



Progress report on **Guelph's cycling and walking programs**

August 2019



Active Transportation Update Report

August 9, 2019

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Section One: Updates to Existing Plans

Cycling Master Plan

Guelph's Cycling Master Plan (CMP) was approved by Council in 2013. The ten-year plan provides direction on how to make cycling more accessible and comfortable in Guelph by developing specific objectives across the "Five E's":

- Engineering (the cycling network, end-of-trip facilities)
- Education (teaching the community about where, how and why to cycle)
- Encouragement (providing incentives and motivation to choose cycling)
- Enforcement of safe practices to share the road, and
- Evaluation of our progress in achieving our goals and objectives of the Cycling Plan.

The Cycling Master Plan directs staff to update Council and the Community on progress implementing this plan. This report details work completed to-date, and page 15 of the report provides a status update on each of the recommended actions identified in the Cycling Master Plan. The CMP is a 10-year plan, and six years have passed since its approval in 2013. Staff feel confident this plan is on track in its implementation. 75 % of the actions recommended in the CMP are either In progress or Achieved. See page 15 for further details.

Key Highlights

On-road Network:

- In 2013, the CMP proposed a total network of 168 kilometres of dedicated bicycle routes including signed routes along quiet residential streets, on-road bike lanes, and in-boulevard Multi-Use Paths (MUP's). Below are some highlights of what has been achieved in the past six years in terms of engineering.
- At the time the CMP was written in 2013, the existing bicycle network included 55.1 km of on-road cycling routes. We have since grown the network to a total of 89.0 km, which is a 61% increase in total network length.

Signed routes

Signed routes direct people on bikes through quiet residential streets as an alternative to using bike lanes on major roads, or where bike lanes are not available. Staff have implemented over 14 of kilometres of signed routes in Guelph, or 31% of the signed routes proposed in the CMP.



Figure 1 Signed routes are wayfinding strategies to direct cyclists through quiet residential areas connecting them to key commercial and employment hubs

On-road bike lanes

Bike lanes are the most common type of cycling infrastructure in Ontario. Guelph currently has 68 kilometres of this type of infrastructure, along most of the arterials in the City. This total includes approximately 4 km of new buffered bikes lanes (see photos below), which have been introduced to add comfort and reduce stress on higher-speed or busier major roads. In total 61% of the bike lane network is complete.



Figure 2 Bike lane on Stone Road in Guelph, featuring a painted buffer which creates additional space between bicycles and vehicles.



Figure 3 Bike lane on Victoria Road in Guelph which has a painted buffer with rumble strips set into it.

Multi-use Paths

Multi-use paths are wide paved pathways beside the road, and are shared between cyclists and pedestrians. The City has introduced multi-use paths along Woodlawn Road West, Eastview Road, and York Road. Guelph has a total of 5.5 km of roadway with MUPs, which represents 68% of what was proposed in the Cycling Master Plan. For Multi-use paths outside the roadways, check out our updates on the Active Transportation Network.



Figure 4 A Multi-Use Path, which is a pathway shared between people walking and wheeling, located in the boulevard next to Woodlawn Road West.

Intersections

Intersections present a significant discomfort to many people on bikes and traditionally include no cycling facilities to guide people through them. The CMP recommends intersection design improvements to increase comfort and safety of people biking.



Figure 5 A woman on a bicycle signals as she makes a left hand turn at an intersection in Guelph

In recent years, the City has been working to test different treatments at intersections in Guelph.

Green Bicycle Box

In July 2017, Guelph got its first green “bicycle box” on Gordon Street at Waterloo, to assist people cycling westbound in turning left. This corridor was experiencing a high rate of collisions and near misses. Adding green paint helps to increase visibility and improves awareness of all road users to the presence of people on bikes.



Figure 6 A person biking enters the intersection at Gordon St and Waterloo St, where Guelph's green bicycle box is located.

Studies of road user behaviours after the installation showed that 86% of drivers stop correctly at the first stop bar, leaving the bicycle box free for use by people on bikes who are waiting to turning left.

Sixty-five percent (65 %) of surveyed residents are happy with this treatment, and say it makes them feel safer travelling through this intersection. One respondent commented: "I absolutely love the pop of colour that reminds BOTH the cyclists to stay in that area ... and also the drivers of vehicles because it reminds us to take a second look!"

Enhancements at Stone Road and Gordon Street.

