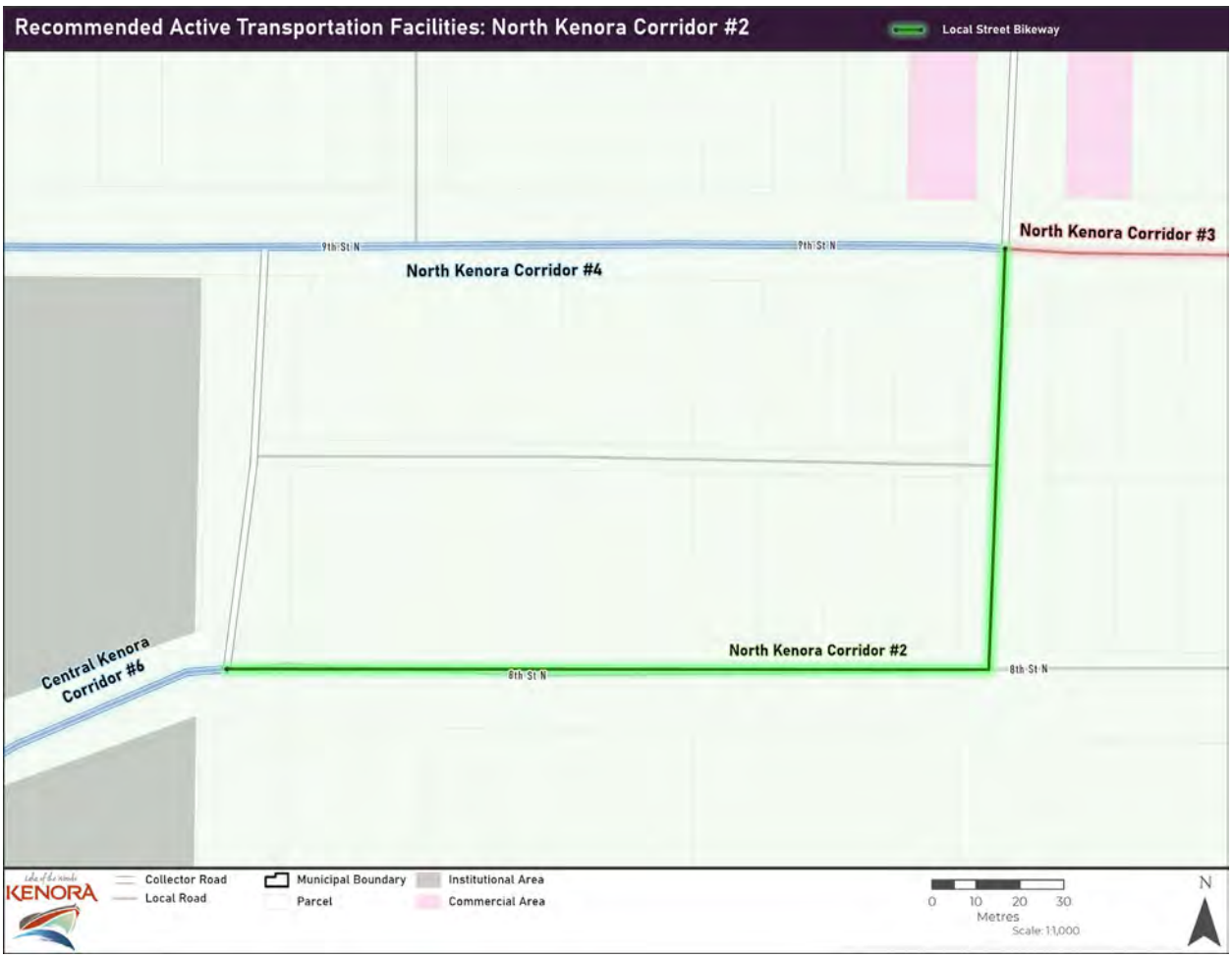
Key connections: A local street bikeway along this corridor would serve a number of important functions, including providing a key link in the Rabbit Lake loop, connect Central Kenora with communities to the north of the rail line, and improve access to the waterfront along Rabbit Lake. Direct access to the Nairn Avenue entrance of the Rotary Way Trail is provided, which support connections to existing local street bikeways on Birchwood Crescent. While providing an important recreational connection, the presence of a large number of institutions, including several schools and care homes near this corridor, allows this facility to serve vulnerable populations (including children and seniors) as road safety is improved.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $61,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years). Acquisition of private property or easements is not required.

Figure 39: North Kenora Corridor # 2 - 12th Avenue N



Corridor Extent: Valley Dr to 8th St Road

Corridor Length: 500 m (200 m Bikeway, 300 m Protected Bike Lane)

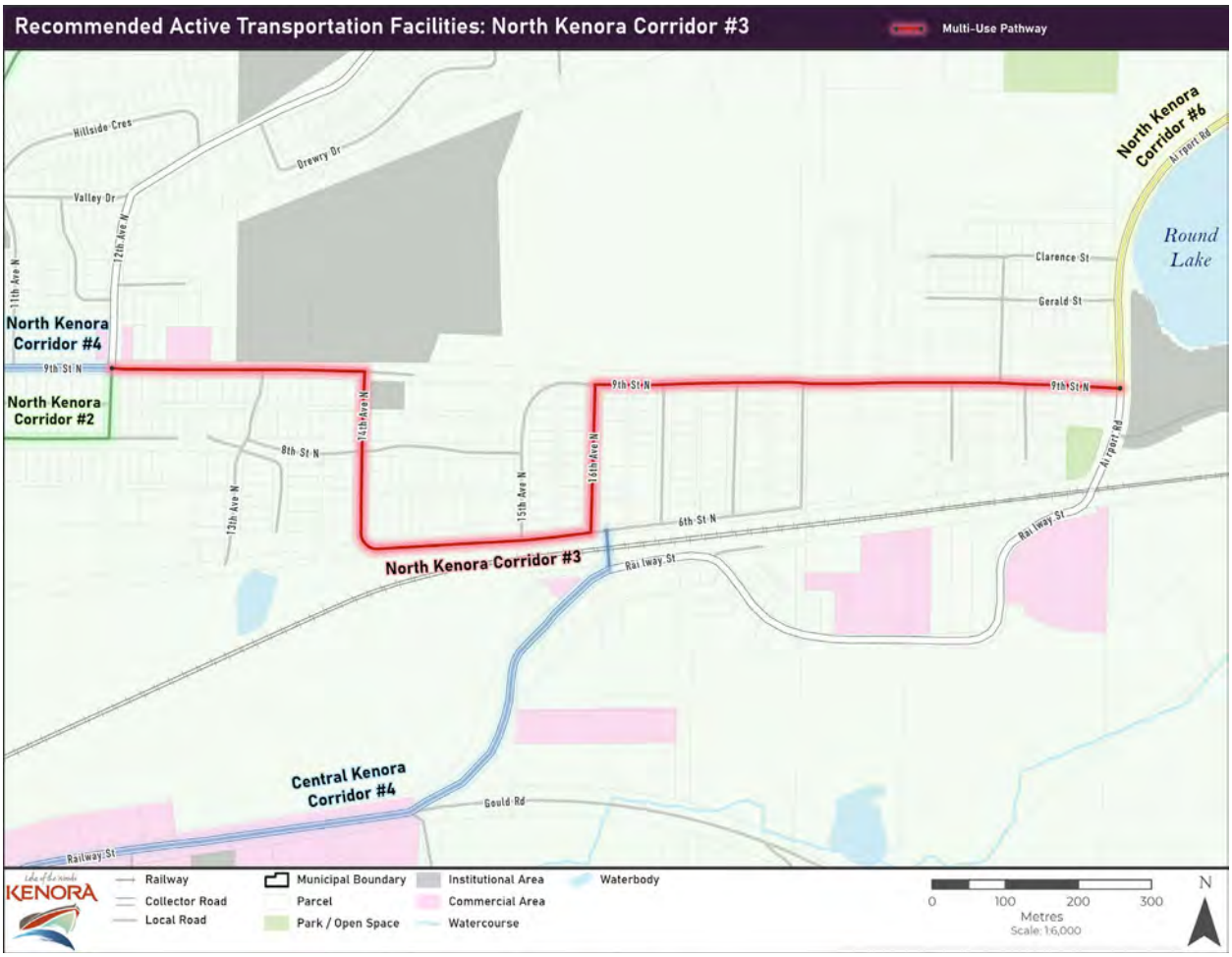
Key connections: This corridor provides a key connection between Central Kenora Corridor #6 on 8th St N and North Kenora Corridor #1 on Valley Drive, ensuring that cyclists are able to access Kenora's downtown from the northern portion of the City, and forms a critical segment in the Rabbit Lake cycling and walking loop.

Recommended Facility Types: South of 9th Street N - Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes. North of 9th Street N – Protected bike Lane with vertical separation.

Class D (-20% to +30%) Cost Estimate: $8,000 for Bikeway portion, $240,000 for bike lane portion

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the short term (1-5 years). Acquisition of private property or easements is not required.

Figure 40: North Kenora Corridor # 3 - 9th Street N



Corridor Extent: 12th Ave N to Airport Rd

Corridor Length: 1,850 m

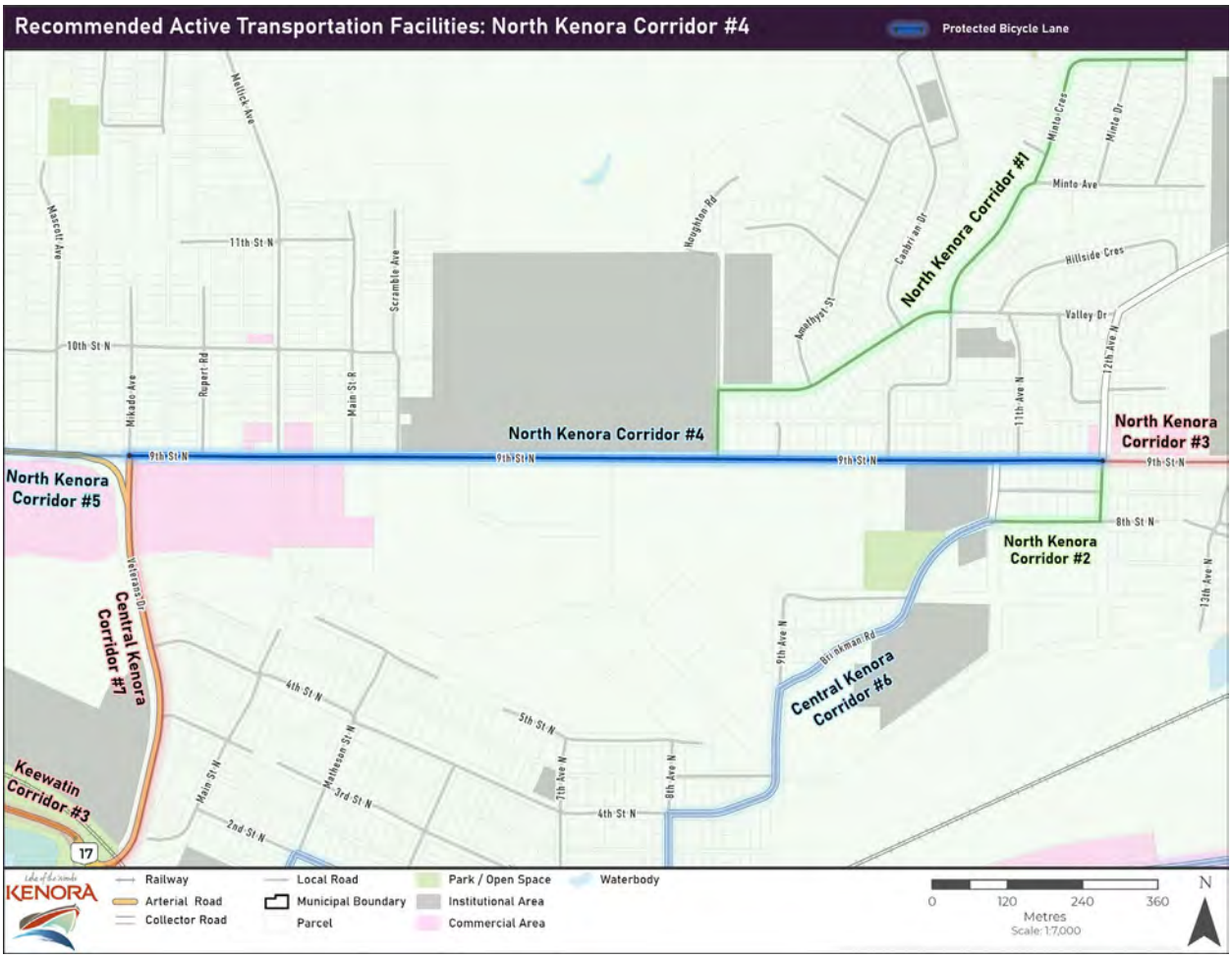
Key connections: 9th street N is an important east/west transportation corridor for all travel modes in the City of Kenora, and providing a lower speed, lower volume corridor for cyclists and pedestrians in this area will help ensure that a complete, connected active transportation network is implemented. Outside of being an important east/west connection between North Kenora corridors #4 and #6, calming vehicle speeds along this corridor will help improve safety for students and families attending Beaver Brae Secondary School, helping to support the City's Active and Safe Routes to School initiatives.

Recommended Facility Types: Raised, Paved Multi-Use Pathway with a paved surface. Given the presence of an existing sidewalk on the North and East sides of this corridor (along 9th St N from 12th Ave N to 14th Ave N and along 14th Ave N itself), as well as the lack of any pedestrian facilities along 16th Ave N and the eastern leg of 9th Street N, expanding the sidewalks (where pre-existing) to be MUP width while also building new MUPs along 16th Ave N and 9th Street N will provide vertically separated (protected) cycling facilities, while also expanding the City's pedestrian network. Installing horizontally separated cycling facilities along this corridor would be difficult due to the existing limited right of way.

Class D (-20% to +30%) Cost Estimate: $74,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years). Acquisition of private property or easements is not required.

Figure 41: North Kenora Corridor # 4 - 9th Street N



Corridor Extent: Veterans Dr to 12th Ave N

Corridor Length: 1,550 m

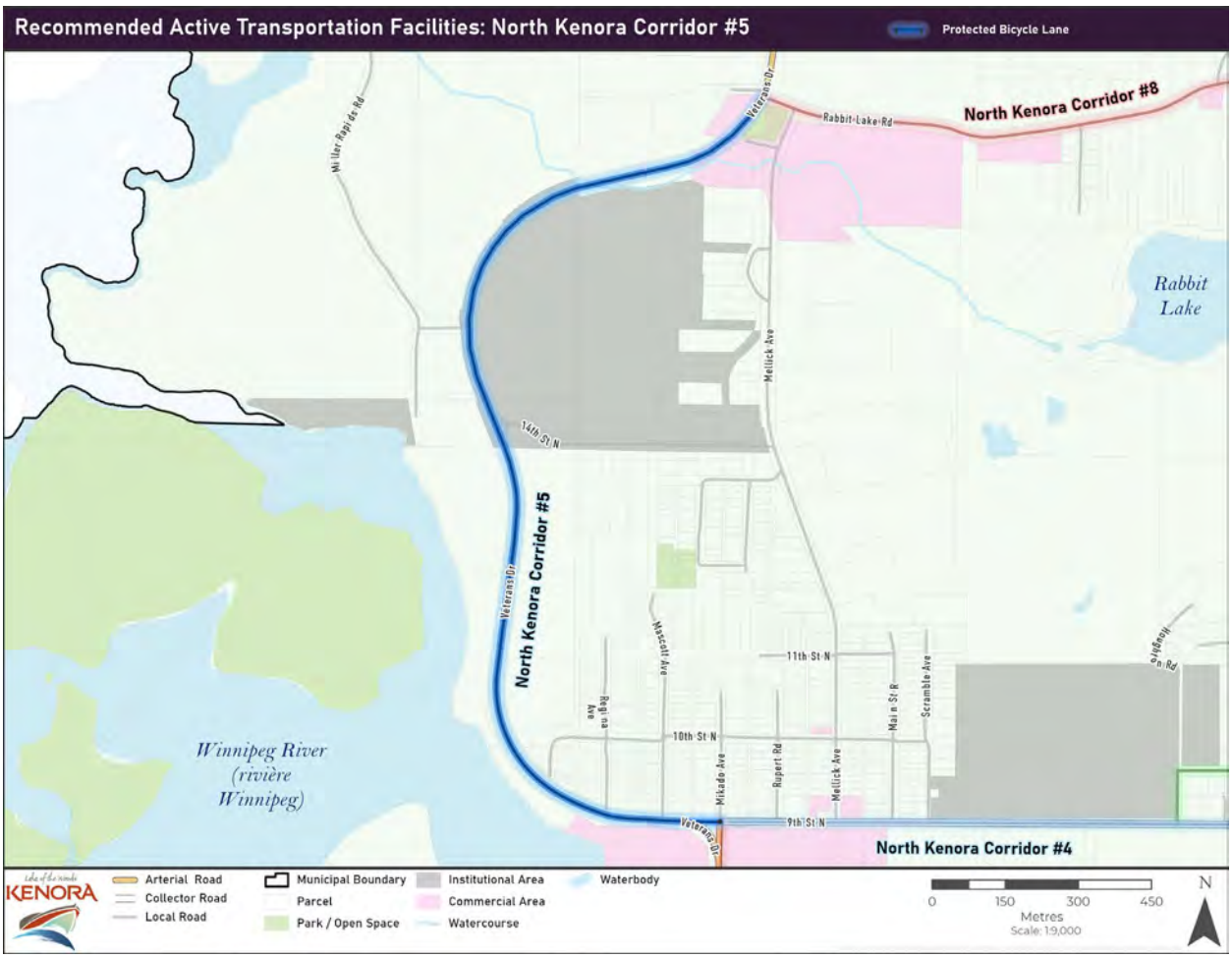
Key connections: This corridor forms part of the Rabbit Lake cycling/walking loop and serves as a critical east/west connection for the overall AT network in this part of Kenora. With the planned addition of hotels on the west side of the corridor, a connection to the downtown via Veterans Dr, and public engagement identified, popular walking/cycling facilities along Miller Rapids Road to the west, this facility is an important component of the proposed active transportation network.

Recommended Facility Types: Protected Bicycle Lanes

Class D (-20% to +30%) Cost Estimate: $1,240,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

Figure 42: North Kenora Corridor # 5 - Veterans Drive



Corridor Extent: Rabbit Lake Road to 9th St N

Corridor Length: 2,200 m

Key connections: This facility will serve as the western leg of the Rabbit Lake loop and as such play a crucial role in this exciting new walking and cycling loop. This corridor also connects to downtown Kenora via Veterans Drive at the southern terminus, as well as to North Kenora corridor #8 at the northern terminus. This facility will also allow staff at the City of Kenora Operations Centre and Fire Station to cycle to and from work, and provide residents without vehicles access to the Kenora Solid Waste Transfer via 14th St N.

Recommended Facility Types: Protected Bicycle Lanes. Due to the speed and volume of vehicles along this roadway (including large commercial vehicles), it is recommended that a separated facility be implemented to increase the safety of vulnerable road users and reduce the risk of a high-speed collision.

Class D (-20% to +30%) Cost Estimate: $1,760,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years).

Figure 43: North Kenora Corridor # 6 - Airport Road

Corridor Extent: Valley Dr to 9th St N

Corridor Length: 1,000 m

Key connections: This corridor was identified as a popular cycling route for road riders and others in both public and stakeholder engagement, and as such a paved shoulder facility is recommended to improve road safety for this popular user group and activity. This corridor also serves to connect the eastern terminus of North Kenora Corridor #3 along 9th St N with North Kenora Corridor #7 along Valley Drive, forming a larger cycling loop adjacent to Round Lake and south of Rabbit Lake.

