CLIMATE ACTION WR

ACTIVE TRANSPORTATION HUBS IN WATERLOO REGION: A RESEARCH PILOT PROJECT

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FCM FEDERATION OF CANADIAN MUNICIPALITIES FÉDÉRATION CANADIENNE DES MUNICIPALITÉS

EXECUTIVE SUMMARY

Waterloo Region has a goal of reducing its community greenhouse gas emissions by 80% below 2010 levels by 2050. Cutting emissions from transportation, the largest community source of emissions, will require a shift toward active travel for shorter trips: walking, biking, wheeling, rolling, and others. All local municipalities have invested and continue to invest in active transportation infrastructure. Currently, only a very small fraction of residents choose to walk or cycle to destinations, but far more are open to the idea: they are “interested but concerned”. Research suggests that the barriers that cause concern include distances, travel times, safety concerns, cargo, physical health limitations, access to bikes, and social norms. Active transportation hubs, which are welcoming spaces with programs and supports for active travel, can help those interested overcome many of these barriers and develop new active travel behaviours. These hubs may be available to local residents on a full time or part time basis, offering programs such as DIY bike repair, workshops, buddy programs, educational and awareness campaigns, trip planning and others.

In addition, these hubs can promote, expand and enhance existing active transportation programs, ensuring they reach underserved communities and address their unique barriers. A total of 11 neighbourhoods were identified as targets for active transportation hubs, based on low active transportation mode share, high potential for active travel and a prevalence of our target populations: those who have a low income, are newcomers or immigrants, and belong to minority groups. Several organizations have expressed interest in exploring a potential partnership for delivering active transportation hubs, although there remains a need to find a partner willing to take the lead in developing the hubs and in providing the space for a full time hub. This research report culminates in 17 recommendations for how to develop active transportation hubs in the Waterloo Region that meet the specific needs of each of the three cities (Cambridge, Kitchener, and Waterloo). If implemented, Waterloo Region could address the concerns of those interested in more active travel thereby encouraging the travel choices that make for healthy people, strong communities, and a stable climate.

1.0 INTRODUCTION

This report summarizes the results of an FCM (Federation of Canadian Municipalities) funded research pilot project into the feasibility of adding community active transportation hubs as a means of increasing active travel mode share for utilitarian trips under 5 km in the cities of Cambridge, Kitchener, and Waterloo[1]. Active transportation hubs are welcoming spaces where there are supports and tools to help clients choose active transportation to reach their destinations. Key target populations include low-income, immigrants and newcomers, and minority groups. *The Building Bike Culture Beyond Downtown* report was used as a framework for how to develop active transportation hubs.

Active transportation hubs

are welcoming spaces where there are supports and tools to help clients choose active transportation. Hubs may offer DIY bike repair, workshops, group bike rides, educational and awareness campaigns, trip planning, and other supports. They typically operate in partnership with mission-aligned organizations that have strong, positive relationships with the community.

Transportation accounted for 49% of all Waterloo Region community greenhouse gas emissions in 2015[2]. Furthermore, nearly half of all personal trips in the region are short distance trips of less than 5 km that could generally be achieved using active forms of transportation[3]. Promoting a shift in transportation behaviour for these trips will be crucial for achieving the Region's long-term climate commitment of an 80% reduction in emissions below 2010 levels by 2050.

Active transportation is used here to refer to any method of traveling to a destination that uses primarily human power: walking, biking, scootering, skateboarding, using a wheelchair, e-biking[4], and others. In practice, walking and biking are the dominant active transportation choices. An average person can travel 2 km on foot and 5 km on a bike in 20-25 minutes. attractive routes.

[1]This report focusses on the potential for active transportation hubs in the three cities of Waterloo Region, but over the long term, the plan is to also bring programs and hubs to the townships.

[4]E-bikes are included here because they are zero-emission vehicles that help people of many ages, abilities and destinations to choose cycling.

Active transportation mitigates climate change, and it also has major benefits for the individual and the community. For the individual, active transportation can improve physical and mental health, save money, provide more travel options, and increase autonomy. The community also benefits from less air pollution, a more resilient transportation system, friendlier and safer streets, poverty reductions, and infrastructure cost savings[5]. The hubs themselves can help to build strong communities, divert waste through bike refurbishment, help to settle immigrants and newcomers to the community, and engage youth. In the long term, growth in active transportation use can also encourage the evolution toward healthy, sustainable communities where all basic needs are within easy walking distance along

Local surveys show that there is community interest in walking and biking more[6]. Indeed, the majority of respondents were interested in walking and biking to destinations but had concerns about these modes of transportation. Many of these concerns relate to local barriers to active transportation that fall into the categories of infrastructure, skills and knowledge, and social norms. As municipalities continue to invest in the infrastructure that supports walking and biking, active transportation hubs can address the skills, knowledge and social barriers.