At the intersection of Stone Road and Gordon Street, a total of 26 lanes of travel intersect, creating an expansive space for left turning cyclists to navigate. The intersection of Stone Road and Gordon Street was reconstructed in the Fall of 2018, creating the City's first modified protected intersection design. The new design no longer requires people on bikes to merge across multiple lanes of traffic to turn left. Instead, they can choose to do a two-staged left turn using the protected areas at the sidewalk corners that are designated for people cycling.



Figure 7 The new configuration at Gordon Street and Stone Road gives people who bike the option to turn left like a pedestrian does, instead of like a vehicle does.

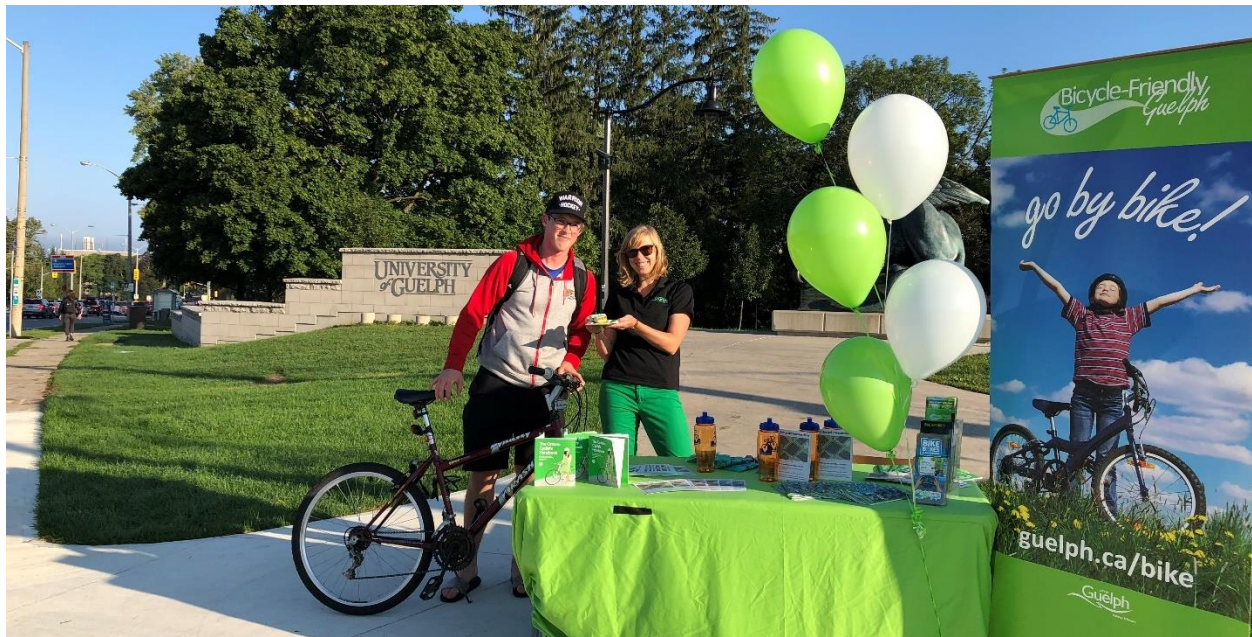


Figure 8 A city employee shares information about Guelph's first modified protected intersection.

Bicycle Parking:

The development approval processes now routinely recommend bicycle parking for multi-unit residential, commercial and industrial developments. City staff will install additional bike parking facilities downtown in accordance with the [Downtown Streetscape Manual](#). The City will also procure temporary bike racks to support cycling to local events.

Education and Encouragement

CAN-BIKE certified bicycle training for adults has been offered via the Recreation Guide at a subsidized rate. The City has coordinated delivery of two courses: Level 4, Advanced Cycling Skills and Level 5, Instructor Training. CAN-BIKE is the national cycling education organization that can certify cycling instructors. Having more certified instructors in Guelph makes it easier to offer more diverse cycling education programs for residents of Guelph. One such program, which is taught by a certified CAN-BIKE instructor, involves a unit on cycling safety skills delivered via the CELP and Headwaters programs for high school students.

Guelph Police Services deliver in-classroom cycling education programs to 45 schools per year, covering rules of the road, helmet fitting, signals and safety checks for students in grades 4-6. To compliment this in-classroom education, City staff have supported GPS and several community groups (GCAT & GORBA) to deliver a "bicycle rodeo", an event for youth to practice their cycling skills.