Recommended Facility Types: Paved Shoulders. Given the intended usage of this corridor (as a primarily road cycling route), paved shoulders are recommended to accommodate these higher speed cyclists who are already familiar with cycling on paved shoulders along highway 17 and other roads in the region.

Class D (-20% to +30%) Cost Estimate: $160,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years).

Figure 44: North Kenora Corridor #7 – Valley Drive

Corridor Extent: Airport Dr to Rabbit Lake Rd

Corridor Length: 600 m

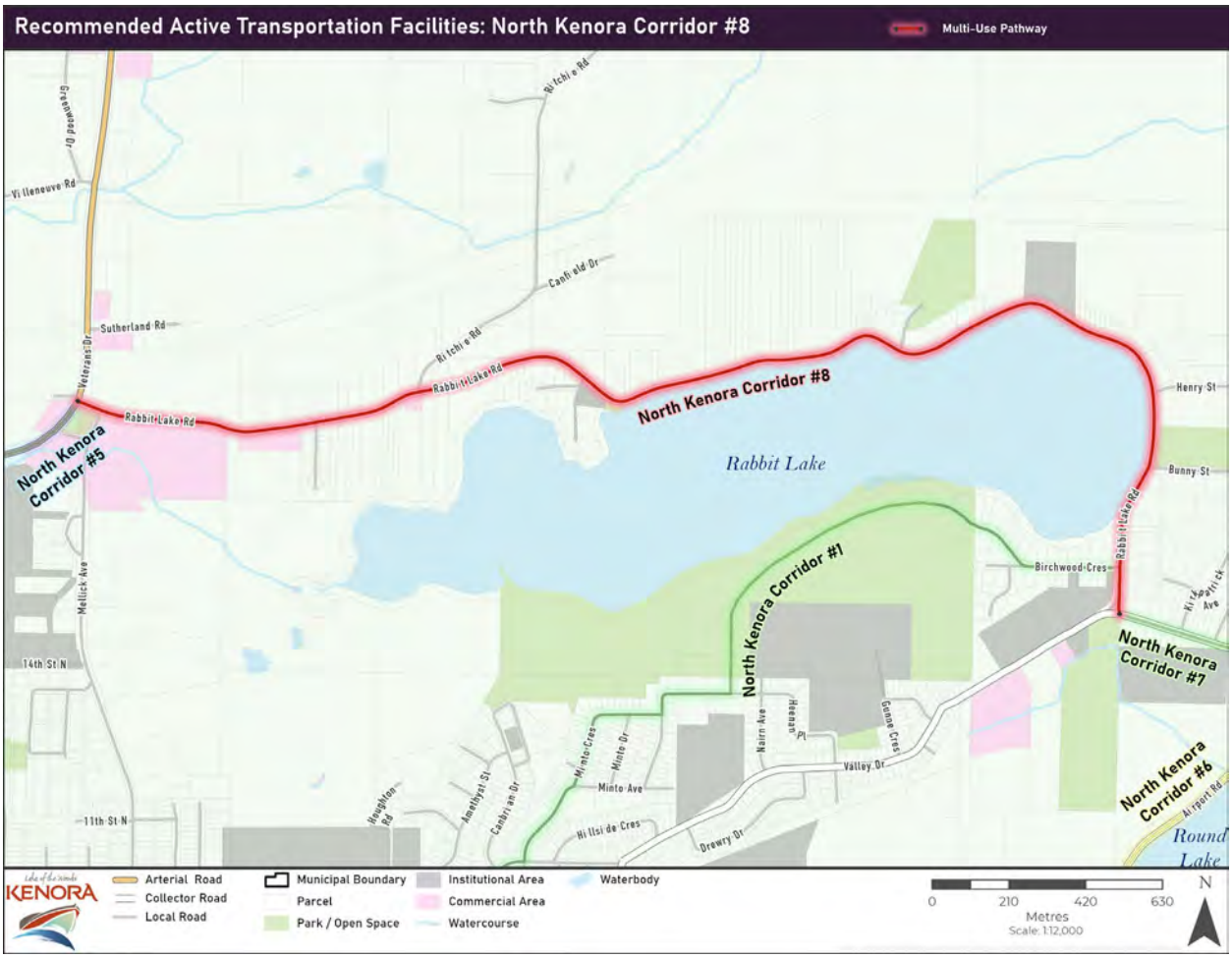
Key connections: This corridor connects cyclists travelling along North Kenora Corridor #6 along Airport Drive to the northern loop along Rabbit Lake Road proposed in North Kenora Corridor #8 and recreational connections along the south shore of Rabbit Lake. Access to nearby institutions along Valley Drive is also improved, including a number of schools, senior's facilities, and recreational destinations.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $24,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

Figure 45: North Kenora Corridor #8 - Rabbit Lake Road



Corridor Extent: Veterans Dr to Valley Dr

Corridor Length: 3,850 m

Key connections: The importance of creating a walking and cycling loop around Rabbit Lake was one of the most identified corridors in all public and stakeholder engagement sessions. This already popular cycling loop provides a scenic tour around the lake, and when the recommend facility is constructed, residents on foot will also be able to spend time enjoying this community gem. This corridor is a key segment of the active transportation network for the city, forming the northern loop of the network, and connecting to facilities at both the eastern and western terminus points.

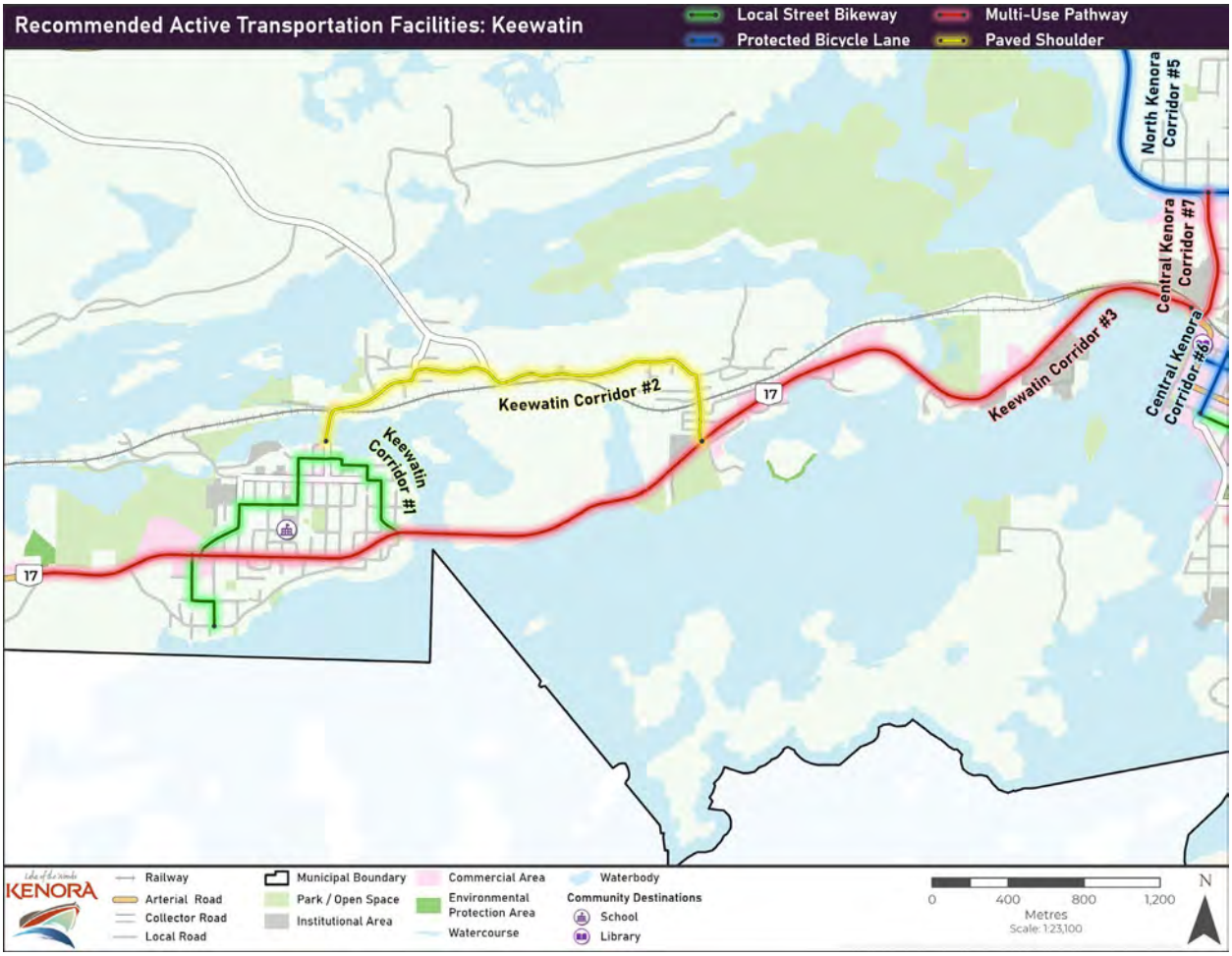
Recommended Facility Types: Vertically separated multi-use path

Class D (-20% to +30%) Cost Estimate: $3,850,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

Keewatin

Figure 46: Proposed Cycling Network – Keewatin Area



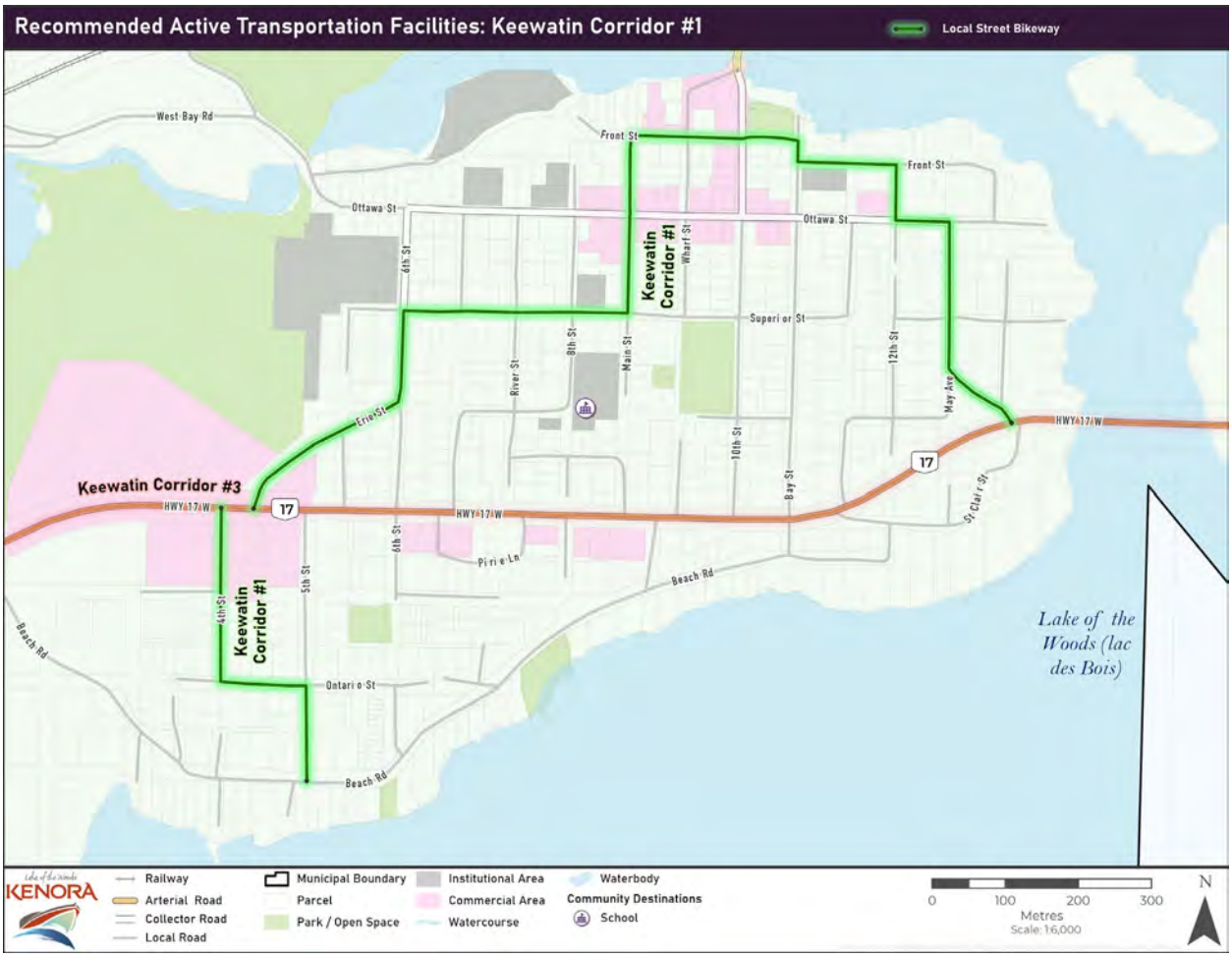
Rationale: Providing active transportation facilities to/from and within the Keewatin area of Kenora is important to connect the two communities and provide residents with transportation options to travel between downtown Kenora and Keewatin. The highway between Keewatin and Kenora is a high-volume traffic route, so providing safe space and/or alternative routes for residents and visitors to walk or bike would be valuable to allow for walking and biking connections to the businesses along the Highway, as well as to Norman Park Beach and McLeod Park.

Length of New Facilities: Approximately 11.8 kms total

Class D (-20% to +30%) Cost Estimate of all facilities in this area: Approximately $3,960,000.

Recommended Facility Types: Local Street Bikeways, Paved Shoulders, Multi-Use Pathways.

Figure 47: Keewatin Corridor # 1 - May Avenue, Erie Street, Ottawa Street, Ontario Street, 4th, 5th, and 6th Streets



Corridor Extent: Keewatin Beach Rd to Highway 17

Corridor Length: 2,330 m

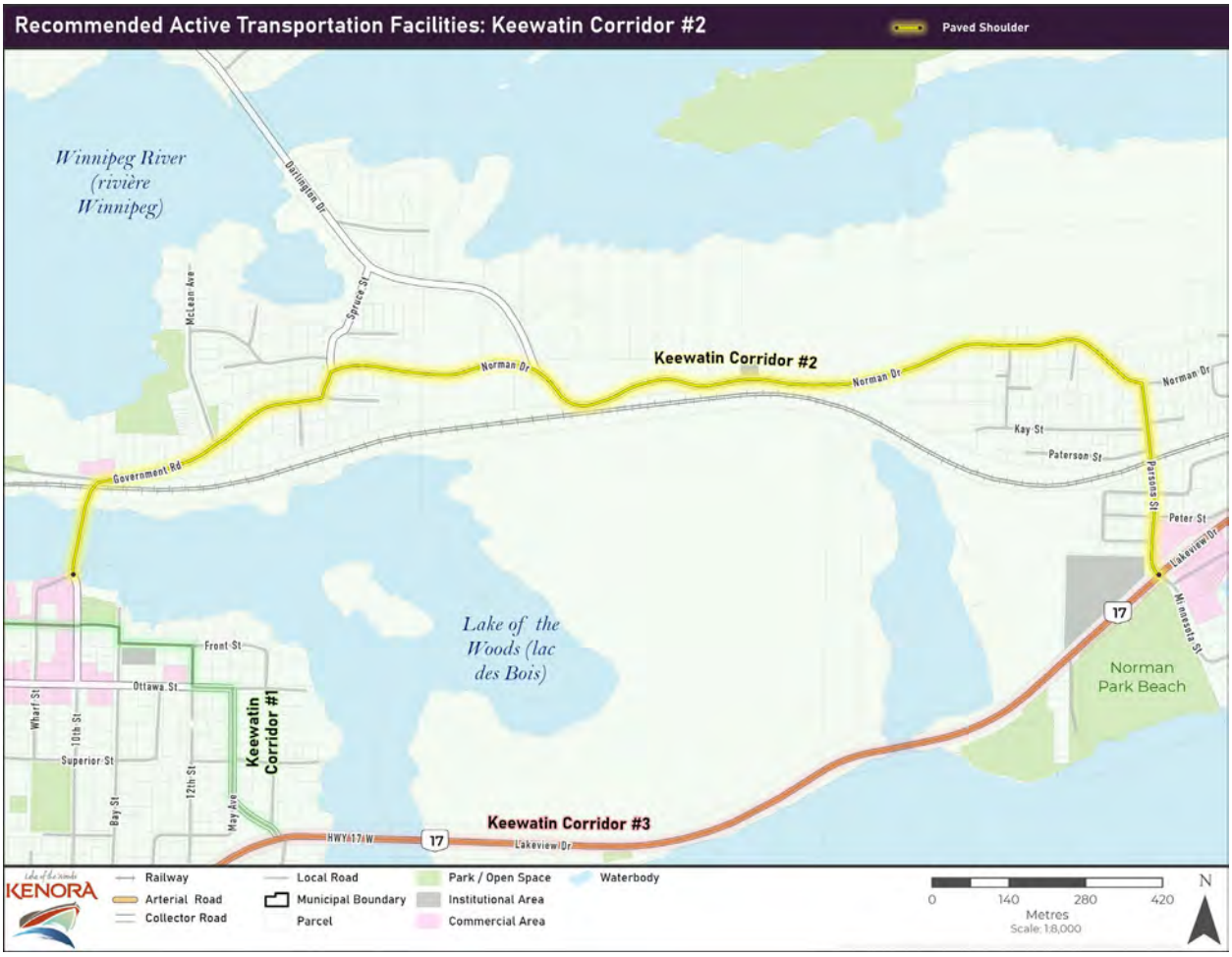
Key connections: Through its north/south and east/west alignment, this corridor provides connections to most of the Keewatin area, as well as to Keewatin corridor # 2 (along Government Rd and Norman Dr) at the northern terminus, and to Keewatin corridor #3 along highway 17 at the eastern terminus. This corridor also provides access to Keewatin Beach at the south end, Keewatin public school at the western edge, the Bowman Electric Keewatin Memorial Arena at the northwest edge, and to commercial businesses along Ottawa Street.

Recommended Facility Types: Local Street Bikeway with a reduced speed limit to 30 km/hr, installation of speed humps or tables to encourage drivers to reduce speeds, signage to indicate bike route, pavement markings to designate a bike route and encourage slower driving speeds, and curb bump-outs, where feasible, to narrow vehicle travel lanes.

Class D (-20% to +30%) Cost Estimate: $94,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years). Acquisition of private property or easements is not required.

