

Information Report



Service Area	Infrastructure, Development and Enterprise Services
Date	Friday, March 31, 2023
Subject	Protected Cycling Network Study status update

Executive Summary

Purpose of Report

This information report provides a summary of the Protected Cycling Network conceptual design study for Eramosa Road, College Avenue and Gordon Street, and informs members of Council and the public of the next steps planned for the implementation of protected cycling facilities.

Key Findings

The Protected Cycling Network Study is a first step in implementing the Cycling Spine Network recommended in the Transportation Master Plan (TMP) to provide “all ages and abilities (AAA)” cycling facilities on three key corridors: Eramosa Road, Gordon Street and College Avenue. A preferred alternative and concept design with refined cost estimates are provided for each corridor.

Delivering this infrastructure supports the city’s Race to Zero carbon goal by providing attractive and convenient cycling routes for all. Protected cycling infrastructure also supports the city’s Vision Zero goal by designing facilities that separate vulnerable road users from motorized traffic. Additionally, supplying sustainable transportation infrastructure along major corridors where infill and higher-density housing is anticipated supports the City in successfully supporting the Housing Pledge to the Ontario government.

A total of 8.8 km of protected cycling network is ready to proceed to detailed design and construction. Phased implementation of the study corridors will proceed subject to funding, alignment to other capital projects and staff capacity.

The project included public, stakeholder and Indigenous consultations. The studies for the three project corridors are considered exempted projects as of the 2019 amendment to the Municipal Class Environmental Assessment Act and are not subject to statutory review periods.

Strategic Plan Alignment

The Protected Cycling Network Study supports the strategic plan goal under the Navigating our Future pillar to foster connected, easy, accessible movement through Guelph’s trails, paths, roads and corridors to tie the community together. The Study directs important investments in active transportation that will lead to high-quality, protected cycling routes that are suitable for people of all ages and abilities to use.

Financial Implications

The total cost estimate for the design and construction of the recommended designs across the three corridors are as follows:

- Eramosa Road: \$2.3 million
- Gordon Street: \$26 million, constructed in up to five phases
- College Avenue: \$10 million, constructed in up to three phases

Implementation will be phased over the next 10 years, utilizing \$3.4 million funding from Investing in Canada Infrastructure Program (ICIP) and other funding as it becomes available.

Several sections of the network will be recommended for funding in the 2024-2027 multi-year budget to use allocated funds according to the ICIP funding agreement.

Report

Background

The [Protected Cycling Network Study](#) initiates the construction of the Cycling Spine Network recommended in the [2022 Transportation Master Plan \(TMP\)](#). The three study areas in the study correspond to popular cycling routes or desired connections serving schools, commercial areas, Downtown and major trails. The study informs staff on preferred conceptual designs that meet the City's goals of delivering an All-Ages and Abilities (AAA) cycling network.

Protecting cyclists and other micro-mobility users such as kick-scooters within the Right-of-Way supports the City's Vision Zero goal by reducing the potential for collisions causing serious injury. Growing Guelph's protected cycling network supports the TMP mode share goal to increase trips made by active transportation. The network also supports the City's ability to deliver on its housing pledge to the Provincial government by supporting the implementation of the TMP recommendations.

Study Area

The Protected Cycling Network Study focuses on three key road corridors:

- Eramosa Road between Woolwich Street to Victoria Road (Study Area A)
- Gordon Street between Waterloo Avenue to Clair Road (Study Area B)
- College Avenue between Janefield Avenue to Dundas Lane (Study Area C)

Figure 1 – Study Area



Gordon Street and College Avenue have existing on-street painted bike lanes. There is currently no cycling infrastructure on Eramosa Road, and the existing cycling infrastructure on Gordon Street and College Avenue does not meet the cycling needs of people of all ages and abilities.

Study Area B on Gordon Street has a one-kilometer gap between Lowes Road and Edinburgh Road, where the approved 2021 Gordon Street Improvements Environmental Assessment took place. That project involved the design of protected bike facilities, which the Cycling Network Study will tie into. This will create a seamlessly protected cycling facility on Gordon from Downtown to the South End of Guelph.

Study Approach

The Study launched in November 2021 with a first round of community engagement that ran until January 10, 2022. With contributions from community members, the design team reviewed key destinations, connections, constraints, and “pinch-points” along the three study area corridors. Key design objectives for the Study included:

- providing consistent and easy to use cycling infrastructure throughout each corridor and at intersections;
- making strong connections to adjacent bike routes, trails and key destinations;
- creating a more comfortable and safe environment for active transportation users of all ages and abilities;
- minimizing environmental impacts; and,
- balancing the needs of various transportation modes including walking, cycling, transit, private vehicles and goods vehicles.