Our active community is indispensable in building a culture of cycling here in Guelph. Each year, community groups such as the Guelph Coalition for Active Transportation ([GCAT](#)), the Guelph Off-Road Bike Association ([GORBA](#)), the [Speed](#)

[River Cycling Club](#), the [Foundation of the Guelph General Hospital](#) and various [Rotary Clubs of Guelph](#) organize and deliver dozens of events spanning from “Get to know your city trails” and “Bikes, Trees and Brews”, to the “Love your Bike Festival” to “Tour de Guelph”. These events are great opportunities for interested residents to meet others, and experience the City in a new way. The City is fortunate to be home to many volunteers who make this work possible.



Figure 9 Riders prepare to ride at the Tour de Guelph

The City hosts an annual [Bike To Work Day](#) event, which kicks off Bike Month in Ontario. In 2018 Bike To Work Day boasted over 230 registrants in Guelph, and in 2019 that number grew to 307. Bike Month takes place throughout the month of June, and consists of a wide variety of celebratory bicycle events. From festivals to educational rides, film screenings to fundraisers, Bike Month in Guelph is a coordinated effort of city staff and community organizations.



Figure 10 More than 85 people attended Guelph’s first Bike To Work Day celebration at City Hall

Enforcement

Guelph Police Services play a key role in enforcing safe behaviours by all road users, often using positive enforcement or educational outreach tactics. One example of this is their recent acquisition of a tool called a "one-metre device". In Ontario it is [the law to leave at least one metre](#) between a person riding a bike and a vehicle. The One Metre Device is affixed to the end of the handlebars of a police officer's bike, and can measure the distance of a passing vehicle. GPS have used the one-metre device to educate people who drive to be aware of their passing distance of people biking, and about the potential consequences of passing too closely.



Figure 11 Guelph Police Service's one-meter measuring device.

Guelph Police also undergo positive ticketing campaigns, such as giving out Dairy Queen coupons to kids who are wearing helmets throughout the early Spring. More recently, Guelph Police launched a bicycle theft prevention program called [Garage 529](#), which allows users to register their bicycle online so they can be more easily identified and returned in the unfortunate instance of theft.

Local businesses and city staff have also been educating and enforcing night visibility by distributing free bicycle lights to cyclists. Wike Bicycle Trailers took their own initiative to distribute roughly 2000 lights in the spring of 2018, and Guelph Transit operators collaborated with Transportation Staff to distribute approximately 1000 free bicycle lights to the public, and developed their own educational outreach campaign to share the message throughout the summer of 2017. These campaigns for better visibility of cyclists were very well received in the public and as such, Sustainable Transportation staff have secured an additional 720 lights to distribute throughout the spring and summer of 2019.

Evaluating Progress

In 2017, the City of Guelph partnered with a non-profit organization called Bikemaps.org to run an educational campaign promoting this online tool. Bikemaps.org is an open-source database providing the opportunity for all road users to pin locations, and detail either a collision, near miss, bicycle theft, or report infrastructure hazard. City Staff have used this resource to identify problem areas, such as substandard bike lanes and locations where visibility is an issue and understand more about the user experience associated with cycling in the city.