Figure 48: Keewatin Corridor # 2 - Government Road, Norman Drive, and Parsons Street



Corridor Extent: Wharf St to Highway 17

Corridor Length: 2,600 m

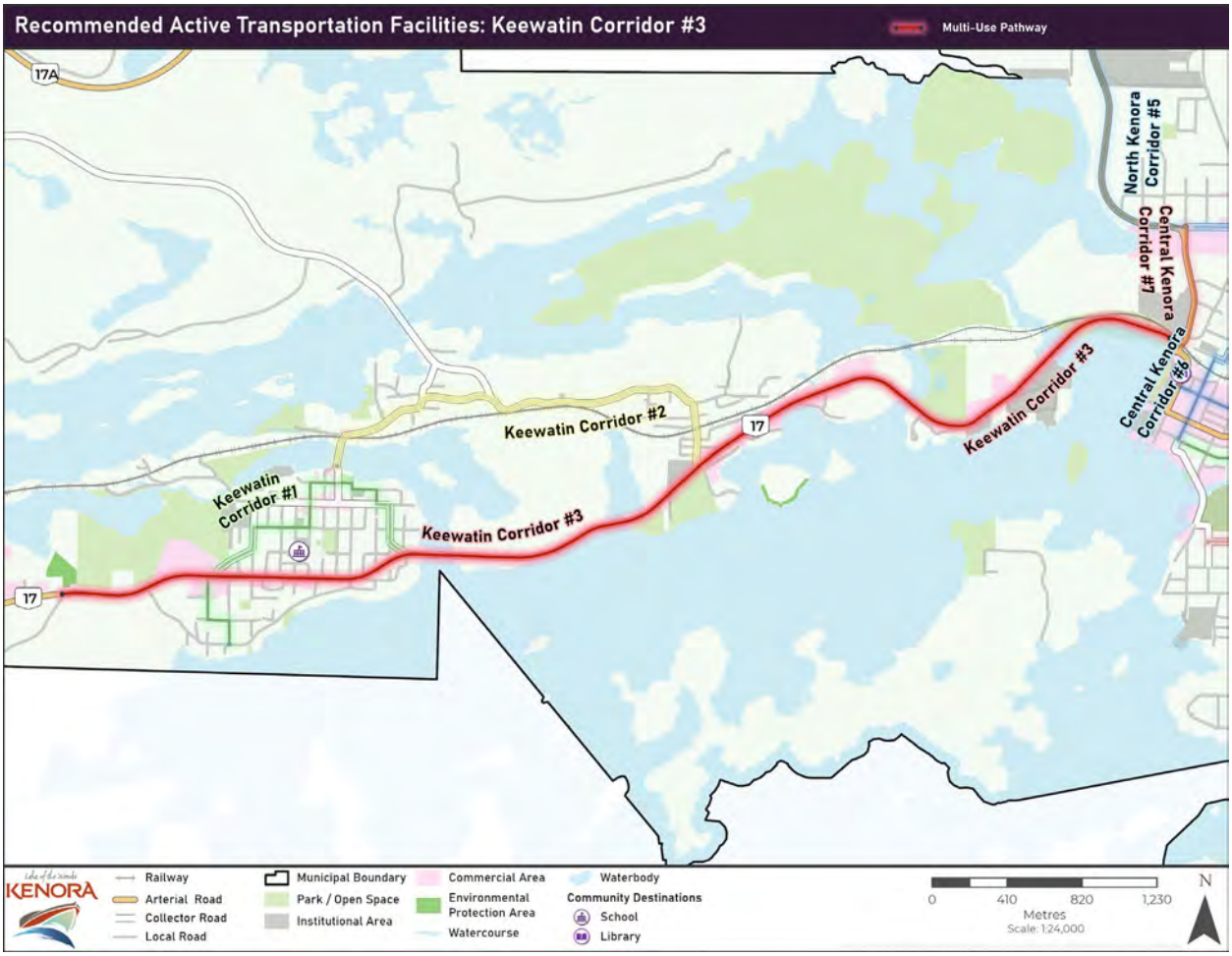
Key connections: The primary purpose of this corridor is to provide a safer cycling route for the significant number of road cyclists in the City of Kenora as the multi-use pathway along highway 17 will likely have a higher volume of pedestrians and recreational cyclists, limiting the possibility of riding at typical speeds for road cyclists. This corridor will also provide an alternate cycling route should highway 17 be closed for construction, collisions, or other reasons.

Recommended Facility Types: Paved Shoulders

Class D (-20% to +30%) Cost Estimate: $416,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the long term (11-20 years).

Figure 49: Keewatin Corridor # 3 - Highway 17



Corridor Extent: McKenzie Portage Rd to Pavilion

Corridor Length: 6,900 m

Key connections: While one of the longer facilities in the proposed active transportation network plan, this corridor was one of the most commonly identified (as well as most strongly supported) of all facilities identified in public and stakeholder engagement. Once constructed, this corridor would link the communities of Kenora (specifically the waterfront and downtown) with the community of Keewatin, provide a world class walking and cycling facility along the length of Kenora's waterfront (as well as a significant tourism draw and amenity), connect to regional medical and tourism facilities (including the Lake of the Wood Discovery Centre and the Lake of the Woods District Hospital), numerous parks (including Norman Beach and Park and Tunnel Island Park) and form the spine of all active transportation facilities west of downtown Kenora.

Recommended Facility Types: Multi-use pathway with a paved surface consistent with other multi-use pathways in the City of Kenora.

Class D (-20% to +30%) Cost Estimate: $3,450,000

Timeframe / Priority: This section of the active transportation network is anticipated to be completed in the medium term (6-10 years).

PEDESTRIAN NETWORK

As part of the development of the City of Kenora's Active Transportation Plan, residents, stakeholders, and administration were asked in the fall of 2023 to identify improvements to the proposed pedestrian network in the City of Kenora. "*What are your thoughts on the proposed improvements to the existing pedestrian network in the City of Kenora? Are there any other gaps that need to be filled? What sections need improvement first?*". Further details on feedback received can be found in Appendix D below.

The following is a summary of the comments received regarding improvements to the pedestrian network in the initial round of public and stakeholder engagement, with specific locations highlighted in bold below:

- General supportive comments for the proposed pedestrian network improvements (i.e., I like it, it looks good, improvements are much needed or long overdue) (45 responses).
- There is a need for more pedestrian facilities throughout Kenora. Respondents mentioned several locations, including **Airport Road, Highway 17, Minto area, and Gould Road** (34 responses).
- The City should prioritize improving personal safety (i.e., concerned about harassment from transient populations, have found drug paraphernalia on sidewalks and trails) (15 responses).
- Respondents are keen to see pedestrian facilities around **Rabbit Lake** (14 responses).
- Like the multi-use paths throughout Kenora, particularly the **multi-use paths connecting Keewatin to Kenora, around Rabbit Lake and Round Lake**) (10 responses).
- Pedestrians, cyclists, and motor vehicles should all be separated from each other (7 responses).
- Pedestrian facilities should be accessible for people of all ages and abilities (5 responses).
- The City should prioritize amenities that will improve safety along sidewalks and trails, such as lighting, well-marked crossings, and vegetation management (5 responses).

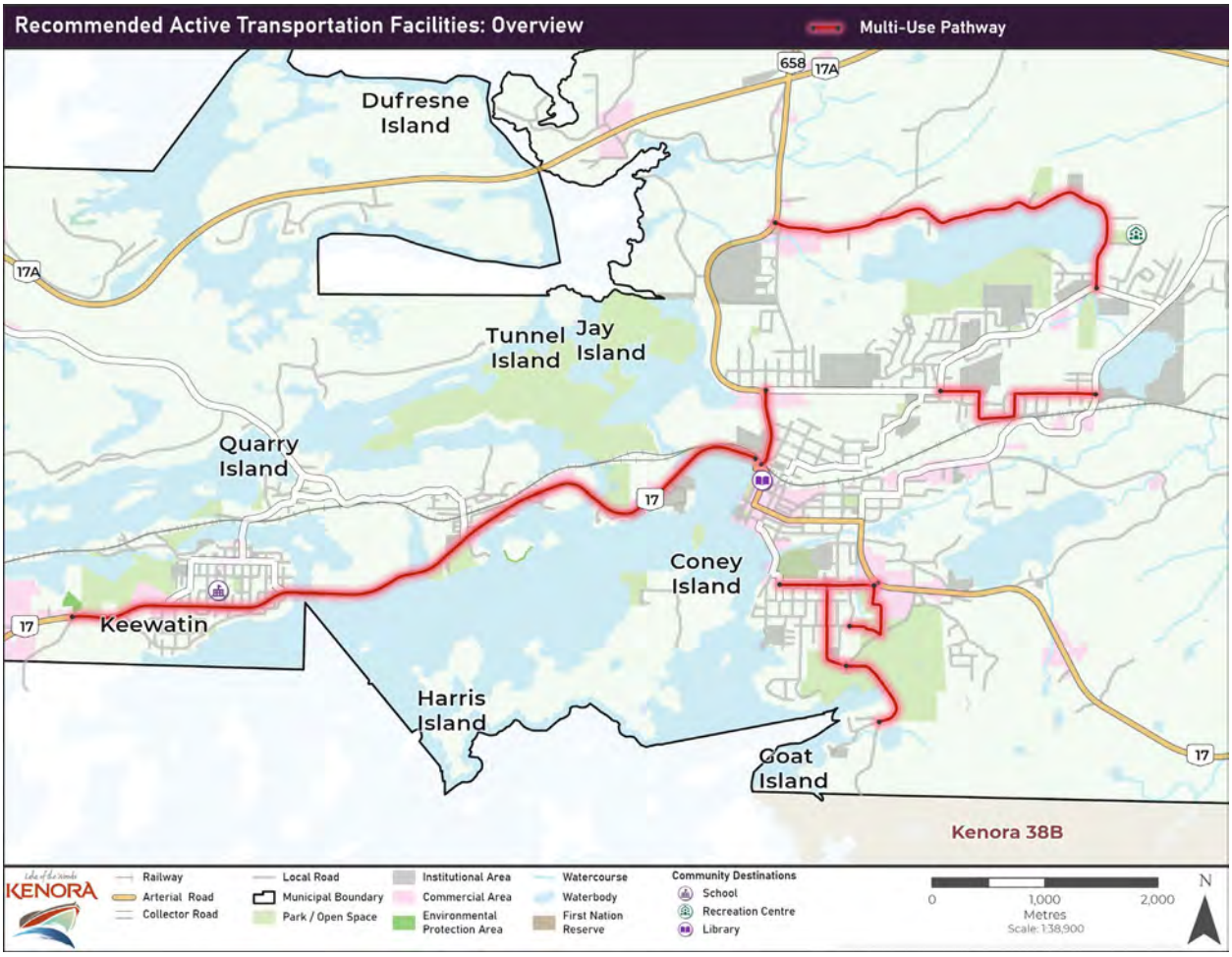
In the second round of public engagement conducted in the fall of 2024, survey respondents were given an opportunity to review the proposed active transportation network and make any comments pertaining to the proposed pedestrian network in particular. As shown by the comment summary below, there were several areas that were again identified as priorities for improved pedestrian facilities:

- Respondents would like to see a pedestrian safety improvement along **Lakeview Drive** (done!).
- Desire for an off-street active transportation **multi-use pathway along the lake.**
- Respondents would like to see pedestrian facility improvement along **Bernier Drive.**
- Respondents would like to see bike lanes, sidewalks, and reduced car speeds in the **Valley Drive and Minto area.**
- Respondents would like a dedicated sidewalk and bike lane along **Airport Road.**
- Respondents would like to see a pedestrian and cycling facility along **Rabbit Lake.**

On the basis of this feedback from local residents and stakeholders on the pedestrian elements of the proposed active transportation network, multiuse paths and paved shoulders for both pedestrians and cyclists were proposed for **Airport Road, Highway 17, the Minto area, Gould Road area, Rabbit Lake, Keewatin to Kenora, Lakeview Drive, and Valley Drive**. Bernier drive was considered as well but given the existing presence of sidewalks in the area, it is not part of the proposed active transportation network. However, given the large numbers of pedestrians in this area (particularly in the summer), it is recommended that the City of Kenora explore opportunities to expand and improve the pedestrian realm in this popular area of the City.

A map of the proposed pedestrian network expansion can be found in Figure 50 below.

Figure 50: Proposed Pedestrian Network Expansion Overview



NETWORK PRIORITIZATION

Kenora's long-term Active transportation master plan (ATMP) proposes new and upgraded pedestrian facilities, pathways, bicycle routes, and trails. These improvements will need significant financial investment and may take years to complete. The plan prioritizes high-demand areas for implementation. This section outlines the approach for identifying and implementing priority projects based on budget availability.

Common criteria for prioritizing infrastructure include road classification, connections to key destinations like schools and parks, network connectivity, transportation equity, and safety (see Table 1). By analyzing these criteria, priority projects can be identified.

The prioritization of the active transportation network will also depend primarily on which sections are within the City of Kenora's control and which require collaboration with developers and other levels of government (such as the Ontario Ministry of Transportation). Generally, the following is the most likely sequence:

1. Implement shared streets in the downtown
2. Implement city-lead off-street facilities without property needs
3. Implement city-lead off-street facilities with property needs
4. Implement developer and Ministry-lead off-street facilities

Some developer-lead projects may proceed more quickly as applications are received and approved by the city. Likewise, some city-lead facilities without property needs may require waiting for capital funding to be allocated and/or asset management (such as road renewal) schedules to align.

Additional planning, feasibility studies, resident feedback, alignment with other projects, and unforeseen factors such as accessibility needs, severe weather events, and funding constraints may influence the prioritization. Engagement with targeted groups is necessary to ensure equity considerations.

Table 10: Prioritization Criteria

Factor	Description	Priority
Roads	Rural Collector	Highest
	Rural Local Road	Lowest
Schools	Directly adjacent to any school	Highest
	School within 200m	
	School within 400m	Lowest
Active Transportation Generators	Directly adjacent to/within any key destination or commercial area	Highest
	Key destination/commercial area within 200m	
	Key destination/commercial area within 400m	Lowest
Network Connectivity	Connects to existing facility on both ends	Highest
	Connects to existing facility on one side	
	Does not connect to an existing facility	Lowest
Network Need	No active transportation facility on either side	Highest
	Active transportation facility already on one side	
	Active transportation facility on both sides	Lowest
Equity	Located in area of high equity need	Highest
	Located in area of moderate equity need	
	Located in area of low equity need	Lowest
Populatino Density	Located in Area of High Population Density	Highest
	Located in Area of Moderate Population Density	
	Located in Area of Low Population Density	Lowest
Safety	Located in area with history of safety concerns	Highest
	Located in area with no history of safety concerns	Lowest

LONG-TERM ACTIVE TRANSPORTATION NETWORK COST ESTIMATES

Unit Costs

The ATMP includes order-of-magnitude capital cost estimates and ongoing operating and maintenance cost estimates for the implementation and maintenance of active transportation corridor routes. The cost estimates presented below are based on typical unit costs and recent construction and operation and maintenance pricing within Kenora. The unit costs that were used as the basis to generate cost estimates are shown in Table 7. Intersection enhancements are also proposed as part of the ATMP, however the specific treatment at crossing locations is context specific and will require additional study. Intersection enhancements can range from $5,000 for a marked crosswalk to $500,000 for traffic signals (Table 11).

Developing high-level per linear meter costs for the proposed active transportation pathways is a crucial step in the planning process. These estimates provide an understanding of the financial requirements for each segment of the network, enabling the city to allocate resources effectively and prioritize projects based on budgetary constraints and anticipated benefits. The costs were developed based on typical cross-sections applied by the City on similar projects. The costs identified in Table 9 are for the identified multi-use pathways/trails, and those identified in 10 are for the re-configuration of the bicycle-friendly shared street network. The estimated costs are in 2025 dollars and include 20% for contingency costs and 15% for associated engineering costs. The cost estimates do not include significant earthworks, utilities, drainage infrastructure, and other roadway or right-of-way improvements that would be associated with land development. These additional costs would be identified during detailed design.

Table 11: Capital Costs by Facility Type

Facility Type	Capital Cost (per km)	Assumptions	Annual Operations and Maintenance Unit Cost (per km) – year-round maintenance
Local Street Bikeway	$40,000	Assuming improvements limited to signage, pavement markings, and speed humps.	$2,000
Multi-use Pathway Adjacent to roadway (new)	$500,000	Assuming no curb and gutter or drainage modifications required. Excludes lighting and property impacts.	$10,000
Multi-use Pathway Adjacent to roadway (utility relocation / drainage required)	$1,000,000	Excludes property acquisition.	$10,000
Sidewalk (curb and gutter)	$870,000	Excludes property acquisition.	$1,000
Paved Shoulders	$160,000	Includes utilities and drainage improvements and 50 mm asphalt depth	$2,000
Trails	$20,000	Estimate assumes no trail amenities or fixtures such as garbage cans, lighting, benches, bike racks, etc. will be provided. TCT Trail Costing Calculator used for cost estimates.	$6800

Table 12: Intersection Treatment Capital Costs

Intersection Enhancement	Cost Per Location
Marked Crosswalk (one crosswalk)	$2,500 to $5000
Rectangular Rapid Flashing Beacon (RRFB) / Enhanced Crosswalk	$20,000 to $75,000
Full Signal (four-way traffic signal)	$250,000 to $750,000
Curb Extensions (one side of crossing)	$10,000 to $20,000

Figure 51: Cost Estimates - Multi-Use Pathways / Trails

Project Area	Length (km)	Estimated Cost (Asphalt)	Notes
Central Kenora corridor #7 - Veterans Drive	0.7	$700,000	
South Kenora corridor #5 - Pine Portage Road / 8th Street S	0.6	$300,000	
South Kenora corridor #6 - Golf Course Road	0.86	$430,000	
North Kenora corridor #8 - Rabbit Lake Road	3.85	$3,850,000	
Keewatin corridor #3 - Highway 17	6.9	$3,450,000	Does not include urbanizing of the right-of-way
TOTALS	**12.91 km**	**$8,730,000**	

Table 13: Cost Estimates – Local Street Bikeways

Project Area	Length (km)	Estimated Cost	Notes
Central Kenora Corridor #1 - 3rd Street S	0.7	$28,000	Signage and pavement markings
Central Kenora corridor #2 - 7th Avenue S / River Drive	0.99	$40,000	Signage and pavement markings
Central Kenora corridor #3 - 1st Street S / 10th Avenue S	0.94	$38,000	Signage and pavement markings
South Kenora corridor #1 - 6th Avenue S	0.85	$34,000	Signage and pavement markings
South Kenora corridor #2 - 5th Street S, 2nd Ave S, Mike Richards Way	0.99	$39,800	Signage and pavement markings
South Kenora corridor #3 - 8th Avenue S	0.38	$16,000	Signage and pavement markings
South Kenora corridor #4 - 8th Street S	0.45	$18,000	Signage and pavement markings
North Kenora corridor #1 - Rabbit Lake Connector	0.96	$38,000	Signage and pavement markings
North Kenora corridor #2 - 12th Avenue N	0.5	$20,000	Signage and pavement markings
North Kenora corridor #3 - 9th Street N	1.85	$74,000	Signage and pavement markings
Keewatin corridor #1 - May Avenue, Erie Street, Ottawa Street, Ontario Street, 4th, 5th, and 6th Streets	2.33	$94,000	Signage and pavement markings
TOTALS	**10.94 KM**	**$439,800**	

Table 14: Protected Bike Lanes and Paved Shoulders

Project Area	Length (km)	Estimated Cost	Notes
Central Kenora corridor #4 - Railway Street / 10th Avenue South	1.45	$1,160,000	
Central Kenora corridor #5 - 1st Street S	0.33	$264,000	
Central Kenora corridor #6 - Matheson Street, 2nd, 3rd, 4th, 6th, and 8th Streets N	2.35	$1,880,000	
North Kenora corridor #4 - 9th Street N	1.55	$1,240,000	
North Kenora corridor #5 - Veterans Drive	2.2	$1,760,000	
North Kenora corridor #6 - Airport Road	1.0	$160,000	Paved shoulder- Cost estimate reflects inclusion in road renewal project for this roadway
Keewatin corridor #2 - Government Road, Norman Drive, and Parsons Street	2.6	$416,000	Paved shoulder- Cost estimate reflects inclusion in road renewal project for this roadway
TOTALS	**11.48 KM**	**$6,880,000**	

The cost estimates provided are only for planning purposes and should not be used for budgeting, as actual costs may vary significantly. Additional costs not included in these estimates can be significant and include detailed project designs, retaining walls, utility pole removal or replacement, etc. Therefore, at locations where these types of treatments are required, the cost per kilometre will be significantly higher.