From February 2022 to June 2022, a range of design options for cycling facilities were developed and evaluated for each study area corridor:

1. **Do Nothing:** keep things as they are.
2. **Cycle track:** one-way, located behind the curbs of the roadway on each side of the road physically separating people on bikes from both pedestrians and motor vehicle traffic.
3. **Multi-use path:** two-way shared pedestrian and cycling facility, physically separated from motor vehicle traffic, replacing a sidewalk with a wider asphalt facility to accommodate both pedestrians and cyclists.
4. **Protected bike lane:** One-way on each side of the road, on the same level as the roadway, with physical separation between people riding bikes and motor vehicle traffic with materials such as curbs, bollards, or planter boxes.
5. **Hybrid approach:** A hybrid of the design options described above is appropriate for the corridor.

For all three study corridors, the “do nothing” option was screened out because it did not meet the goal of delivering AAA cycling facilities. The “Protected bike lane” option and the “Cycle track” option scored the highest in terms of meeting the goals of AAA facilities, as they provide separate spaces for riders and pedestrians and riders travel in the same direction as vehicles, improving safety at intersections.

The preferred designs were presented to the public in July 2022 at an Open House event plus one month of online engagement. The study team reviewed all public input received and updated the preferred design options to create a final concept design and cost estimate for each study corridor.

What we heard from community engagement

The primary goal of engagement for this study was to understand the needs of the various road users (cyclists, motorists, pedestrians, transit users) as they relate to designing cycling facilities that are accessible for people of all ages and abilities. Communications and engagement activities included a walking workshop, key informant interviews, stakeholder meetings and both in-person and online engagement.

Feedback received throughout the study was positive overall, with comments emphasizing the importance of creating safe, accessible cycling facilities on the study corridors. Several participants expressed anticipation for when the facilities will be built, and a desire for more protected cycling facilities throughout Guelph. A general preference for cycle tracks or protected bike lanes was noted among participants, and the importance of protected intersections was highlighted.

We completed two rounds of community engagement to develop the conceptual designs. For more details on the community engagement, refer to the Engagement Summary Report in Attachment-1.

During the first round, we asked community members to identify key places in the study area related to accessibility, safety, destinations, and connections. We also asked for design ideas and other suggestions. Consultation ran for 6 weeks from November 30, 2021 to January 10, 2022. A total of 384 comments were received on the issues map.

As part of the second round of engagement, we presented the preferred preliminary design for each of the study corridors and asked community members to provide feedback and suggestions. An Open House event was held on July 27, 2022, attended by approximately 45 people. Materials were also posted on the [Have Your Say webpage](#) for a period of two weeks prior to and following the Open House. A total of 130 comments were received on the preferred preliminary designs.

Key input provided by participants included:

- The importance of signage and education for cyclists, drivers, and pedestrians
- Consideration for vehicular traffic movements at intersections and driveways
- The need for the cycling facilities to be maintained throughout the winter
- Measures to prioritize cyclists and pedestrians, including crosswalks and dedicated traffic lights for cyclists.

Throughout the study, we communicated with the following Indigenous communities via email and telephone:

- Mississaugas of the Credit First Nation
- Six Nations of the Grand River
- Haudenosaunee Confederacy.

Communications with Indigenous communities included sending notifications with project information, offering to meet and discuss the study or send additional information, and sending the Stage 1 Archaeological Assessment Report for review. No concerns were raised by Indigenous communities regarding the study or the archaeological assessment report. Mississaugas of the Credit First Nation and Six Nations of the Grand River expressed interest in being involved in the Stage 2 archaeological assessment.

According to the *Municipal Class Environmental Assessment* (2000, as amended, “the Act”), the studies for the three project corridors are considered “Schedule A+” pre-approved projects and are not subject to statutory review periods. At the project initiation, the project team assumed some or all corridors may trigger a Schedule B project or higher and issued a Notice of Consultation in July 2022. A correction notice was circulated on December 1, 2022 to clarify the project class schedules. As of March 3, 2023 a Ministry of Environment, Culture and Parks amendment to the Act now considers projects that add active transportation amenities as “exempt” from ministerial review and appeals processes.