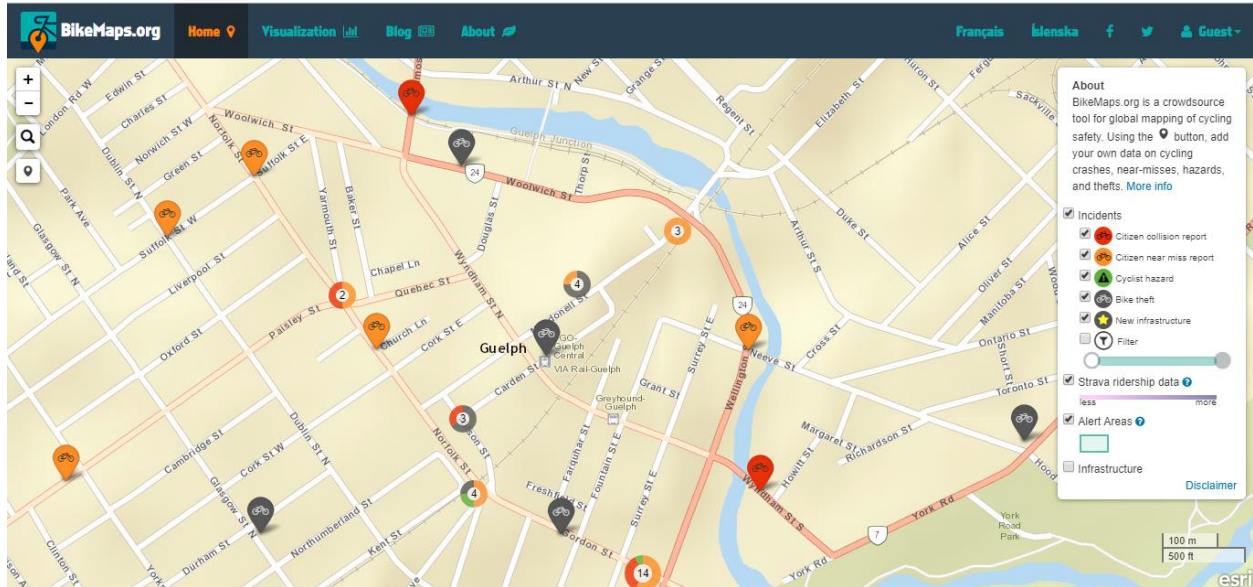


Figure 12 Bikemaps.org in Guelph

The Active Transportation Count Program measures the number of people cycling and walking at different locations throughout the City. A cross-departmental team including staff from Engineering and Transportation, Public Works, Parks Planning, and Parks Operations support the count program over approximately 6 months each year, especially during the spring and summer when walking and cycling are most popular. On-road counters and trail counters provide the opportunity to understand when, how and where people are travelling throughout the City. This data is used to inform future policy and infrastructure decisions and priorities for Staff, and locations are chosen to measure before/after infrastructure changes, and evaluate priorities when implementing plans.



Figure 13 Two employees stand next to a pyro box counter, which counts people using the trail.

Some key highlights from our count program in recent years include....

- In 2016 and 2017 combined, a total of 131,505 Active Transportation users were counted at 39 sites throughout the City of Guelph.
- One of the most popular cycling routes is Gordon St south of Stone Road, near the University of Guelph, where up to 600 people/day are counted riding bikes.
- Holidays and special events often draw a considerable number of Active Transportation users at select locations in Guelph:

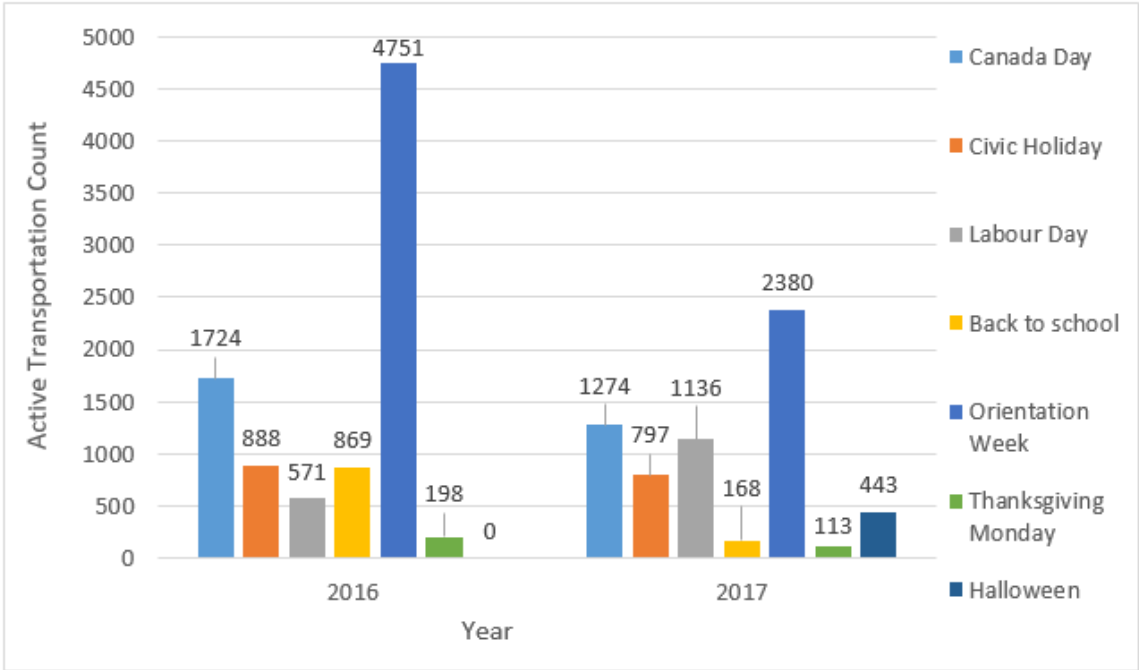


Figure 14 A graph of active transportation (people walking or wheeling) user activity during holidays and special events in Guelph. Note that the locations were different in 2016 and 2017 which affects the total numbers.