The City should continue to look for new opportunities to work with developers, other agencies, and other levels of governments to establish cost-sharing agreements, or to seek grant opportunities to offset total project costs. Cost estimates have been developed for facilities on both Public Works and City -owned roadways.

As seen above in Table 7, there is a range of costs associated for each of the different facility types depending on the materials used and the existing conditions. The entire proposed active transportation network is approximately 36 kilometres.

PROPOSED PRIORITY PROJECTS

During the development of the Active Transportation Network Plan, several existing priority corridors were identified for active transportation Network improvements. These form both an east-west and north-south spine through the City of Kenora.

The recommended active transportation improvements included in this Plan cover approximately 34 kilometres of new pedestrian facilities, cycling facilities, and traffic calming.

The estimated capital costs have been provided to identify relative cost for planning purposes only and should not be used for budgeting purposes as each corridor will require further feasibility studies and actual costs may vary significantly.

Phase 1 (Short Term) - 1 to 5 Years

The estimated capital cost of the Phase 1 Active Transportation Network expansion is $2,970,000:

Table 15: Phase 1 Active Transportation Network Projects Cost Estimates

Corridor Name	Facility Type	Length (km)	Estimated Capital Cost
Central Kenora corridor #1 - 3rd Street S	Bikeway	0.7	$28,000
Central Kenora corridor #2 - 7th Avenue S / River Drive	Bikeway	0.99	$40,000
Central Kenora corridor #3 - 1st Street S / 10th Avenue S	Bikeway	0.94	$38,000
Central Kenora corridor #5 - 1st Street S	Protected bike lanes	0.33	$264,000
Central Kenora corridor #6 - Matheson Street, 2nd, 3rd, 4th, 6th, and 8th Streets N	Protected bike lanes	2.35	$1,880,000
Central Kenora corridor #7 - Veterans Drive	Multi-Use Pathway	0.7	$700,000
North Kenora corridor #2 - 12th Avenue N	Bikeway	0.5	$20,000
		Estimated Total Cost	**$2,970,000**

Phase 2 (Medium Term) - 6 to 10 Years

The estimated total cost of the Phase 2 Active Transportation Network expansion is $9,498,800:

Table 16: Phase 2 Active Transportation Network Projects Cost Estimates

Corridor Name	Facility Type	Length (km)	Estimated Capital Cost
Keewatin corridor #1 - May Avenue, Erie Street, Ottawa Street, Ontario Street, 4th, 5th, and 6th Streets	Bikeway	2.33	$94,000
Keewatin corridor #3 - Highway 17	Multi-Use Pathway	6.9	$3,450,000
South Kenora corridor #6 - Golf Course Road	Multi-Use Pathway	0.86	$430,000
South Kenora corridor #1 - 6th Avenue S	Bikeway	0.85	$34,000
South Kenora corridor #2 - 5th Street S, 2nd Ave S, Mike Richards Way	Bikeway	0.995	$39,800
South Kenora corridor #5 - Pine Portage Road / 8th Street S	Multi-Use Pathway	0.6	$300,000
North Kenora corridor #1 - Rabbit Lake Connector	Bikeway	0.96	$61,000
North Kenora corridor #8 - Rabbit Lake Road	Multi-Use Pathway	3.85	$3,850,000
North Kenora corridor #4 - 9th Street N	Protected bike lanes	1.55	$1,240,000
		Estimated Total Cost	**$9,498,800**

Phase 3 (Long Term) – 11 to 20 Years

The estimated total cost of the Phase 3 Active Transportation Network expansion is $3,604,000:

Table 17: Phase 3 Active Transportation Network Project Cost Estimates

Corridor Name	Facility Type	Length (km)	Estimated Capital Cost
Keewatin corridor #2 - Government Road, Norman Drive, and Parsons Street	Paved shoulders	2.6	$416,000
North Kenora corridor #6 - Airport Road	Paved Shoulders	1.0	$160,000
North Kenora corridor #3 - 9th Street N	Bikeway	1.85	$74,000
Central Kenora corridor #4 - Railway Street / 10th Avenue South	Protected bike lanes	1.45	$1,160,000
South Kenora corridor #3 - 8th Avenue S	Bikeway	0.38	$16,000
South Kenora corridor #4 - 8th Street S	Bikeway	0.45	$18,000
North Kenora corridor #5 - Veterans Drive	Protected bike lanes	2.2	$1,760,000
		Estimated Total Cost	**$3,604,000**

The total estimated cost to fully implement the Active Transportation Network Plan is around $16.1 million dollars (in 2026 pricing), largely based on the type of facilities selected for the identified corridors. As this plan was envisioned to be implemented over a 20-year timeframe, this would require funding in the amount of approximately $804,000 in annual funding from all 3 levels of government to be fully implemented over those 20 years.

4 IMPLEMENTATION AND MONITORING

During the active transportation planning process, we identified the improvements that are most important to community members and devised a series of strategies and actions for the City to implement over the next ten years and beyond. Despite the long-term nature of the plan, it is crucial to allocate sufficient financial and staff resources to prioritize and actualize these improvements. As recommended in Action 1c, the Plan should undergo an annual review to monitor progress, ensure the allocation of appropriate resources, and verify that the recommendations continue to align with the City's priorities and current design standards.

This chapter includes both an implementation and monitoring strategy to ensure that the ATMP is being executed effectively and that progress is being made towards creating a more livable and sustainable City.

IMPLEMENTATION PLAN

The implementation plan was developed based on the following guiding principles:

- The ATMP is just the beginning, outlining steps for the City's vision and goals set by the community. Implementing it requires significant investment in infrastructure, maintenance, policies, programs, and staff. The City, Mayor, Council, and partners must support this effort.
- Community feedback will be crucial for refining active transportation in Kenora. Many improvements need additional technical work and input. Collaboration with partners and stakeholders is key to progress.
- The implementation plan targets high-priority areas over the next ten years, focusing on infrastructure projects and actions.
- The ATMP, as a dynamic document, will be reviewed and updated regularly to reflect changing community interests and priorities. Feasibility and design reviews with community input are essential for recommended projects. Regular updates ensure the ATMP aligns with the City's evolving priorities.

MONITORING STRATEGY

Monitoring and reporting to the Council and community on the ATMP implementation are crucial for achieving its vision and goals. This ensures effective allocation of resources towards prioritized actions and improvements. Monitoring helps identify changing conditions and priorities, necessitating adjustments to the ATMP.

Monitoring should be:

- Meaningful: Demonstrates success in achieving the ATMP's vision, goals, and targets.
- Measurable: Clearly defined criteria with easily obtainable data.
- Manageable: Accounts for resource constraints and focuses on accessible information or straightforward data collection.

1. Define Objectives and Goals

- Identify Key Objectives: Clearly define what the active transportation plan aims to achieve. This could include increasing the number of people walking or biking, improving safety, reducing carbon emissions, or enhancing accessibility.
- Set Specific Goals: Quantify these objectives with specific, measurable goals, such as increasing cycling trips by 20% within five years.

2. Identify Key Performance Indicators (KPIs)

- Usage Metrics: Track the number of pedestrians and cyclists using specific routes or facilities. Use counters, surveys, or manual counts.
- Safety Metrics: Monitor the number of accidents or incidents involving pedestrians and cyclists. Collaborate with local law enforcement and health departments for data.
- Infrastructure Quality: Assess the condition and connectivity of sidewalks, bike lanes, and other infrastructure.
- Environmental Impact: Measure changes in air quality or reductions in greenhouse gas emissions attributed to increased active transportation.
- Public Satisfaction: Use surveys to gauge public satisfaction and perceived accessibility or safety of active transportation options.

3. Data Collection Methods

- Automated Counters: Install devices to automatically count pedestrians and cyclists on popular routes.
- Surveys and Interviews: Conduct regular surveys with users and non-users to gather qualitative data on the experience and barriers.
- Mobile Apps and GPS Data: Use technology to anonymously track movement patterns and gather data on preferred routes.
- Observational Studies: Periodically conduct manual counts and observations to complement automated data.

4. Data Analysis and Reporting

- Regular Analysis: Analyze data on a regular basis (quarterly, bi-annual, or annually) to track progress toward goals.
- Visual Reporting: Use dashboards, infographics, and maps to present data in an accessible format for stakeholders and the public.
- Benchmarking: Compare data against benchmarks or other similar communities to assess performance.

5. Feedback Mechanism

- Stakeholder Engagement: Regularly engage with stakeholders, including local governments, community groups, and residents, to gather feedback.
- Adjustments to Plan: Be prepared to make adjustments to the plan based on feedback and data insights.

6. Review and Update Strategy

- Annual Review: Conduct a comprehensive review of the monitoring strategy annually to ensure it remains relevant and effective.
- Adapt to New Technologies: Stay informed about new data collection and analysis technologies that could enhance monitoring efforts.

7. Communication

- Public Transparency: Ensure that the results and progress are communicated to the public regularly to maintain transparency and accountability.
- Success Stories: Highlight successes and improvements to encourage continued public and stakeholder support.

By following these steps, you can develop a robust monitoring strategy that not only tracks the success of your active transportation plan but also provides insights for continuous improvement.

METRICS OF SUCCESS

The ATMP monitoring strategy identifies success measures for:

- Implementation progress
- Plan outcomes and impact

The tables below describe these measures, including indicator metrics and data sources.

Table 18: ATMP Metrics of Success

Measure of Success	Indicator	Source
Active Transportation Mode Share (commuting)	%	Statistics Canada Census
Proportion of each of women, children, and seniors using active transportation (commuting)	%	Statistics Canada Census
Active Transportation Volumes on Key Corridors	#	City of Kenora
Active Transportation Funding Levels (% of total budget)	%	City of Kenora
City of Kenora Staff resources dedicated to Active Transportation (FTE)	#	City of Kenora

Theme 1: Connect

The success metrics for **Theme 1: Connect** aim to create an effective, fully integrated network of active transportation facilities. The following measures of success will help the City of Kenora determine if it is achieving the goals of the ATMP.

Table 19: Metrics of Success - Connect Theme

Measure of Success	Indicator	Source
Total length of active transportation facilities (by facility type)	Total km	City of Kenora
Proportion of streets with a pedestrian facility on at least one side	% of all streets	City of Kenora
Length of completed recommended active transportation improvement projects	Total km	City of Kenora
Proportion of Kenora's population within 400 metres of active transportation facilities	%	City of Kenora
Proportion of Kenora's total land area within 400 metres of active transportation facilities	%	City of Kenora

Theme 2: Explore

The success metrics for **Theme 2: Explore** are centered on the design or redesign of active transportation routes, ensuring that both community members and visitors can travel safely and comfortably to explore the City of Kenora, regardless of their chosen mode of transportation.

Table 20: Metrics of Success – Explore Theme

Measure of Success	Indicator	Source
Number of collisions involving pedestrians and cyclists	#	City of Kenora/OPP/NWHU
Proportions of all collisions involving people walking and cycling	%	City of Kenora/OPP/ NWHU
Total length of active transportation facilities constructed around new developments	Total kms	City of Kenora
Number of school aged students participating in an education and cycling skills training course	#	City of Kenora/KPDSB/ KCDSB
Total length of Local Street Bikeways	Total kms	City of Kenora
Number of audible pedestrian signals	#	City of Kenora
Proportion of intersections with curb ramps and pedestrian crossings to connect all active transportation routes	%	City of Kenora

heme 3: Include

The success metrics for **Theme 3: Include** are focused on making active travel a part of everyday life for all residents and visitors - regardless of their transportation mode or mobility challenges.

Table 21: Metrics of Success – Include Theme

Measure of Success	Indicator	Source
Total number of public wayfinding displays	#	City of Kenora
Amount of funding allocated for active transportation promotion and education	$	City of Kenora
Number of people who participated in a bicycle education program	#	City of Kenora
Number of new programs or initiatives designed to encourage active transportation	#	City of Kenora
Number of views or downloads of online maps and active transportation resources	#	City of Kenora
Proportion of Municipal staff who travel to work by walking, rolling, cycling, carpooling, or transit	%	City of Kenora
Proportion of active transportation routes that include public amenities (benches, lighting, washrooms, recycling bins, etc.)	%	City of Kenora
Number of new public amenities installed along active transportation routes	#	City of Kenora
Proportion of Kenora's facilities and businesses with bike parking or end-of-trip facilities within 100 metres	%	City of Kenora

FUNDING STRATEGY

Although the Active Transportation Master Plan is estimated to cost approximately $16,072,800 over the next 20 years and beyond, these costs can be shared by pursuing external funding from other levels of governments, partnerships with other organizations and the development industry, and integration of cycling and pedestrian projects with other plans and projects.

This section describes several strategies that the City may consider helping leverage its investments and to maximize its ability to implement active transportation improvements.

Capital Planning

The City should incorporate the Active transportation master plan recommendations into its Operating and Capital Budgets to ensure that projects are accounted for in the City 's capital planning process.

Integration

The City should include bicycle and pedestrian improvements in other plans and projects whenever possible. There are active transportation parts in many upcoming and planned road renewal programs, development projects, and major capital projects identified as part of the City's active transportation network. The best time to provide safe and convenient active transportation facilities is during the initial planning and design of these projects.

The City should look for chances to add active transportation facilities with new infrastructure or renewal projects, like major road resurfacing and servicing upgrades. The City also needs to change existing policies and standards to make sure opportunities to add proposed active transportation projects are required as new developments happen.

External Funding Sources

The costs of making the improvements in the Active Transportation Master Plan can be cut down by looking for outside funding and partnership opportunities. This section talks about some ways to get funding and where the City might find money to help with transportation projects. While the City already checks for grant opportunities, Kenora should also look for all possible sources of money for transportation infrastructure and programs, including the following options (Note: funding opportunities change often, so the details here might change):

Federal Funding: There are several programs that provide funding for environmental and local transportation infrastructure projects in municipalities across Canada. Typically, the federal government contributes one-third of the cost of municipal infrastructure projects. Provincial and municipal governments contribute the remaining funds, and in some instances, there may be private sector investment as well.

- In 2022 the Federal Government launched the National Active Transportation Fund (ATF), with an allocation of $400 million over 5 years. This fund was heavily oversubscribed with over $1.3 Billion in applications for both the capital and planning streams - including funding for the development of this Plan. However, the entire funding allocated for this fund was used up in the 2022/2023 calendar year, except for $20 million remaining for Indigenous Communities. In discussions with Infrastructure Canada staff, they indicated that the ATF will be permanently part of Permanent Public Transit Fund (PPTF). The PPTF has an annual allocation of $3 Billion per annum, and a portion of this fund will be dedicated to Active Transportation, with new applications being accepted as of 2025 – including a recent intake to the Capital Funding Stream of the National Active Transportation Fund in February of 2025.

Green Municipal Funds: The Federation of Canadian Municipalities manages the Green Municipal Fund, with a total allocation of $550 million. This fund is intended to support municipal government efforts to reduce pollution, reduce greenhouse gas emissions and improve quality of life. The expectation is that knowledge and experience gained in best practices and innovative environmental projects will be applied to national infrastructure projects.

- Developers. The City should explore opportunities for road improvements to be constructed as development occurs within and adjacent to City of the City of Kenora. This process could be formalized through an update to the City of the City of Kenora's Official Plan or through individual negotiations.
- Private sector. Many corporations wish to be good corporate neighbours — to be active in the community and to promote environmentally-beneficial causes. Bicycle and pedestrian routes and facilities are well-suited to corporate sponsorship and have attracted significant sponsorship both at the local level and throughout North America.
- Service Clubs. In many communities, service clubs (including the Lion's Club and Rotary) have been involved in funding and building bicycle infrastructure and facilities including pathways and bicycle parking.

Staff Resources

Implementation of the Active transportation master plan includes not only additional financial resources, but the City will require significant staff resources to implement the various strategies. Given the current staffing structure, the City should designate a lead staff person to implement the Active Transportation Plan. This responsibility for promoting and encouraging active transportation as well as implementing the Active transportation master plan would likely be best suited for the City's General Manager of Capital Project Delivery.

This position should work with Public Works, Trails, Tourism, and Economic Development to enact the plan and increase active transportation related tourism activities.

5 SUMMARY AND CLOSING

The City of Kenora is entering an exciting period with many new developments and substantial growth expected over the next ten years. The Active Transportation Master Plan (ATMP) offers a clear plan for creating a more livable, sustainable, connected, and active community. The Plan includes suggestions for improving the current active transportation network and creating new policies and programs that will encourage residents to choose active travel options. Implementing the recommendations in the ATMP will make it easier, more comfortable, more convenient, and safer for community members who choose to travel actively in the City.

The ATMP is just the beginning of efforts to improve active transportation in Kenora. The strategies and actions in the ATMP provide a roadmap for the City to follow in the coming decade. This involves investing in new and updated infrastructure, maintaining active transportation facilities, funding new programs, and allocating significant staff resources. Implementing the Plan will also require close cooperation with Ontario's Ministry of Transportation and ongoing coordination with community organizations and various stakeholders.

While the ATMP was developed partly based on thorough technical work, it would not have been possible without the valuable input from community members, local stakeholders, council, and administration. We would like to thank all community members for their involvement in the planning process and for their valuable feedback, which helped shape the ATMP. We look forward to seeing Kenora become an even better place to walk, wheel, and enjoy active travel in the coming years.

APPENDIX A

COMMUNITY ENGAGEMENT

COMMUNITY ENGAGEMENT

The participation of the community and stakeholders was essential in shaping Kenora's Active Transportation Master Plan (ATMP). Various engagement opportunities were offered to community members, including two online surveys, an interactive map, and four community pop-up events - both in-person and virtual.

Round 1: Understanding Current Conditions

The first round of engagement occurred between August and September of 2023, focusing on understanding current active transportation habits, challenges, and future priorities. Community members contributed through an online survey, interactive map, and various pop-up sessions. The project team also organized five stakeholder meetings to introduce the project, share community feedback, and learn about the initiatives of key stakeholders. You can find the Round 1 engagement summary in section A.3 below.

Round 2: Gathering Feedback on the Draft Plan

The second round of engagement was conducted to measure the community's support for the initial network recommendations, as well as to understand which projects residents would like prioritized. Feedback on the proposed actions and strategies was gathered to assess the levels of support for each suggestion.

Input from both community members and stakeholders allowed the project team to assess support for the identified corridors within the Plan and make necessary adjustments to the proposed active transportation improvements. The summary of the Round 2 engagement can be found in section A.4 below.

STAKEHOLDER ENGAGEMENT

The development of Kenora's Active Transportation Master Plan heavily relied on numerous formal and informal consultations with a diverse range of stakeholders. The organizations involved included:

- Kenora Chamber of Commerce
- Kenora Hospitality Alliance
- Confederation College
- Northwest Health Unit
- Kenora Association for Community Living
- Kenora Senior's Club
- Mosswood Adventures
- Keewatin-Patricia District School Board
- Northwestern Ontario Student Services Consortium
- Happy Trails Committee
- Youth Wellness Hub
- Kenora Chiefs Advisory – OGIMAAWABIITONG
- Kenora Catholic District School Board
- Lake of the Woods Museum

Stakeholder consultation sessions were held upon project initiation in December 2023, and one on one sessions were held with the Youth Wellness Hub, the Nordic Trails Association, both Kenora School Districts, as well as the Kenora Senior's Club.