Preferred Design and Next Steps

The preferred design and next steps for each corridor are summarized below. Detailed study reports for each corridor will be posted to the project page at <https://guelph.ca/living/getting-around/cycling-and-walking/protected-cycling-network-study/>

Study Corridor A – Eramosa Road

The preferred design option for the south segment of Eramosa Road from Woolwich Street to Arthur Street is Protected Bike Lanes, with a protected intersection at Woolwich Street and a new signalized intersection at Arthur Street. This is a short but strategically significant segment of the study corridor because it will serve as a major connection to downtown Guelph and future cycling facilities on Wyndham Street. This segment of Eramosa Road from Woolwich Street to Arthur Street will proceed to detailed design and construction, subject to funding and approvals.

A preferred design option was not identified for the segment of Eramosa Road north of Arthur Street to Victoria Road, due to technical challenges and physical constraints. Significant additional investigation work is needed to be completed before feasibility can be confirmed. Community feedback indicated this connection as a lower priority because of the combination of steep grades and high traffic speeds and volumes. Development of a local network of neighbourhood bikeways is recommended to be included in the Cycling Master Plan update to improve cycling connectivity to key destinations along Eramosa Road. The CMP update is anticipated to begin in 2024.

Study Corridor B – Gordon Street

The preferred design for Gordon Street is Cycle Tracks throughout the length of the study corridor from Waterloo Avenue to Clair Road. In addition, pedestrian crossings were added to the preferred design at key locations along the corridor to address the accessibility and connectivity concerns we heard throughout the engagement process. The Gordon Street protected cycling facilities will proceed to detailed design and construction, subject to funding and approvals.

Study Corridor C – College Avenue

A hybrid approach has been identified as preferred for College Avenue, with Cycle Tracks from Janefield Avenue to Edinburgh Road, and Protected Bike Lanes from Edinburgh Road to Dundas Lane. This hybrid option optimizes cyclist comfort in the western portion of the corridor where several elementary schools are located, while limiting construction complexity in the more constrained eastern portion of the corridor which includes the University of Guelph and numerous mature trees.

The recommended design includes raised crossings at transit stops to make the bus more accessible to patrons. It adds pedestrian crossings at trail crossings and the University of Guelph to improve accessibility, connectivity, and access to key destinations. The College Avenue protected cycling facilities are in the detailed design stage in 2023 and construction is expected in 2024-2025.

Financial Implications

The Study established preliminary cost estimates for the detailed design and construction of the recommended option for each corridor. Early estimates used to prepare the ICIP funding application and informing the previous capital budgets were lower due to the absence of technical analysis delivered by this type of study. Therefore, the cost estimates below represent a significant improvement in accuracy and assumptions.

The total cost estimate for the design and construction of the protected cycling network for each of the three corridors assumes these will be standalone capital projects (i.e., not tied to a road reconstruction project) and are as follows:

- Eramosa Road: \$2.3 million, including relocating the Mitchell Road ped crossing to Arthur Street, and intersection improvements at Woolwich Street
- Gordon Street: \$26 million, which anticipates up to 9 protected intersections
- College Avenue: \$10 million, including 3 protected intersections

The cost estimates conservatively anticipate a maximum number of protected intersections for each corridor than may be recommended at detailed design. The total costs include 35% for project administration and utility costs, plus an additional contingency of 30% to account for property impacts, soil disposal, ground conditions and other contingencies. Inputs to the cost estimates used 2021 and 2022 tender prices as available and should reflect some of the significant inflation experienced post-pandemic. These cost estimates will be further refined during the detailed design stage.

Implementation will be phased over the next 10 years, utilizing the \$3.4 million in funding from federal Investing in Canada Infrastructure Program (ICIP) grant and provincial funds. Several sections of the network will be recommended for funding in the 2024-2027 multi-year budget. Because the project is partially funded through the Investing in Canada Infrastructure Program, there is an obligation to complete eligible expenses work before 2033. Operation and maintenance costs have been built into the existing capital budget as operating impacts.

Consultations

City of Guelph departments consulted include:

- Economic Development and Tourism
- Emergency Services (Fire, Paramedic)
- Engineering and Transportation Services
- Environmental Services
- Facilities and Energy Management
- Guelph Junction Railway
- Operations
- Planning and Building Services
- Guelph Transit

Attachments

[Attachment-1: Engagement Summary Report](#)

Departmental Approval

Jennifer Juste, Manager, Transportation Planning

Report Author

Kate Berry, Project Manager, Sustainable Transportation

This report was approved by:

Terry Gayman, P.Eng.

General Manager/City Engineer, Engineering and Transportation Services

Infrastructure, Development and Enterprise Services

519-822-1260 extension 2369

terry.gayman@guelph.ca

This report was recommended by:

Jayne Holmes, P.Eng., PMP

Deputy Chief Administrative Officer

Infrastructure, Development and Enterprise Services

519-822-1260 extension 2248

Jayne.Holmes@guelph.ca