Staff collaborated with the University of Guelph's Community Engaged Scholarship Institute (CESI) to complete a [summary of the first two years of count data](#).

The following section summarizes the objectives outlined in the Cycling Master Plan and denotes the stage of completion of each goal: Achieved, in progress or not started.

Reporting on Recommended Actions directed by the 2013 Cycling Master Plan

Recommended Actions for Engineering the Bikeway Network (Engineering)

Give priority to providing a comprehensive cycling network

Status: In progress

53% of proposed on-street cycling network is completed: 31% of signed routes, 61% of bike lanes; 49% of cycle tracks (includes buffered bike lanes) and 68% of multi-use paths. Seven intersections have been improved to accommodate cyclists.

Maximize cycling connections and minimize barriers to cycling

Status: Achieved

The City has worked with the community and stakeholders to mitigate impacts to on-street parking where bike lanes were proposed and built in all projects completed to-date. These projects included York Road/Wyndham Street, Gordon Street's buffered parking bays, Downey Road and Stevenson Street. Barriers to cycling off-road (trails and boulevards) are being addressed through the 2017 Active Transportation Network. Some of these have already been implemented, such as curb cuts along the Spurline Trail near Exhibition Park.

Develop a strategy to address end-of-trip facilities throughout the City of Guelph

Status: In Progress

100% of site plan applications require bicycle parking as part of either the updated Downtown Zoning Bylaw, or outside downtown, through recommendations included in the Site Plan Application Guidelines. A downtown bike parking strategy has been initiated and will be completed and implemented by Q2 2020. The Comprehensive Zoning Bylaw Update is underway and staff are recommending improvements to include more rigorous end-of-trip facilities.

Update Guelph's cycling maps regularly

Status: Achieved

The Cycling Map has been updated twice since the 2013 CMP was approved, and is launching a new update and fresh look in Spring 2019.

Recommended Actions to Promote a Bicycle-Friendly City (Education & Encouragement)

Form partnerships and support advocacy groups to enhance cycling

Status: In progress

City staff actively support community events and groups such as the Guelph Coalition of Active Transportation and Tour de Guelph to promote cycling. A strategy is still needed to promote cycling amongst local businesses and employers.

Enhance the recognition and influence of the Bicycle-Friendly Guelph brand

Status: Achieved

A logo and brand was created with the approval of the Cycling Master Plan, and is used on all materials since 2013. City Staff regularly attend community events and regional or national campaigns such as Bike Month and Clean Air Day.

Collaborate with partners to reinforce driver awareness of share-the-road practices:

Status: Achieved

Guelph worked with CAA South-Western Ontario to develop materials around sharing the road; and distribute these materials at public events. Guelph is a regular participant in Share the Road Coalition's Ontario Bike Summit to share our best practices with the Ontario community.

Support safe cycling education and promotion

Guelph established a City-run CAN-BIKE education program to train local instructors. The Cycling Map brochure and Guelph.ca/bike provide updated safety information for the public. City staff co-chair the local Active and Safe Routes to School coalition to encourage cycling (and walking) to school; Staff collaborate regularly with Public Health and Guelph Police on educational outreach and promotional campaigns.

Status: Achieved

Coordinate programs for local employers who encourage employees and customers to cycle

This goal has not yet been initiated.

Status: Not started

Recommended Actions for Improving Safe Cycling and Sharing the Road in Guelph

Create a cycling enforcement strategy

The City has done some preliminary work around monitoring and reporting collisions through a partnership with Bikemaps.org; however a formal strategy with Police and other stakeholders has yet to be initiated.

Status: Not started

Enhance enforcement opportunities

Similar to the enforcement strategy, a formal strategy with Police and other stakeholders has yet to be initiated.

Status: Not started.

Improve safety records

Guelph Police Services regularly provides traffic safety data to City staff, and staff refer to this on an ad-hoc basis to monitor or analyze potential or existing hot spots. The City has no influence on the type of data that GPS and others collect at the scene of an incident, and so has put resources into promoting bikemaps.org as a self-reporting crowd-sourced data tool to gather these details.