A second round of stakeholder engagement was held in the late fall of 2024 to share the proposed strategies, actions, and pedestrian and cycling networks in the draft active transportation plan for the city of Kenora.

Stakeholder sessions were conducted virtually and recorded to ensure that no feedback or comments were missed. This also allowed for a broader participation from stakeholders who might not be able to attend in person.

In addition to the formal stakeholder sessions, numerous community site visits and tours were conducted with stakeholders and City staff to get a firsthand look at the routes proposed for future designation in the Active Transportation network. This included several meeting with local stakeholders to examine and discuss specific locations.

Throughout development of the Active Transportation Master Plan for the City of Kenora, it became clear that there is a very high level of interest in cycling, walking, and rolling in the City of Kenora. There are several volunteer-led initiatives already promoting safe, sustainable, and healthy transportation options for community residents of all ages.

Youth Wellness Hub – December 7th, 2023

The previous bus system posed challenges, but the new Wave Micro-Transit service has greatly improved accessibility. The Youth Wellness Hub identified transportation as a key area for enhancement. Providing affordable bicycles, cycling facilities, and reliable bus services can significantly boost youth mobility. Improving walking routes to schools and better maintenance of walking and cycling paths will foster active travel. Enhanced pavement markings and signage will also assist visitors in navigating the city.

Nordic Trails Association – December 8th, 2023

In the year 2000, the Nordic Trails Association received grants to develop a Trail Plan and enhance existing trails, resulting in a trails map and priority list. (***Despite efforts to find this Trail Plan in City records, online, or with Nordic Trails Association volunteers, no copy of the report was located or shared with the ATMP project team.) The Nordic Trails Association expressed a strong desire to see Rabbit Lake transformed into a vibrant traffic-calmed corridor for cycling and walking, similar to Wellington Crescent in Winnipeg.

Representatives emphasized the importance of prioritizing road widening to accommodate pedestrians and cyclists during road renewals. They encouraged the City to adopt improved design standards for active transportation and connect the active transportation network to Vernon Trails. This enthusiasm reflects a commitment to fostering accessible and sustainable transportation options for all residents.

Keewatin-Patricia District School Board and Kenora Catholic District School Board – December 12th, 2023

There is significant enthusiasm around the development of the ATMP among schools and school districts. The longstanding mountain biking programs at KCDSB could greatly benefit from supportive cycling infrastructure, keeping students engaged and active. Evergreen Trail System and Tunnel Island were suggested as ideal locations for these initiatives.

St. Thomas Aquinas High School boasts 10 km of trails and is eager to expand, with funds available to improve these trails pending City approval. Enhancing accessibility and adding signage would greatly benefit the community.

Map of existing and planned trails near St. Thomas Aquinas High School

School district staff alone conveyed the need for a cultural shift towards greater support for trail development, as this would empower volunteer-led efforts and help to overcome liability concerns. Notably, over 15 km of informal trails have already been created by volunteers (including school staff) near Rabbit Lake. A map of this informal trail system can be found on the next page of this documents.

Map of informal trail network near Rabbit Lake

A desire for a formal Trails or Active Transportation Committee as a Committee of Council was expressed, and there was enthusiasm about the potential for improved walking and cycling connections between Kenora and Keewatin. The example of Cuyuna, Minnesota was highlighted as a successful model, showing how a small town can become a world-class destination for mountain biking.

There is strong support for expanding shoulders and dedicated cycling facilities for seasonal road riders and leveraging existing volunteer-led mountain biking trails to develop a broader network. Stakeholders are optimistic about the ATMP despite the perception that past plans were not being implemented, and schools are eager for city support to run cross-country running programs and maintain trails.

The school districts conveyed their need for city collaboration to provide permissions, materials, and funding for volunteer-led efforts. These passionate volunteers are seen as valuable assets for Kenora, and there is hope that enhanced city support will foster a thriving recreational trail system.

Kenora Senior's Club – December 12th, 2023

Senior's Club Members shared concerns about the slope of sidewalks, which often causes issues for wheelchair users, especially near driveways. Vehicles blocking sidewalks force detours, and the installation of multiuse pathways could be a solution. An accessible walking and cycling path on Tunnel Island would be a fantastic community asset.

Members also suggested widening shoulders and improving maintenance for road projects, considering vulnerable road users. There is a need for better handicapped parking downtown and wider sidewalks for wheelchair users. Pine Portage has potential for a multiuse path, and areas near Senior's Centres should be prioritized.

Educating cyclists and drivers, with support from OPP and the education system, is crucial. Railway Ave. needs a non-grade separated pathway, and the city should maintain design standards. More generous curb cuts would benefit those with mobility issues.

Senior citizens need more consideration, and their input should be sought before projects begin. Support for the plan's recommendations upon release is important, and push-button crosswalks would be a better option than constantly flashing lights.

Stakeholder Engagement Highlights – Round #2

The second round of stakeholder engagement focused on reviewing and discussing the initial draft of the Active Transportation Master Plan, and the following themes and feedback were discussed:

- There was strong support for safe walking and cycling routes between downtown Kenora and Keewatin, filling gaps in the existing cycling network, and separated facilities along Highway 17
- A discussion on the potential impact of Provincial legislation around the installation of protected bike lanes on existing vehicle travel lanes was had, with stakeholders expressing concern that the City may be limited as to what types of facilities it can propose, and where, as a direct result of this legislation.
- Participants highlighted the importance of safe pedestrian facilities for students and the need for improved crossings and sidewalks near schools.
- Stakeholder emphasized the importance of safe pedestrian and cycling routes for students, and the need for improved crossings and sidewalks near schools. They also discussed the potential for walking school bus programs and the benefits of connecting school properties to civic trails.
- There was strong support for Safe Routes to School and the need for end-of-trip facilities like bike parking.

- Participants also emphasized the importance of maintaining existing pathways, improving community safety, and ensuring proper signage.
- Stakeholders expressed the need for better signage and maintenance of existing bike symbols on key routes to show the city's commitment to cycling. They highlighted the importance of repainting faded bicycle symbols along Lakeshore Dr and Hwy 17 to improve visibility and safety for cyclists.
- Stakeholders from the KPDSD suggested organizing walking school buses to improve safety for students walking to school, based on successful examples from other cities. They emphasized the importance of creating safe and accessible routes for students and the potential benefits of such programs.
- Given Kenora's topography and existing mountain biking culture, stakeholders discussed the potential for developing mountain biking trails and improving existing trails to attract tourists and support local cyclists. They highlighted the importance of creating an even stronger mountain biking culture in Kenora, and the need for collaboration between the city and local volunteers to develop and maintain trails.

Happy Trails

In addition to dedicated stakeholder sessions with the 15 community organisations represented above, the Happy Trails group (an informal coalition of community members interested in supporting walking and cycling in the City of Kenora) was extremely active in engaging with the project team throughout the entirety of the project. In total, over 37 emails were sent to the project team from Happy Trails members throughout the development of the project, as well as a dedicated community site visit and tour with project team members and members of the Happy Trails committee. Input from this group ranged across a wide variety of topics and is summarized below.

Members of Happy Trails shared the legacy of Dave Schwartz, advocating for the inclusion of the Miller Rapids trail and the use of the golf course for winter activities. They highlighted the federal Active Transportation Fund and expressed hopes for funding sources in the Active Transportation Plan.

The group emphasized prioritizing the "circle route" and incorporating the ski club's bike trails project. They inquired about a designated point person for Active Transportation and invited the project team to their TedTALKS Trails/Active transportation meetings. They also stressed the importance of engaging the community and building support for the Plan's release.

Happy Trails members suggested a walking/biking school bus pilot at Evergreen School, directed the project team to connect with Elaine Fischer, and recommended linking with the Happy Trails group for the success of Kenora's 2025 ATMP. They shared inspiring examples from Norway's non-motorized transportation infrastructure, encouraging similar multi-use trails in Kenora.

Niisaachewan Anishinaabe Nation

Niisaachewan Anishinaabe Nation (NAN) is located approximately 20 kms north/northwest of the city of Kenora and has long enjoyed a neighbourly relationship with Kenora due to their close proximity. Recently, NAN undertook the development of an Active Transportation Plan for their own community, largely focused on trails in and around the community.

While this plan is largely local in nature, it was noted in stakeholder sessions in NAN that there is a desire for a regional trails strategy that encourages mountain cycling tourism in both communities, as well as an appetite to explore the creation of a regional trail network linking the two communities – similar to the 25 km long ?apsčiik t'ašii multi-use trail between Ucluelet and Tofino on Canada's West Coast.

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APPENDIX B

BACKGROUND REPORT

BACKGROUND REPORT

ACTIVE TRANSPORTATION TODAY

Benefits of Active Transportation

In recent years, many communities across North America have seen a growing interest in reducing dependence on cars and promoting active transportation methods like walking and cycling. The advantages of this shift towards active transportation encompass:

Health

Benefits

The health benefits of active transportation are well known and varied across a number of areas. The list of benefits below is not extensive, but provides a high-level summary of just some of the benefits from engaging in active transportation:

- **Improves Cardiovascular Health:** Regular physical activity helps strengthen the heart and improve circulation, reducing the risk of heart disease.
- **Reduces Obesity:** Engaging in active transportation helps burn calories and maintain a healthy weight, lowering the risk of obesity.
- **Lowers Blood Pressure:** Physical activity from walking or cycling can help reduce high blood pressure, which is a risk factor for many chronic diseases.
- **Enhances Mental Health:** Active transportation can reduce stress, anxiety, and depression, and improve overall mental well-being.
- **Decreases Risk of Diabetes:** Regular physical activity helps regulate blood sugar levels, reducing the risk of type 2 diabetes.
- **Strengthens Muscles and Bones:** Walking and cycling help build and maintain strong muscles and bones, reducing the risk of osteoporosis and fractures.
- **Boosts Immune System:** Regular exercise can enhance the immune system, making the body more resistant to infections.
- **Improves Respiratory Health:** Active transportation can improve lung function and reduce the risk of respiratory conditions.
- **Increases Longevity:** Engaging in regular physical activity is associated with a longer life expectancy.
- **Promotes Better Sleep:** Physical activity can help regulate sleep patterns, leading to better quality sleep.

Additional Research

The research on the health benefits of active transportation and reducing the usage of private vehicles is extensive. These are but a few examples from across the country over the past few years:

- Each year, **traffic-related air pollution** (TRAP) leads to hundreds of early deaths and thousands of hospital stays. Exposure to TRAP has been linked to various adverse health outcomes, including respiratory and **cardiovascular diseases, cancer, adverse birth and developmental outcomes, and premature mortality**. Vulnerable groups such as children, seniors, and people with pre-existing health conditions are particularly at risk. Elevated levels of traffic-related air pollution can be found up to 250 meters from major roads. In Ontario, it is estimated that TRAP contributes to approximately 500 premature deaths annually.[1]
- Using active transportation, like walking or biking, is an excellent way to add **physical activity to daily routines**, which helps lower the risk of chronic diseases and enhances heart health.[2]
- The **health benefits of physical activity are widely recognized**. Regular exercise can significantly reduce the risk of more than 25 chronic conditions, such as coronary heart disease, stroke, breast cancer, colon cancer, Type 2 diabetes, and osteoporosis. Physical inactivity is estimated to cost Canada around $6.8 billion annually due to its impact on several chronic diseases alone.[3]
- Communities that encourage active transportation can also provide health benefits by **reducing traffic noise and lowering the number of traffic injuries and fatalities** through traffic calming measures.
- Studies have shown that individuals who switch from driving to cycling gain significantly more in life-years due to the physical activity compared to the slight increase in risk from air pollution exposure.

1 Health Impacts of Traffic Related Air Pollution in Canada, Health Canada, 2022
2 Hamer, Mark & Chida, Yoichi. (2008). Active commuting and cardiovascular risk: A meta-analytic review. Preventive medicine. 46. 9-13. 10.1016/j.ypmed.2007.03.006.)
3 Canadian Association of Physicians for the Environment (CAPE). (2021). Active Travel Background Document

Safety

Benefits

- **Improved Pedestrian Safety:** Well-designed pedestrian infrastructure, like sidewalks and crosswalks, enhances safety for people travelling on foot.
- **Cyclist Safety:** Dedicated bike lanes and cycling paths can significantly reduce the risk of accidents involving people on bicycles.
- **Lower Emissions:** Reduced vehicle use leads to lower emissions, improving air quality and reducing health risks associated with pollution.
- **Enhanced Community Safety:** More people on the streets can lead to increased surveillance and a greater sense of community safety.
- **Traffic Calming:** Implementing measures like speed bumps and narrower streets can slow down traffic, making roads safer for all users - when collisions do occur, they will occur at much lower speeds.
- **Reduced Noise Pollution:** Fewer vehicles on the road can lead to lower noise levels, contributing to a more pleasant and safer environment.

Additional Research

- **Walking and cycling can reduce the number of motor vehicle injuries and fatalities** in two significant ways. First, by encouraging people to shift from cars to walking or cycling, we can decrease the number of vehicles on the road, subsequently lowering the potential for collisions. Active transportation poses minimal risks to other road users. Secondly, studies indicate that **when more individuals walk and cycle as their mode of transportation, roads become safer for pedestrians and cyclists because drivers anticipate their presence and drive more cautiously**.[4]
- Bike lanes enhance safety and comfort for both motorists and cyclists, thereby reducing risks for all road users.[5]
- **Bicycling significantly improves safety for everyone on the road** and reducing the amount of driving leads to the greatest safety benefits. **In cities with high bicycling rates, the total traffic fatality rates (per 10,000 population) were 57.3% lower, and pedestrian fatalities were 193.8% lower compared to similar cities with lower bicycling rates.** To improve traffic safety, cities should prioritize the convenience and safety of those who are not using personal cars.[6]

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4 Daniel, Kristie MPH and Kim Perrotta MHSc. Prescribing Active Travel for Healthy People and a Healthy Planet: A Toolkit for Health Professionals. Canadian Association of Physicians for the Environment (CAPE). March 2017

5 City of Toronto. (2017). Bloor Street West Bike Lane Pilot Project Evaluation

6 Nicholas Ferenchak and Wesley E Marshall. Traffic safety for all road users: A paired comparison study of small & mid-sized U.S. cities with high/low bicycling rates

Financial

Benefits

- **Transportation Cost Savings:** Active transportation reduces the need for expensive road maintenance through reduced wear and tear of roadways.
- **Increased Property Values:** Properties near well-maintained walking and biking paths often see an increase in value.
- **Healthcare Cost Reduction:** By promoting physical activity, active transportation can lead to lower healthcare costs due to reduced rates of chronic diseases.
- **Boost to Local Businesses:** Increased foot and bike traffic can lead to higher sales for local businesses.
- **Tourism Revenue:** Trails and bike paths can attract tourists, boosting local economies.
- **Job Creation:** Building and maintaining active transportation infrastructure creates jobs in construction, maintenance, and related sectors.
- **Economic Productivity:** Healthier populations are more productive, contributing positively to the economy.
- **Reduced Fuel Costs:** Individuals save money on fuel by opting for walking or cycling instead of driving.
- **Public Investment Returns:** Investments in active transportation infrastructure can yield significant economic returns, often exceeding the initial investment.

Additional Research

- Active transportation offers numerous economic benefits, including **healthcare savings, increased tourism revenue, and the growth of small businesses**.[7]
- **Pedestrians and cyclists tend to shop locally more frequently and spend more money**. Studies have shown that the installation of bike lanes on retail streets does not negatively impact the economy. A study measuring the impact of a recently installed bike lane in Ontario found that both monthly customer spending and the number of customers served increased after bike lanes were added. Customers arriving by foot and bicycle visited more often and spent the most money per month.[8]

7 Sallis, JR et al (2015). Co-benefits of designing communities for active living: an exploration of literature. International Journal of Behavioral Nutrition and Physical Activity

8 Arancibia, D., Farber, S., Savan, B., Verlinden, Y., Smith Lea, N., Allen, J., & Vernich, L. (2019). Measuring the Local Economic Impacts of Replacing On-Street Parking With Bike Lanes: A Case Study. Journal of the American Planning Association, 85(4), 463–481

Environmental

Benefits

- **Reduced Greenhouse Gas Emissions:** Active transportation, such as walking and cycling, produces no emissions, helping to reduce overall greenhouse gas emissions.
- **Reduced Water Pollution:** Fewer vehicles mean less runoff of oil, gasoline, and other pollutants into water bodies.
- **Lower Resource Consumption:** Walking and cycling require fewer resources to support compared to motor vehicles, reducing the demand for fossil fuels and raw materials.
- **Climate Change Mitigation:** By reducing reliance on fossil fuels, active transportation helps mitigate climate change impacts.
- **Biodiversity Preservation:** Less land development for roads and parking lots helps preserve natural habitats and biodiversity.
- **Energy Efficiency:** Active transportation is highly energy-efficient, requiring only human power, which is renewable and sustainable.

Additional Research

- Replacing driving trips with walking or cycling reduces greenhouse gas emissions and supports more compact communities. **Active transportation lowers transportation-related greenhouse gas emissions by encouraging people to switch to low-emission modes like walking and cycling.** It also requires less paved space for transportation and supports more compact communities with shorter travel distances.[9]
- **Ninety percent of vehicle emissions occur within the first 1.6 kilometers, which are distances that could easily be covered by walking or biking.** Using active transportation can greatly improve air quality. For example, during an 11-kilometer car trip, the majority of emissions happen within the first 1.6 kilometers, before the car's engine has fully warmed up. Replacing these short trips with walking or biking could significantly reduce air pollution. [10]
- Reallocating road space to public transit and active travel methods has demonstrated a **decrease in traffic volumes and greenhouse gas emissions, without significantly altering traffic speeds**.[11]

9 Sallis, JR et al (2015). Co-benefits of designing communities for active living: an exploration of literature. International Journal of Behavioral Nutrition and Physical Activity

10 Daniel, Kristie MPH and Kim Perrotta MHSc. Prescribing Active Travel for Healthy People and a Healthy Planet: A Toolkit for Health Professionals. Canadian Association of Physicians for the Environment (CAPE). March 2017

11 Canadian Association of Physicians for the Environment (CAPE). (2021). Public Transit Background Document

Transportation Equity

Benefits

- **Accessibility for All:** Active transportation infrastructure ensures that people of all income levels have access to safe and affordable transportation options.
- **Health Benefits for Vulnerable Populations:** Low-income communities and communities of color often face higher rates of chronic diseases. Active transportation can help mitigate these health disparities by promoting physical activity.
- **Reduced Transportation Costs:** Walking and cycling are cost-effective modes of transportation, reducing the financial burden on low-income households.
- **Improved Safety in Underserved Areas: I**nvesting in pedestrian and cycling infrastructure in underserved areas can reduce traffic accidents and improve overall safety.
- **Enhanced Mobility for Non-Drivers:** Active transportation provides mobility options for those who cannot drive, including the elderly, children, and people with disabilities.
- **Job Access: I**mproved active transportation infrastructure can enhance access to jobs, especially for those who rely on walking or cycling to get to work.
- **Community Cohesion:** Active transportation can foster a sense of community by encouraging social interactions and reducing social isolation.
- **Environmental Justice:** Reducing vehicle emissions through active transportation can improve air quality in low-income neighborhoods, which often suffer from higher pollution levels.
- **Equitable Investment:** Prioritizing active transportation in planning processes ensures that all communities benefit from infrastructure investments, not just affluent areas.
- **Inclusive Planning:** Engaging diverse communities in the planning and implementation of active transportation projects ensures that the needs and preferences of all residents are considered.

Additional Research

- **Walkable neighborhoods help reduce social inequalities.** When lower-income areas are designed to be more walkable and have good public transit, social and health inequalities can be lessened. This is because people who can't afford cars have better access to jobs, health services, grocery stores, and recreational facilities. This also benefits those who can't drive due to age or disability.[12]

12 Canadian Association of Physicians for the Environment (CAPE). (2021). Active Travel Background Document

- Walkable neighborhoods reduce the necessity of owning a car, significantly benefiting low-income residents. By designing communities so that employment opportunities, amenities, schools, and retail stores are accessible via walking, cycling, or efficient public transit, we lessen the dependency on cars. **This allows individuals living on low incomes to allocate more funds towards essential needs such as food and housing**.[13]
- **Promoting active transportation increases physical activity for everyone.** Changing policies, systems, and environments to encourage walking and cycling is a proven strategy to boost physical activity, regardless of age, race, ethnicity, or socioeconomic status.[14]

Community Building

The development of active transportation infrastructure, such as sidewalks and cycling paths, encourages social interaction, which helps build trust, respect, understanding, and a sense of cooperation within the community. Additionally, it offers transportation options for those unable to afford private vehicle ownership, promoting equity and inclusivity.

Benefits

- **Enhanced Social Interaction:** Active transportation encourages people to walk or cycle, leading to more face-to-face interactions and stronger community bonds.
- **Improved Safety:** More people on the streets can lead to increased surveillance and a greater sense of safety within the community.
- **Environmental Stewardship:** Communities that prioritize active transportation often have a stronger focus on sustainability and environmental conservation.
- **Inclusive Design:** Active transportation infrastructure can be designed to be accessible for all ages and abilities, promoting inclusivity and equity.
- **Cultural Vibrancy:** Active transportation can support cultural activities and events, enriching the community's cultural life and fostering a sense of identity.
- **Outdoor Activity:** Active transportation also fosters community connectivity by providing safe, healthy, and sustainable options for residents and visitors to engage in outdoor activities. This is particularly beneficial for children and seniors, supporting their mental and physical well-being.

13 Daniel, Kristie MPH and Kim Perrotta MHSc. (March 2017). Prescribing Active Travel for Healthy People and a Healthy Planet: A Toolkit for Health Professionals

14 Nestor Asiamah, Kofi Awuviry-Newton, Whitney Nesser, Evelyn N. Alvarez, Carbon Footprints of Active and Non-Active Transport Modes: Hierarchy and Intergenerational Narrative Analyses, Sustainability, 15, 17, (12795) (2023)

COMMUNITY CONTEXT

Community Profile

The population of Kenora has remained relatively stable at around 15,000 residents over the past 20 years. From 2016 to 2021, the population slightly decreased by 0.9%, from 15,096 to 14,967 residents. However, this data does not account for Kenora's seasonal residents. According to the 2021 Census, the city has 7,637 private dwellings, with only 85% occupied by full-time residents. This indicates that the remaining 15% are used by seasonal residents and tourists. Overall, Kenora has an aging population. The median age in Kenora is 43.1 years and the average age is 43.6 years, compared with 41.6 and 41.8 years, respectively, for the province overall. This suggests that active transportation infrastructure must be designed to accommodate the needs of all ages and abilities, particularly older pedestrians and cyclists.

Demographics

Kenora is a serene and picturesque community that draws both retirees and young families. As the population ages, designing infrastructure that caters to their needs will help maintain independence and enhance their quality of life.

Understanding community demographics is essential for developing a fair and accessible transportation system. It is vital to consider the transportation requirements of marginalized groups, including women, seniors, the BIPOC community, immigrants and refugees, the 2SLGBTQIA+ community, and those who are socio-economically disadvantaged or facing homelessness or addiction.

Based on 2021 Census data for the City of Kenora:

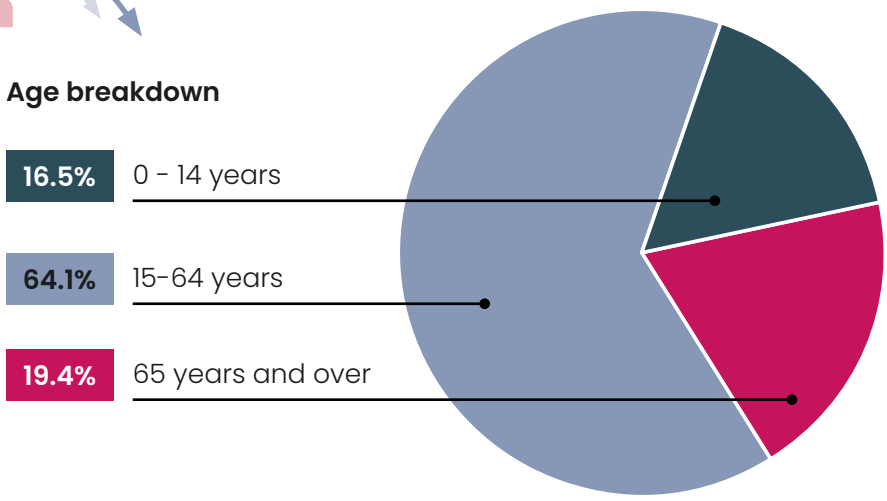
As of **2021**, Kenora has a population of

14,967

This represents a **slight decrease of 0.9%** from the 2016 population of 15,096.

The median age in Kenora is 43.1 years

Age breakdown



Male to female ratio

50.5% Female

49.5% Male

Ethnicity and Language

30% Indigenous and Metis

5.8% Immigrants or non-permanent residents

Majority of residents speak **English**, with a small percentage speaking **French** and **Indigenous** languages

Household and Family Structure

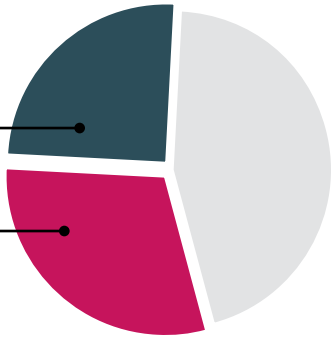
6,510
Households

2.3 PERSONS
Average household size

According to Statistics Canada's 2022 Canadian Survey on Disability, **37.9% of Ontario residents aged 15 and older live with one or more disabilities**.

Education and Employment

Education Levels



30% High school diploma

45% Post-secondary education

Major Employment Sectors

Healthcare

Retail

Education

Public administration

Income

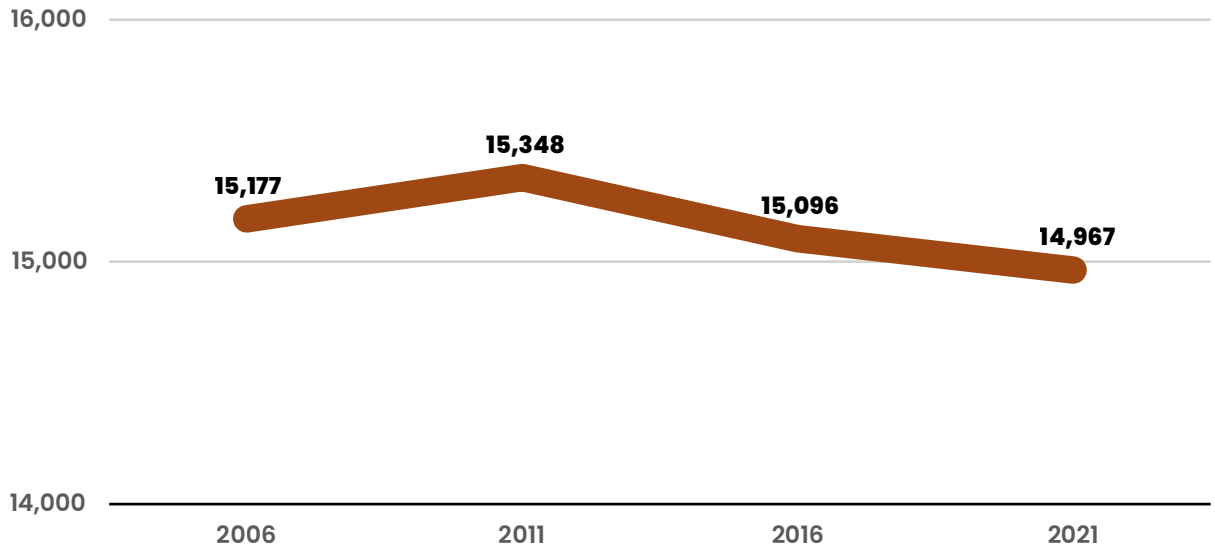
$70,000
Median Household Income

Manitoba: $80,322

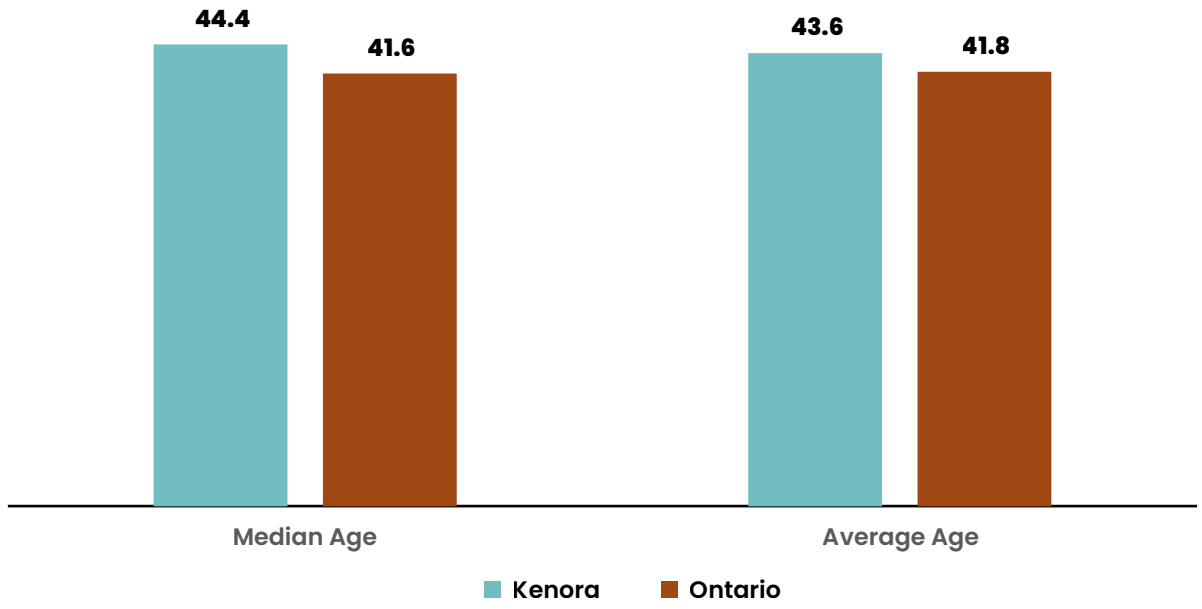
15%
of the population is considered low-income using the LIM-AT measure

Kenora's demographics reflect a diverse and dynamic community with a strong Indigenous presence and a balanced age distribution.

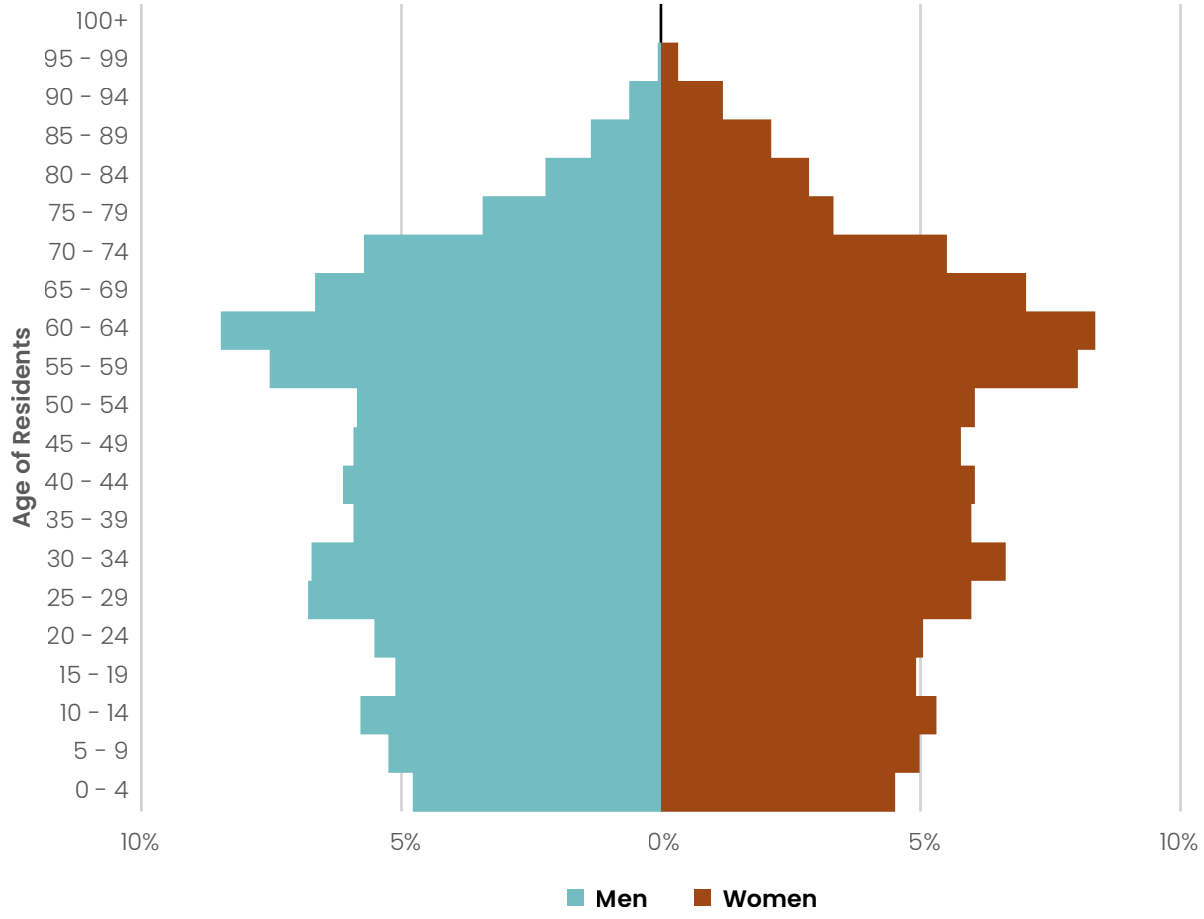
Kenora's Population, 2006 – 2021



Median and Average Age in Kenora and Ontario, 2021



Kenora's Population by Age and Gender, 2021



Transportation Equity

Transportation equity refers to the fair and just distribution of transportation resources and opportunities, ensuring that all individuals, regardless of their socioeconomic status, race, age, ability, or geographic location, have access to safe, affordable, and reliable transportation options. It aims to address and rectify historical and systemic disparities in transportation infrastructure and services, promoting equal access and mobility for everyone.

Active transportation, which includes walking, cycling, and other forms of non-motorized travel, plays a crucial role in promoting transportation equity:

- **Access to Opportunities -** Active transportation provides access to essential services, education, employment, and recreational activities, especially for low-income and marginalized communities. It helps bridge the gap between underserved areas and essential resources.
- **Health Benefits -** Active transportation promotes physical activity, which can improve overall health and reduce the risk of chronic diseases. It also contributes to mental well-being by reducing stress and enhancing social interactions.
- **Environmental Impact -** Encouraging active transportation reduces reliance on motor vehicles, leading to lower greenhouse gas emissions and improved air quality. This benefits the environment and public health, particularly in urban areas.
- **Safety and Infrastructure -** Ensuring safe and accessible infrastructure for active transportation is crucial. This includes well-maintained sidewalks, bike lanes, and crosswalks, as well as traffic calming measures to protect pedestrians and cyclists.
- **Transportation Equity Challenges -**Despite the benefits, there are challenges to achieving transportation equity in active transportation. These include disparities in infrastructure investment, safety concerns, and the need for inclusive planning that considers the needs of all community members.
- **Policy and Advocacy -** Addressing transportation equity requires a combination of policy interventions, community engagement, and advocacy. This includes investing in infrastructure, implementing safety measures, and promoting inclusive planning processes that prioritize the needs of underserved communities.
- **Housing costs -** Because transportation costs are tied to location and availability of services or infrastructure, they can be seen as a component of housing costs. Those living in areas without public transport or access to safe and convenient active transportation infrastructure face the higher transportation costs of car ownership. For those who are unable to drive, such as those too young to hold a drivers license, or those with health situations that prevent them from safely operating a vehicle, the costs or impacts to access basic needs and services can be greater. Affordable transportation options can be a key component of affordable and accessible housing.

Transportation equity initiatives can take many forms in practice - the examples below illustrate how transportation equity can be promoted through a combination of policies, programs, and community engagement efforts.

- **Affordable Public Transit:** Programs that offer reduced fares or free transit passes for low-income individuals, seniors, and students help ensure that public transportation is accessible to everyone. With the recent launch of The Wave micro transit service and fares only costing $2.50 each way, the City of Kenora has taken significant steps to make public transit affordable and convenient. The impact of this initiative includes increased accessibility and affordability of public transit, which can lead to higher ridership and reduced transportation costs for vulnerable populations. However, challenges include securing sustainable funding to maintain these programs and ensuring that the reduced fares do not compromise the quality of service.
- **Complete Streets Policies -** These policies aim to design and operate streets that enable safe access for all users, including pedestrians, cyclists, motorists, and transit riders of all ages and abilities. This often includes adding bike lanes, wide sidewalks, and safe crosswalks. Challenges involve balancing the needs of different users, securing funding for infrastructure improvements, and overcoming resistance from stakeholders who may prioritize car travel.
- **Safe Routes to School Programs -** Initiatives that focus on creating safe, convenient, and fun opportunities for children to walk and bike to school. This includes infrastructure improvements like sidewalks and bike lanes, as well as education and encouragement programs. Challenges can include securing funding for infrastructure projects, engaging with schools and parents, and addressing safety concerns in high-traffic areas.
- **Accessible Infrastructure -** Ensuring that transportation infrastructure is accessible to people with disabilities. This includes features like curb cuts, tactile paving, and audible signals at crosswalks. Challenges can involve securing funding for accessibility improvements, ensuring compliance with accessibility standards, and addressing the diverse needs of people with different types of disabilities.
- **Community Engagement -** Involving community members, especially those from underserved and marginalized groups, in transportation planning and decision-making processes can help ensure that their needs and concerns are addressed. Challenges include ensuring meaningful and sustained engagement, overcoming language and cultural barriers, and addressing conflicting interests among stakeholders.

- E**quitable Funding Distribution -** Allocating transportation funding in a way that prioritizes investments in underserved communities that have historically been neglected. This can help address disparities in transportation infrastructure and services. Challenges involve securing sufficient funding, ensuring transparency and accountability in funding decisions, and addressing potential resistance from more affluent communities.
- **Active Transportation Programs -** Encouraging walking, cycling, and other forms of active transportation through infrastructure improvements, safety campaigns, and incentive programs. This can improve health outcomes and reduce transportation costs for all. The impact includes increased physical activity, reduced emissions, and lower transportation costs. Challenges include securing funding for infrastructure projects, addressing safety concerns, and promoting behavior change among residents.