Status: In progress

Review and suggest changes to municipal cycling laws and regulations

Status: Not started

This work remains outstanding but is planned, following clarification from the Ministry of Transportation on the regulation of e-bikes and e-scooters.

Recommended Actions for Monitoring and Measuring Success (Evaluation)

Establish a comprehensive monitoring plan

Status: Achieved

Staff have been tracking implementation of the on-road network as part of its applications for Bicycle-Friendly Community Status. Staff also purchased and use EcoCounter equipment to count cyclists on and off-road as part of the Count Program as of 2016. Counts of cyclists are now a routine requirement in any traffic counts commissioned by the City. An internal map of the network is maintained annually to measure progress on building the cycling network and downtown bicycle parking spaces.

Collect and establish baseline performance measurement data

Status: Achieved

Baseline data was collected with respect to the existing cycling network in 2013 prior to implementing the Cycling Master Plan.

Provide regular evaluation and reporting of cycling accomplishments

Status: In progress

City staff have not reported bi-annually as initially proposed in the Cycling Master Plan. This report was intended to be a mid-term report halfway through the lifespan of the Plan but was deferred to address other priority work.

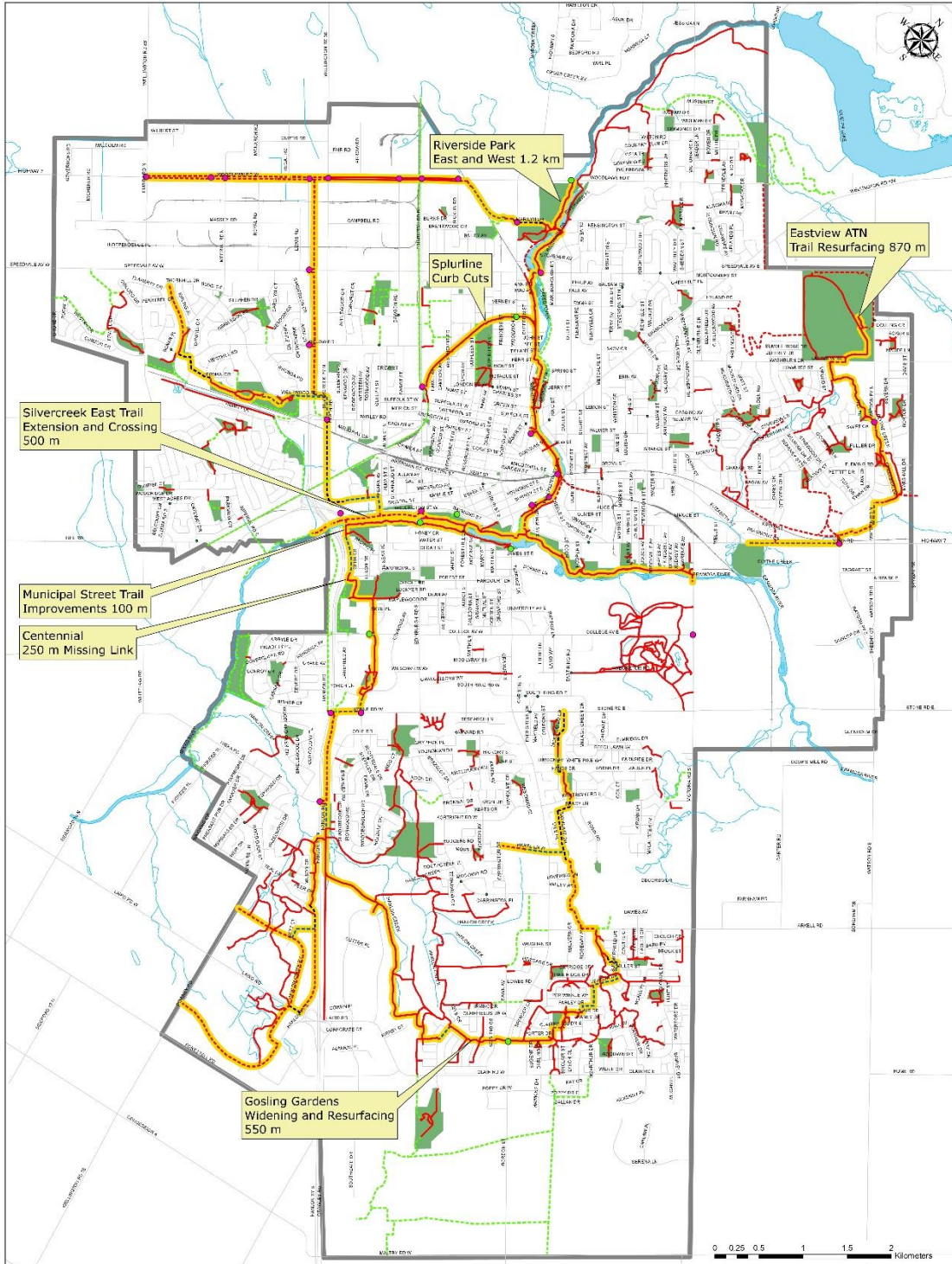
Active Transportation Network

Council approved the Guelph Active Transportation Network study in 2017. When the network is finished in 2027, it will connect the city from north to south, and east to west enabling people to travel by pedal or by foot using direct, wide routes that are maintained all year long. This proposed 54-kilometre City-wide network includes 46.2 km of off-road paths and trails connected by 7.8 km of routes along roadways. The on-road sections are comprised of either separated in-boulevard facilities along major roads or signed routes along quiet residential streets. This network is specifically designed to be accessible to people of all ages and abilities. This map highlights some improvements which have been implemented between 2017 and 2019. So far 8.1 km of improvements have been completed.

Key Highlights

- Technical study supports the need for a second signalized crossing of Gordon Street at the Boathouse. The new signal will be installed in 2019.