Land Use

While there are numerous land use policies that can support active transportation, the following policies are typically employed by local governments seeking to increase the safety of vulnerable road users, improve air quality, and provide more options for residents to transport themselves on foot or bicycle:

1. **Mixed-Use Development:** Encourage a blend of residential, commercial, and recreational spaces within close proximity, reducing the need for car travel and promoting walking and biking.
2. **Complete Streets Policies:** Ensure streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.
3. **Zoning for Density:** This allows for higher density development, which supports more efficient public transportation and makes walking and biking more viable options.
4. **Greenways and Urban Trails:** Develops networks of greenways and trails that connect neighborhoods, parks, and commercial areas, providing safe and scenic routes for active transportation.
5. **Reduced Parking Requirements:** Lower the minimum parking requirements for new developments to encourage the use of alternative transportation modes and reduce car dependency.
6. **Public Space Enhancements:** Invest in the creation and maintenance of public spaces such as parks, plazas, and community gardens that encourage walking and biking by providing attractive destinationshttps://paamovewithus.org/for-transfer/transportation/.

The above policies can significantly enhance the walkability and bikeability of communities, making active transportation a more attractive and practical option for residents.

Policy Context

The development of this Plan was informed by many of Kenora's key documents that contain pedestrian, biking, and trail related policies, plans, and goals. These include the City's Official Plan, the City's Beaches, Parks, and Trails Plan, and the Parks and Recreation Master Plan, among others. The key plans and their relevance to the Active transportation master plan are highlighted below.

Plan	Year	Relevance
Official Plan	2015	• Includes guiding principles focused on Complete Communities and a Multi-Modal Transportation System • Recommends several policies related to active transportation infrastructure
Beaches, Parks, and Trails Plan	2016	• Includes vision, overview of existing conditions, proposed on-road cycling network, and list of priority projects
Vacant Lands and Growth Study	2020	• Documents existing municipal land holdings • Land holdings could be used for future trails
Tourism and Economic Development Study	2021	• Includes two actions related to trails
Parks and Recreation Master Plan	2022	• Includes recommendations related to the development of an off-road trail network and a Trail Centre
Charting our Course Strategic Plan	2022	• Recommends completion of an Active Transportation Plan

A summary of relevant findings, policies, and recommendations from each of these plans is included in Appendix A. By following the city's strategic plans, Kenora can create a vibrant and economically strong community.

The Market for Active Transportation

The market for active transportation in Kenora offers many benefits, and the market for active transportation is growing as communities worldwide recognize the benefits of promoting walking, cycling, and other human-powered modes of transportation.

Key Drivers:

- **Health and Wellness:** Active transportation promotes physical activity, which can help reduce obesity rates, improve cardiovascular health, and enhance mental well-being.
- Environmental Sustainability: Reducing reliance on motor vehicles helps lower greenhouse gas emissions and decrease air pollution.
- Economic Benefits: Investing in active transportation infrastructure can boost local economies by attracting tourists, increasing property values, and supporting local businesses.
- Safety and Accessibility: Creating dedicated spaces for walking and cycling improves safety for all road users and makes these modes of transportation more accessible to people of all ages and abilities.
- Community attractiveness: Communities with high walkability scores are increasingly popular. Walkability is often associated with better access to amenities, reduced reliance on cars, and a more vibrant community. In addition, cities investing in bike lanes and multi-use trails are seeing increased demand for housing in those areas where bike lanes and sidewalks are being installed.

Trends:

- Infrastructure Development: Many cities are investing in bike lanes, pedestrian pathways, and other infrastructure to support active transportation.
- Policy Support: Governments are implementing policies and programs to encourage active transportation, such as bike-sharing programs and incentives for using non-motorized transport.
- Technological Advancements: Innovations like e-bikes and e-scooters are making active transportation more accessible and appealing to a broader audience.
- Sound fiscal policy: Encouraging walking and cycling can reduce the reliance on cars, which means less money spent on roads and parking areas. This shift can also help local businesses since pedestrians and cyclists are more likely to shop locally.
- Quality of life: Promoting active transportation can improve the quality of life by cutting down traffic and pollution, attracting more people and businesses to the area.

EXISTING CONDITIONS

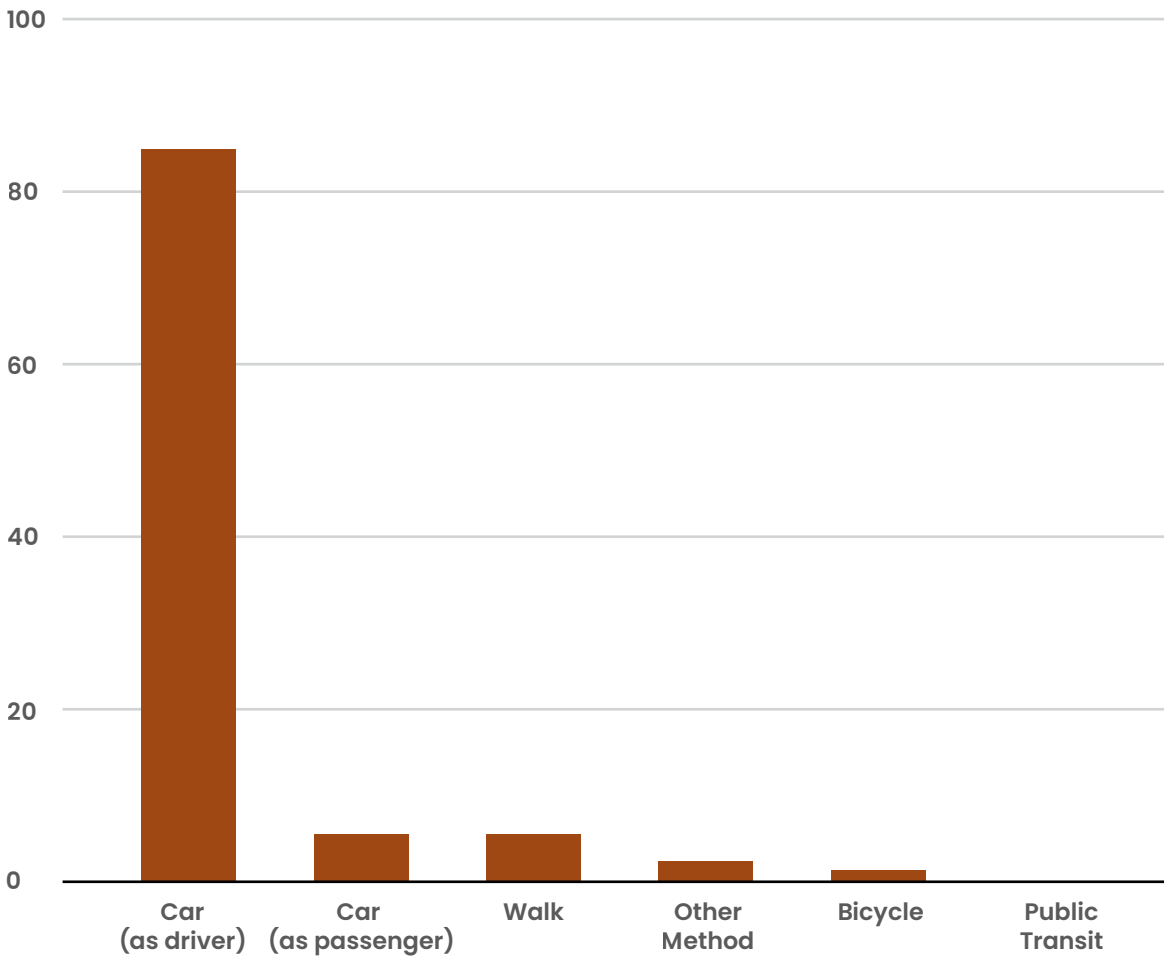
Existing Travel Modes

According to the 2021 Census, only 7% of Kenora residents walk, bike, or use public transit to get to work. 91% drive to work or ride as passengers in cars, while 2% use other ways to commute.

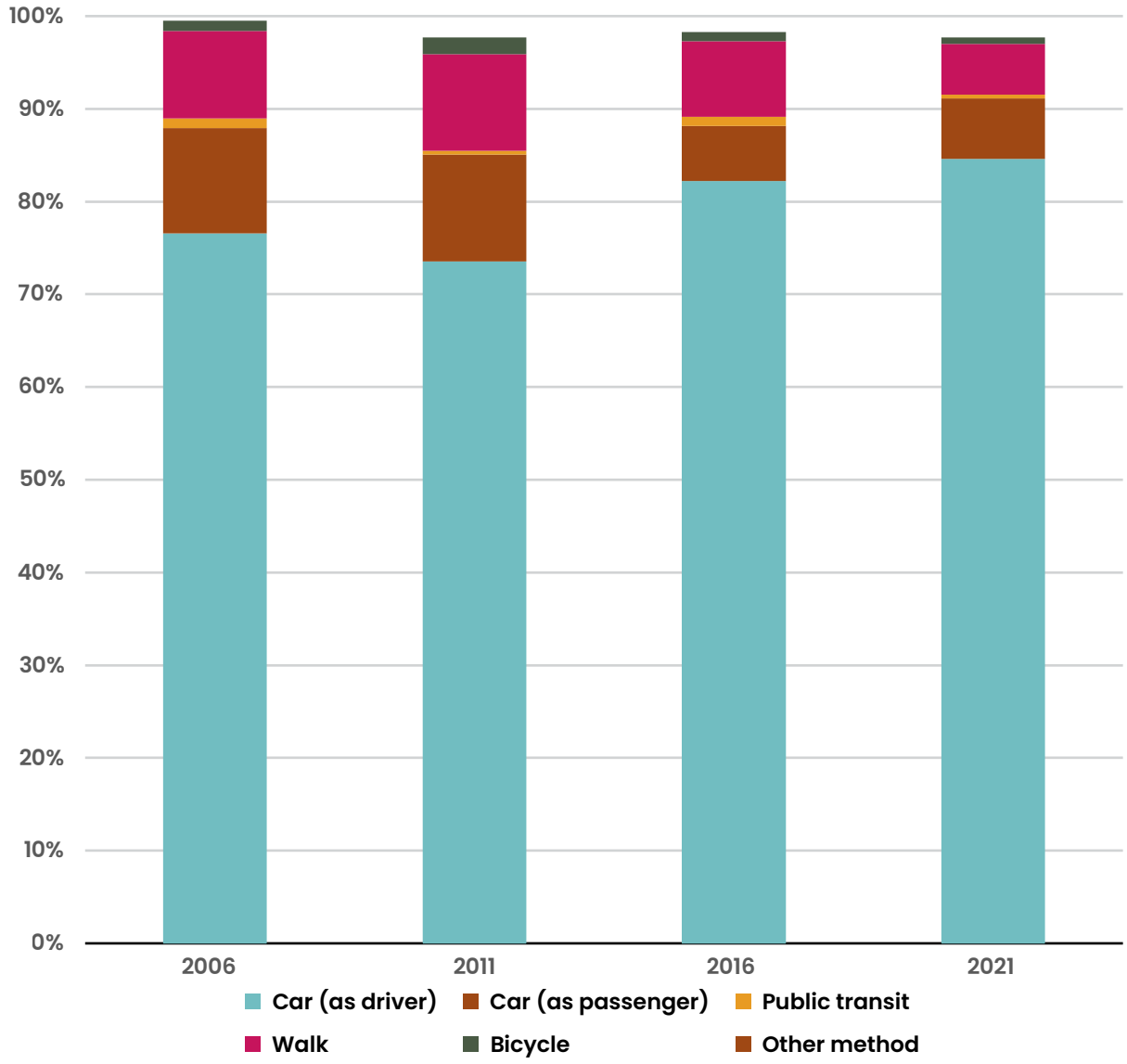
Since 2006, more people have been driving, while fewer people walk or ride as passengers. The number of people biking remains at 1%.

In 2021, more than half of Kenora residents lived less than 3 kilometres from work. A quarter of those living within 1 kilometre walked or biked to work. However, only 6% of those living between 1 and 2.9 kilometres did the same – 94% of these residents drove. These short distances mean that many people could potentially walk or bike to work.

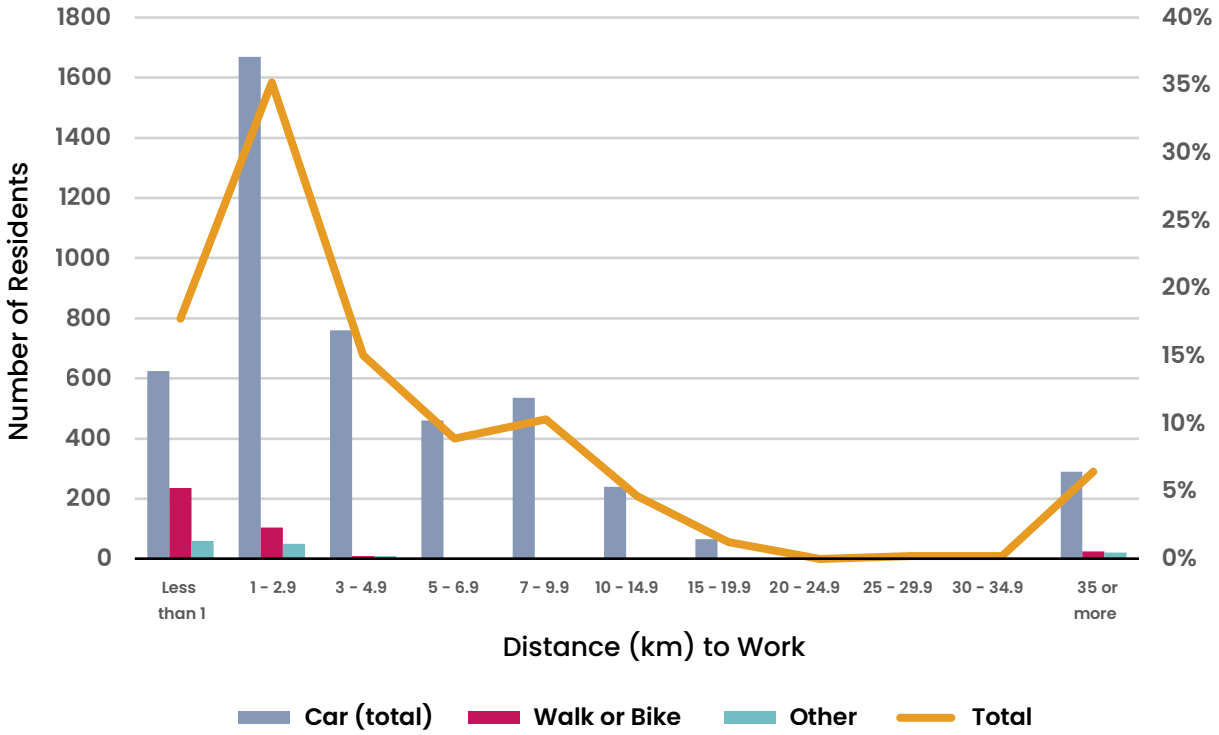
Mode of Travel to Work, 2021



Mode of Travel to Work, 2006 - 2021



Mode of Travel by Distance to Work, 2021



Existing Transportation Network

The existing transportation network in Kenora consists of a network of Provincial Highways, collector roads, and local streets with a supporting network of sidewalks, pathways, and designated cycling routes. The City manages and maintains 323 km of roads consisting of: paved streets (136 km per lane x 2 lanes), surface treated roads (58 km per lane x 2 lanes), gravel roads (116 kms per lane x 2 lanes), and 13km of public laneways (one-lane allies), and 66.5 kms of sidewalks.

Kenora's proximity to Lake of the Woods and the other rivers and lakes that feed to/from the lake, along with the Canadian Pacific Railway that runs east-west through the city, create several constraints and bottlenecks for the road network through the city. There are presently four rail crossings and 21 bridges within the city.

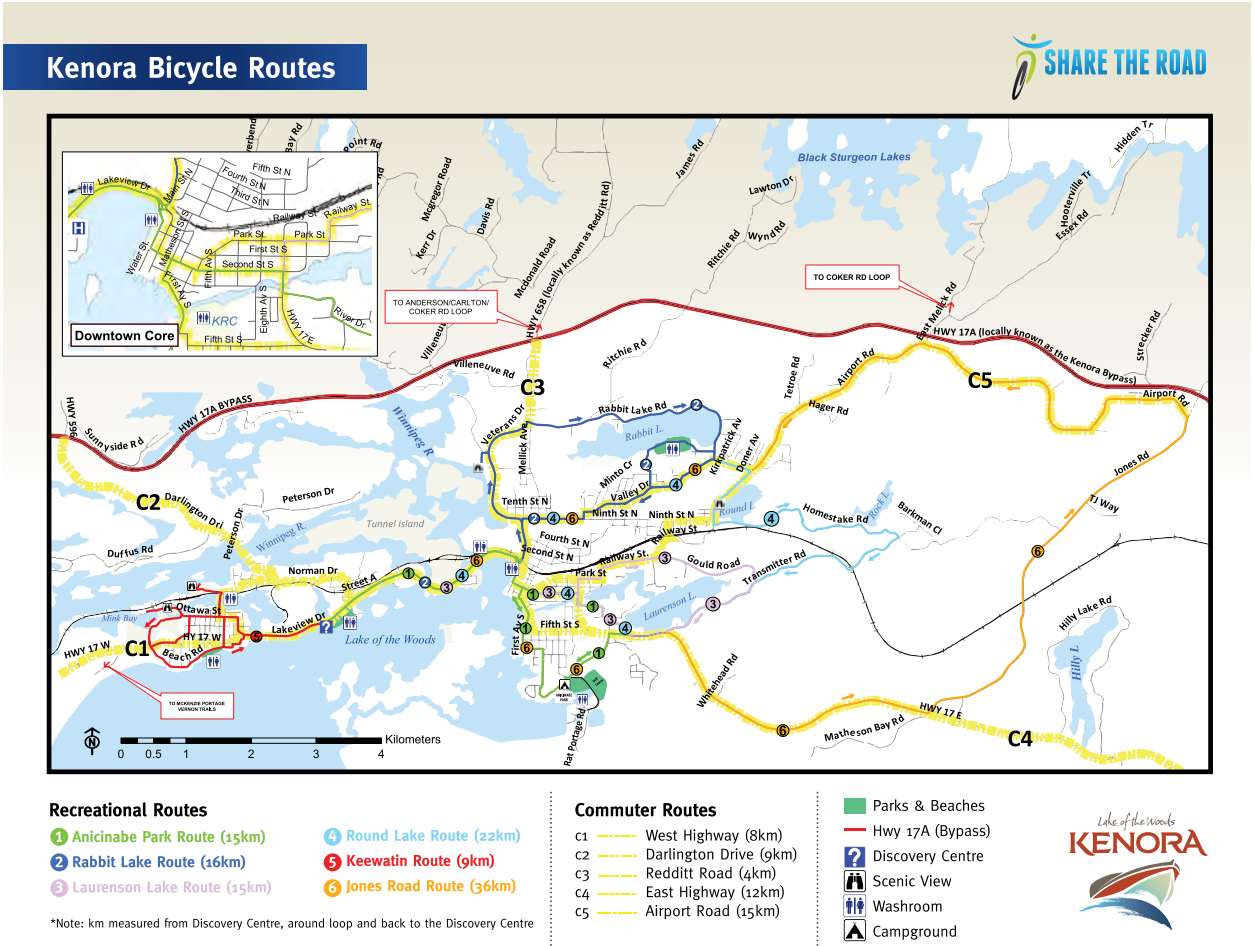
The City of Kenora has recently launched a new microtransit service called "The Wave". Prior to the launch of the "The Wave" micro-transit service, only a small percentage of the population (less than 1%) reported transit as their main (most common) mode of commuting in the 2021 census.

Since the launch of "The Wave" micro-transit service on October 15, 2024 and in just its first month of operation, the transit service recorded 5,455 ride requests, a 94 % demand met rate, an average of 4.9 passengers per driver per hour, and a maximum of 203 completed rides in one day.