- Parks Operations staff have completed 5.3 km (10%) of identified improvements to the trails and restoration recommendations from the ATN study
- The Silvercreek Skatepark now includes a dedicated trail connection and new signalized crossing of Wellington Street
- Woodlawn Road multi-use path construction of Phase 2 will be completed in 2019, with funding from the Ontario government's 2017 Municipal Commuter Cycling Program.

Figure 15 (next page)



EX-1 RECOMMENDED ACTIVE TRANSPORTATION NETWORK



Off-Road Trail Network

- Existing Trail
- - - - Proposed Trail (from previously approved plans alignment to be confirmed in the next Guelph Trail Master Plan Update)
- - - - Proposed trail route identified during the ATN Study
- Recommended Active Transportation Network
- - - - Proposed trail identified in the Guelph Trail Master Plan (2005) or other approved City plan / planning approval process. Shown for illustrative purposes only; not examined during the ATN Study

On-Road Links

- - - - On-road link; critical to connectivity of the Active Transportation Network. Route also identified in the Guelph Cycling Master Plan (2013)
- - - - On-road link; critical to connectivity of the Active Transportation Network. Route identified during the ATN Study

Existing Active Transportation Network Crossings

- Existing Mid-block Pedestrian Signal located on the ATN Study Route
- Existing Signalized Road Intersection located on the ATN Study Route

- Roads
- Rivers and Streams
- Railway
- City-owned Park or Open Space
- Conservation Authority Lands
- Guelph Lake
- City Boundary

Implementing the Guelph Active Transportation Network study requires coordination among several City Hall departments, including Parks Planning, Parks Operations and Engineering Services. Parks and Forestry Operations staff keep these spaces clean, safe and functional in all seasons, by implementing restoration work, trail widening and surface improvements, and winter maintenance. Engineering staff undertake the technical design and construction work for sections of the network along the roadways. Below are some photos to celebrate the cross-departmental collaboration, which takes place to actualize the Active Transportation Network.



Figure 16 City Staff from multiple departments pose in front of a recently resurfaced Guelph trail



Figure 17 An aerial photo of the Active Transportation Network in Guelph's south end.



Figure 18 Two people on bikes enjoy a ride along an off-road trail in Guelph.