Each one-way ride costs only $2.50, and the service is available Monday-Friday from 7:00 am to 7:00 pm. Pickup locations are specialized stops located close to the riders pickup location, usually at the nearest street corner or intersection. The Wave has increased transit access for over 10,000 residents – a more than 26 % increase over the previous fixed-route bus service.

The city's cycling infrastructure includes on-street routes marked with sharrow symbols and signs. There are some off-street multi-use paths, mainly along the waterfront, connecting to on-street routes. The Share the Road Kenora Bicycle Routes map shows six "Recreational Routes" ranging from 9 km to 36 km in length, and several "Commuter Routes". The current map is shown in Figure 7. While these routes connect different parts of Kenora, they aren't always comfortable for everyone and don't meet today's design standards.

Existing Kenora Bicycle Routes



Road Safety

Road safety is a significant concern for communities in Northwest Ontario, including Kenora. The Northwestern Health Unit's (NWHU Road Safety Trends Report states that between 2008 and 2015, there were 87 deaths caused by land transportation accidents in the area. This results in an incidence rate of 13.4 per 100,000 people per year. In comparison, the incidence rate for all of Ontario during the same period was 5.0 per 100,000 per year. The incidence rate in the NWHU area was 168% higher than the overall provincial rate.

In addition to the Road Safety Trends Report, the 2021 Ontario Road Safety Annual Report noted that there were 112 vehicle collisions in Kenora in 2021, resulting in 14 injuries. Province-wide in 2021, 16 cyclists were killed, and 1,609 were injured. Pedestrian fatalities increased from 116 in 2020 to 121 in 2021, a 4% rise. Over the past decade, pedestrian deaths have gradually increased, making up 20% of all road fatalities in 2020, and rising to 22% in 2021. Pedestrians accounted for 22% of all fatalities, second only to speed-related deaths at 23%.

The Ontario Ministry of Transportation has identified "sharing the road with vulnerable road users, such as pedestrians, cyclists, and micromobility users" as a major safety priority. Given the high number of vulnerable road users in both Kenora and Ontario's road safety data, it is crucial to provide safe, separated facilities for non-vehicle travelers. This will help mitigate potential conflicts, reduce collision risks, and encourage residents to use more sustainable transportation modes.

Sidewalk Cycling

The rules that regulate operating a bicycle on sidewalks in Ontario are scattered in different legislations.

Each municipality can pass bylaws prohibiting sidewalk riding. The Highway Traffic Act (HTA) does regulate activities in highways, including riding a bike, defining what a bicycle means and define e-bikes (Regulation 369/09).

The existing City of Kenora bylaw around cycling mirrors the requirements found in the HTA but includes the explicit prohibition of group riding. This is not directly forbidden by the HTA. If there is enough public demand to allow group riding, the legislation could be amended to reflect conditions and requirements in compliance with the HTA.

In terms of framework for an amendment of the City of Kenora bylaw, the Toronto Municipal Code (TMC) regulates bicycles, sidewalks, and highways similarly to the City of Kenora's bylaw, but it does provide designated areas as exceptions to the prohibitions. It also prohibits any bicycle riding on sidewalk from people 14 years and older (Chapter 950-201 – Toronto Municipal Code)

As the TMC establishes the designated areas that are compatible with sidewalks and bicycles, the bylaw can have whatever areas deemed acceptable to be one of those areas. Chapter 886-2 of the TMC establishes the footpaths, bicycle ways, and pedestrian way areas. It prohibits any vehicle to be operated or conducted there but bicycles. Afterwards, the footpaths areas are defined in a specified Schedule with an illustrative map. E-scooters and bikes are prohibited and fall under a different regulation.

As the City of Kenora continues to expand their pedestrian and cycling networks in the years ahead, updates and amendments to existing bylaws should be considered to help reflect current conditions, new facility types, and reduce potential user conflict.

Research indicates that sidewalk cycling can be significantly more dangerous than cycling on the road.

1. **Higher Collision Rates:** Studies have shown that the risk of collisions between bicycles and motor vehicles is higher on sidewalks compared to streets. For example, a study by Dr. William Moritz found that the relative danger index for sidewalk riding was 24.8 times higher than for riding on major streets without bicycle facilities.
2. **Intersection Risks:** Bicyclists on sidewalks face increased risks at intersections. A study by Alan Wachtel and Diana Lewiston found that the car-bike collision rate was 1.8 times higher for sidewalk riding compared to street riding.
3. **Visibility Issues:** Sidewalk cyclists are often less visible to drivers, especially at driveways and intersections, increasing the likelihood of accidents.
4. **Pedestrian Conflicts:** Cycling on sidewalks can lead to conflicts with pedestrians, which can result in injuries for both parties.
5. **Inconsistent Infrastructure:** Sidewalks are not designed for cycling, leading to inconsistent surfaces, obstacles, and abrupt ends, which can cause accidents.

These findings highlight the importance of dedicated cycling infrastructure, such as bike lanes and protected paths, to enhance safety for cyclists and pedestrians alike.

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APPENDIX C

RELEVANT PLANS AND POLICIES

RELEVANT PLANS AND POLICIES

OFFICIAL PLAN (2015)

The City's 2015 Official Plan provides a vision for the future growth of the city and guides use of land and physical development over the long-term.

Guiding Principles

The Official Plan includes the following two principles that are directly relevant to active transportation:

Principle 6 – Complete Communities

Kenora shall encourage new development (e.g. buildings, new neighbourhoods) to provide for a mix of uses in planning for complete communities.

Objectives:

- To support mixed-use neighbourhoods.
- To enhance the quality of life for existing and future residents by improving access to parkland, cultural and recreational facilities, and linking recreational settings with active transportation networks wherever practical.
- To provide opportunities for the redevelopment of the former Abitibi Mill site with employment uses.
- To provide a full range and equitable distribution of publicly accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources.
- To promote a mix of uses in the area around main streets such as Ottawa Street in Keewatin.

Purpose:

In the *Purpose of the Official Plan* (1.1) the following commitment was made:

- The promotion of development that is designed to be sustainable, to support public transit and to be **oriented to pedestrians**.

Principle 8 – Multi-Modal Transportation System

Kenora shall provide a range of mobile transportation modes that are accessible for persons of all ages and abilities by connecting people and places through coordinated land use, urban design, and transportation planning efforts.

Objectives:

- To develop and promote an efficient and safe multi-mode transportation system for all users.
- To prioritize public streets, infrastructure, trails, and pathways to facilitate and increase community connectivity and active transportation.
- To implement a linked network of safe and active transportation trails and pathways.
- To minimize the loss of future opportunities for trails and pathway development through land acquisition at the time of development.
- To design roads as complete streets, where possible, to allow pedestrians, cyclists, transit riders and motorists of all ages and abilities to interact and move safely along and across municipal streets.

Relevant Policies

The *Official Plan* also includes the following policies that are relevant to active transportation:

Section 3: General Development Policies:

3.4.1: Urban Design Principles

The following urban design principles should be considered in the preparation and review of development proposals in the Established Area, Residential Development Area, and the Harbourtown Centre designations. New development should prioritize the needs of pedestrians and cyclists by providing barrier-free, aesthetically pleasing pedestrian and cycling linkages. Linkages such as trails, sidewalks and bike lanes between residential, commercial, employment, industrial and institutional and open space lands shall be provided and maintained, where practical, as part of the community's transportation system to encourage and support recreational and utilitarian active transportation

Section 4: Land Use Designations

4.1.2: Established Area Policies

d) Linkages to recreation and open spaces shall be encouraged through the development of trails, parks, roadways and sidewalks designed to provide space for pedestrians and cyclists.

4.2.2: Residential Development Area Policies

g) Local parks may be developed to serve the needs of new residents within the Residential Development Areas. Where possible, open spaces, recreational areas and parks may be developed as an interconnected system that can be accessed from residential neighbourhoods through a community-wide network of walkways, sidewalks, trails, bicycle lanes and multi-use paths.

4.6.2: Open Space Policies

a) The City shall continue to acquire waterfront areas for public open space uses wherever possible. Parking, multi-use trails, launching and docking facilities shall generally be developed as funding permits.

b) Open space uses, and recreational facilities shall be designed to meet the needs of residents of the City as well as tourists, while preserving the environmental features and functions of those areas. Some examples are:

- The development of a continuous multi-use trail system throughout the City
- Future Harbourtown development
- Future recreation centre development

Section 7: Transportation

Trail Pathway System

a) Walking, cycling, and/or snowmobile lanes shall be provided in all new roadway construction and, wherever possible through reconstruction and resurfacing projects.

b) The City of Kenora is committed to establishing a safe system of trails for recreation and commuting. In planning the trail system and upgrading related infrastructure, the City shall have regard for the findings of the Beaches, Parks and Trails Development Project (2010), or any updated plans, including:

- Identification of major origins and destinations;
- The existing trail system and the proposed on-road cycling network; and
- The importance of connectivity, including completing and integrating the Trans-Canada Trail into the Kenora network.

Trail planning and design shall be focused on trails as both recreation and active transportation infrastructure, including a connected system of trails and bike paths or lanes to permit linkages, where possible.

The City of Kenora may consider preparation of a Trails and Cycling Master Plan to establish policies for the development of trails.

c) The City of Kenora shall ensure that all new sidewalks and crosswalks associated with roadway developments are barrier-free and meet minimum design standards for the visually and hearing impaired.

Any proposals for snowmobiles or trail crossings of provincial highways will require the prior approval of the Ministry of Transportation. Trails located along the right-of-way of a provincial highway are not permitted.

KENORA BEACHES, PARKS, AND TRAILS PLAN (2016 UPDATE)

The Kenora *Beaches, Parks, and Trails Plan* (BPTP) was originally developed in 2010 and updated in 2016.

Vision

The 2016 update includes the following vision statement for the City's trail network:

To enhance a network of on-road cycling facilities, trails and pathways that:

- *is built on strong community connections and partnerships,*
- *connects residents, business, summer residents and visitors of all ages and abilities to Kenora's many exciting attractions, and*
- *inspires a vision of the city as a premier hiking and biking destination*

Existing Conditions

The 2016 Plan includes an overview of current conditions related to trails in Kenora, including users, trails, major destinations, on-road cycling facilities, opportunities, and constraints. The key constraints and barriers listed include:

- Narrow bridges with limited pedestrian and cycling facilities,
- CP railway dividing north and south neighbourhoods,
- Inconsistent shoulder conditions, and
- General geographical constraints including steep hills and multiple water bodies.

Proposed Cycling Network

The BPTP includes a proposed on-road cycling network and categorizes the proposed routes by priority level, shown below. This network was based on four key factors identified by the City, including safety, connectivity, cost and compatibility with broader development plans.

However, the network map does not include off-road trails or recommended treatments for the on-road network. In the long-term, the Plan recommends that the City builds:

- Bike lanes and sharrows mainly in downtown core
- Multi-use pathways and trails inside parks, recreational areas and natural settings
- Bike paths and cycle tracks along major roads

Proposed Network Map from Beaches, Parks, and Trails Plan

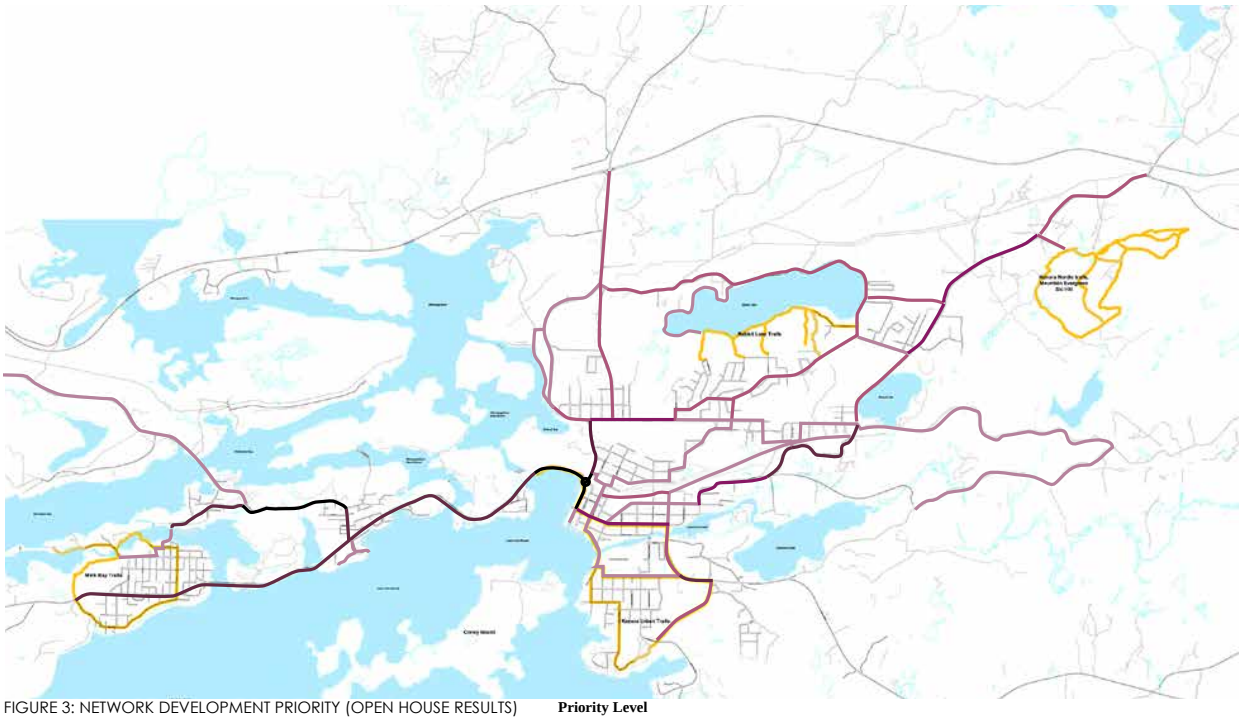

FIGURE 3: NETWORK DEVELOPMENT PRIORITY (OPEN HOUSE RESULTS)

Priority Trail Projects

The 2016 version of the BPTP also identifies the Kenora Urban Trails Committees' priority trail projects to be completed between 2016 and 2020. These projects included:

- Rabbit Lake Trail Extension and Enhancement
- Great Lake of the Woods Trail
- Laurenson's Creek Trail
- Norman Park Loop
- Tunnel Island

VACANT LANDS AND GROWTH STUDY (2020)

The Vacant Lands and Growth Study provides an overview of the City's existing land holdings. The City of Kenora owns 542 parcels of surveyed land, which consists of 3,710 acres. The purpose of the plan was to:

- Identify strategic municipal land holdings
- Promote and market vacant municipal lands
- Support development readiness
- Support efforts to increase local housing stock
- Identify key future growth areas
- Inform potential crown and provincial surplus lands acquisition

The Study may be used to identify existing municipal land holdings that could be used for future off-road active transportation facilities.

Tourism and Economic Development Strategy (2021)

The Tourism and Economic Development Strategy includes three key pillars:

- Tourism Development
- Economic Development
- Tourism and Economic Foundations

The strategy aims "develop Kenora into a four-season destination" and "position Kenora as an attractive, responsive, and investment-friendly community."

The Strategy includes the following two actions specifically related to trails:

- Enhance and expand current hiking trail network while exploring opportunities for new trails
- Continue to expand local trail network and active transportation improvements and develop connections to regional trail networks.

Parks and Recreation Master Plan (2022)

The 2022 Parks and Recreation Master Plan includes the following 8 guiding principles:

- Accessibility and inclusion
- Accessibility
- Affordability
- Viability
- Reconciliation
- Collaboration
- Climate action
- Leadership

The Plan has four 'big moves', including: Indoor Recreation, Outdoor Recreation, Parkland and Trails, and Service Delivery. The Plan includes an Action Plan for each of these Big Moves.

Public Engagement

As part of the development of the Plan, the project team conducted online engagement. Some key findings related to trails from the engagement included:

- "The top outdoor recreation amenities identified for enhancement include beaches (56%), pools (37%), skating rinks (35%), natural surface trails (34%), and ball diamonds (32%)"
- "The top outdoor recreation amenities identified for development include natural surface trails (53%), paved trails (51%), BBQ / picnic areas / park shelters (48%), playgrounds (41%), campgrounds (41%), and community gardens (40%)."
- "When asked how they feel future parks, recreation, trails, and open space needs should be funded in Kenora, more than half (52%) of respondents indicated that they would like to see funding increased, with an additional third (34%) wanting to see funding maintained at current levels. Only 2% of respondents identified that they would like to see funding be decreased."

Trail Network

The Parkland and Trails Action Plan recommends the adoption of a trail classification System based off the Parks Canada Classification System. The Parks Canada system includes four trail types, ranging from Type 1 (paved or hard packed surface, at least 1.5 metre wide) to Type 4 (no construction, not maintained). The Action Plan does not highlight or classify existing trails within the report.

The Action Plan also includes several recommendations related to trails, including:

- As part of an enhanced parkland policy framework within the City's Official Plan, the City should adopt the proposed Trails Classification System.
- In addition to the land dedication provisions set out in Section 42 of The Planning Act, the Official Plan, and subsequent Parkland Dedication By-law, should also enable other mechanisms to acquire or secure land for park and/or trail development, including but not limited to:
    - Direct purchase of land by way of funds allocated in the City's budget, monies raised through cash-in-lieu of land dedications, and/or funds generated through the sale of other City lands; land exchanges/swaps; and donations, gifts, or bequests from individuals or organizations.
- Particularly in the case of planning optimal trail routes or trail connections, where specific lands cannot be acquired by the City, the City should consider approaching pertinent landowners to secure public access. Such access can be secured by way of agreement to allow continuous trail access and passage.

- As part of the overall policy framework the City should also develop a policy to direct the use of funds generated through cash-in-lieu of parkland. Where the City exercises its option to use cash-in-lieu of parkland provisions, those proceeds should be invested in […] the acquisition of land to support the continued development of Kenora's planned trail network
- Recognizing that parks, trails, and beaches are significant civic assets, the City should increase budget allocations for trail, park, and beach infrastructure, including capital, operations, and maintenance (staffing and equipment).

Trail Centre

The Master Plan also recommends that the City explore the development of Trail Centre "at strategic locations within the City's existing and emerging trail network". The Plan notes that "the development of trail centres is growing in popularity to bring added comfort, use, and accessibility to trail networks. Often featuring public washrooms, sheltered open and seating areas, and informal fitness opportunities, trail centres allow more people to enjoy the benefits of trail networks."

The Plan includes the following considerations for the development of a Trail Centre:

- Access: users should be able to access the site through a variety of modes such as walking, biking, and driving.
- Multi-use: trail centre design should be flexible to support a variety of activities, including year-round use.
- Accessibility: the site and space should be able to accommodate and support users with a variety of physical needs.
- Location/Proximity: the site should be located close to existing or planned amenities, making the most efficient use of adjacent or complementary uses (i.e., trail networks, beaches).
- Aesthetic: design of the facility should accentuate and enhance the identity and character of Kenora.
- Sustainability: the City should strive to meet or exceed environmentally sustainable building practices.
- Funding: identify potential funding sources (provincial, federal, private foundations) to support the development and associated costs.

Charting Our Course Strategic Plan (2022)

The City's Strategic Plan provides the City with direction from 2022 to 2027.

Public Engagement

Through public engagement, the City heard that the City should:

- "Provide alternative modes of transportation and expand our trails"
- "Continue to invest in our parks and trails"

Actions

One of the goals in the Plan is to "deliver coordinated four-season cultural and recreational infrastructure, programs, and events." As part of this goal, one of the recommended actions is to "Complete an Active Transportation Plan".