Sidewalk Needs Assessment

Key Highlights

The Sidewalk Needs Assessment identified a list of areas in the City with missing sidewalks and ranked them based on need, using indicators such as the presence of nearby schools, transit stops, employment hubs, and desire lines created by worn paths. The report provided a method for prioritizing missing sections of sidewalk, but did not do a comprehensive inventory of all missing sidewalks in the City. The City has a budget of \$240,000 per year over 6 years to address the highest priority areas. Below is a summary of the segments completed to-date:

Table 1 Sidewalk segments constructed up to December 2018

Section	Length Completed
Willow Road east of Elmira Road	100 meters
Grange Road east of Auden Road	60 meters
Ptarmigan Drive south of Niska Road	30 meters
Elmira Road north of Tovell Drive	80 meters
Exhibition Street between Division Street and Powell Street	110 meters
Imperial Road south of Speedvale Avenue West	100 meters
Kathleen Street south of Division Street	80 meters
Eastview Road between Summit Ridge Drive and Watson Parkway North	170 meters
Watson Parkway North at Cooling Crescent	130 meters
Woodlawn Road West between Nicklin Road and Elmira Road North	2,852 meters
Stone Road East from Oakdale Drive to Gordon Street	1,042 meters
Goldie Avenue east of Memorial Crescent	75 meters
Princess Street between Clarke Street and Division Street	115 meters
Total	4944 meters

Section Two: Next Steps and Opportunities

Looking ahead

As we introduce new types of infrastructure, like [protected bike lanes](#) and intersections, the City must start to explore how best to adapt and match maintenance equipment to fit the infrastructure. Sustainable Transportation staff are working closely with colleagues in Operations to better maintain the on-road cycling network.

Changes to provincial and federal funding also means staff must find new sources of funding. For example, the former Cap and Trade program resulted in \$1.19 million in cycling infrastructure funding to the City in 2018, which was used to extend the Woodlawn Road multi-use path and freed up funds to do a section of Victoria Road that otherwise would not have been built for several years.

The programs and projects offered by the City are limited to the number of staff dedicated to them: currently there are two full-time staff working to implement these programs. Additional staffing resources would accelerate the rate that existing plans, such as those highlighted above, are implemented. It would provide capacity to respond to requests from the Community and Council and trends visible in surrounding municipalities, and enable staff to move forward with more strategic programming and messaging related to transportation demand management and sustainable transportation.

City staff are working together to find solutions to policy issues that conflict with or contradict other City policies. For example, staff must balance policies that strive to maintain traffic flow for economic, transit and emergency services while providing adequate space for all road users. This sometimes means removing on-street parking or traffic lanes to ensure room for active transportation infrastructure such as bike lanes or Multi-Use Paths exists. Other examples include balancing environmental impacts – some of the Active Transportation Network travels through or close to the Natural Heritage System, and with improving zero-emission transportation options.

Opportunities for improvement and next steps

The Transportation Master Plan Update is underway and will provide guidance to inform the next updates to the Cycling Master Plan and supporting more trips by active transportation in Guelph

Staff are doing a Feasibility and Design study for several new sections of the Cycling or Active Transportation routes throughout 2019 and 2020, including Speedvale Avenue W, Paisley Road W, Silvercreek Pkwy N and Stone Road W.

The City continues to be a support and contributor to the Wellington-Dufferin-Guelph Active and Safe Routes to School Committee. In 2019, this committee is implementing Guelph's first Walking School Bus pilot project

The City will continue to deliver on the existing Cycling Master Plan, including development of a bicycle-friendly business program, completing the cycling network, and expanding educational outreach efforts.

City staff are monitoring disruptive technology developments such as “Micro-mobility” (bike shares, scooter shares), and autonomous (driverless) vehicles in order to make informed decisions on how these technologies will impact and/or serve Guelph.

Appendix

Definitions:

Error! Not a valid bookmark self-reference. **lane:** A bike lane has a single painted line to define the bike lane from the rest of the traffic lanes. In Guelph, bike lanes are between 1.2 m and 1.8 m wide.

Buffered bike lane: This describes a bike lane that adds extra space between the bike lane and traffic, usually as a painted hatched area. The bike lane itself is about 1.5 m and the hatched zone ranges from 30-50 cm wide. Stone road between Gordon Street and Victoria currently has buffered bike lanes. Sometimes the space has rumble strips in the buffer, like the ones on Victoria Road between the river and Stone Road. Cycle tracks are bike lanes in or beside the road that have a small curb instead of a painted line to separate the bikes from cars. An example is the Stone Road cycle track between Gordon Street and Edinburgh Road.

Protected bike lane: This describes any type of bike lane that is physically protected from traffic. There are two main kinds:

- **Multi-use paths** can be in the boulevard or through parks, and are usually 3.0 m wide, and have a hard or packed surface to ride on.
- On-street bike lanes that have posts (also called bollards), planters or curbs protecting cyclists from traffic.