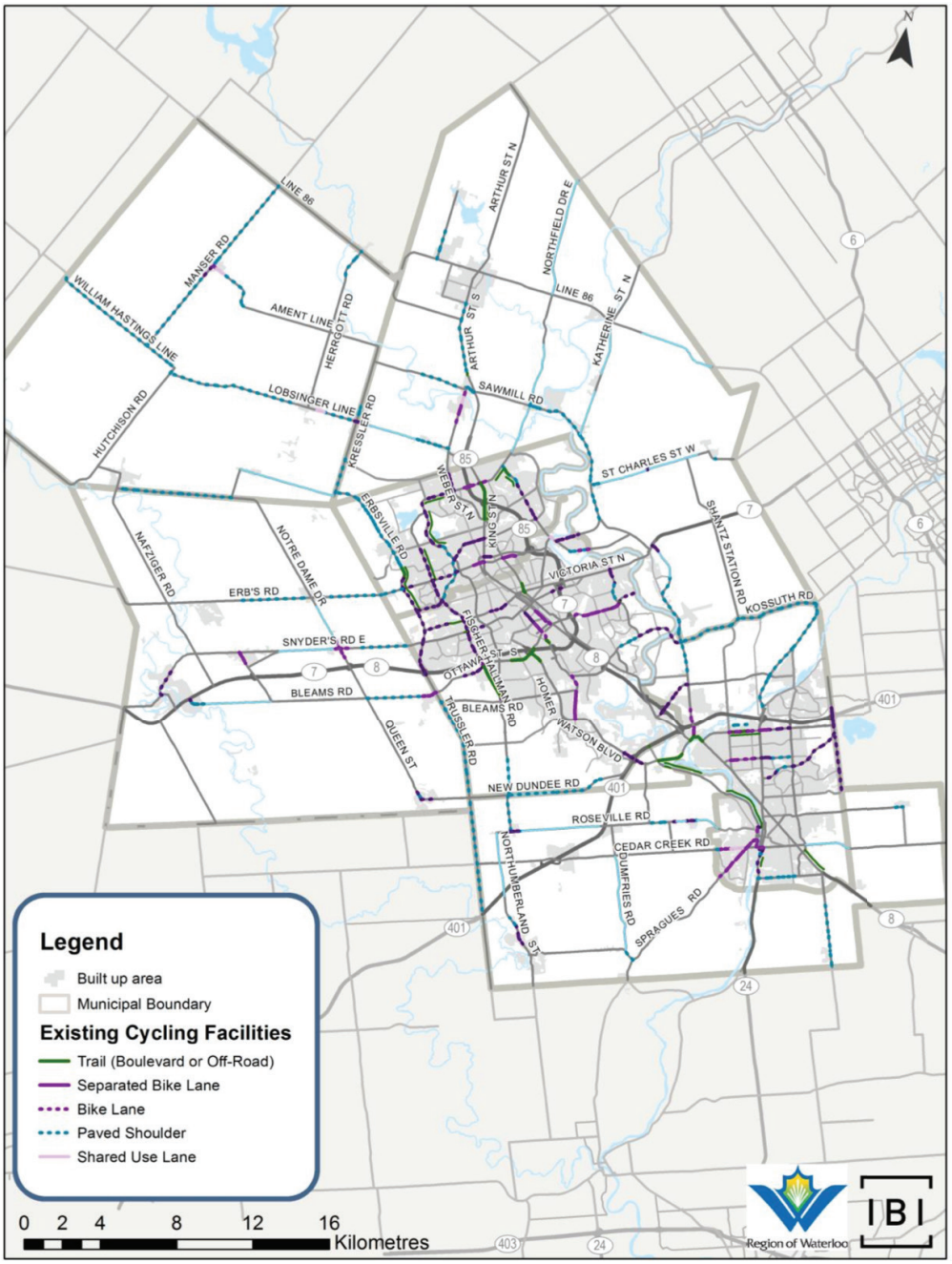
Two types of active transportation hubs are proposed in this report. Full time hubs have regularhours and drop in programs that generally include DIY bike repair. These are ideally situated in partner facilities with strong ties to the community. They should be in dense neighbourhoods with many destinations close by. The second type of active transportation hubs are part time. These are community sites that host programs on a regular and predictable basis but cannot operate full time due to factors such as lack of space, smaller client base, and low destination density. Permanent signage at part time hub locations create a constant presence that informs residents of available programs and symbolizes a commitment to, and investment in the community.

Partnerships are an essential part of an active transportation hub. Partners may provide links to the community, facilities, staff and volunteers, and programming support. In return, the hubs enhance the programs offered by the partner organization and may draw in new clients. This report summarizes the current state of active transportation, local barriers to greater adoption of active modes of travel, programs that could address these barriers, and the local gaps in programming that could be addressed with active transportation hubs. Potential sites and partners for such hubs are identified and recommendations are made for how to develop full time and part time active transportation hubs in Waterloo Region. Supporting documentation is found in the appendices.

Ultimately, active transportation hubs have the potential to support a great number of WaterlooRegion residents in choosing walking, cycling and other active ways of getting to their destination. A shift that will not only help us meet our climate goals, but will also bring people and partners together to build stronger communities.

2.0 CURRENT STATE OF ACTIVE TRANSPORTATION IN WATERLOO REGION

EXHIBIT 3.6: *WATERLOO REGION ACTIVE TRANSPORTATION NETWORK (2018)*



Note: *The active transportation network in this exhibit only includes regionally-managed corridors.*

2.1 - ACTIVE TRANSPORTATION INFRASTRUCTURE

There are currently over 300 km of bike lanes across the Region and nearly 1,000 km of active transportation facilities[7]. The map below shows the current (2018) active transportation network. The Region and all three Cities have plans to increase the number and connectivity of bike lanes and active transportation facilities in the coming years. Although not the focus of this report, the townships are also interested in promoting active transportation. See Appendix A for more details.

2.2 - MUNICIPAL ACTIVE TRANSPORTATION PLANS

The Region of Waterloo and the Cities of Cambridge, Kitchener and Waterloo all have transportation plans with proposals to increase the active transportation infrastructure, make a more connected network across the cities and the region, and make these facilities attractive to people of all ages and abilities. See Appendix A for descriptions of key strategies, action items, and implementation measures in the transportation master plans that relate directly to active transportation.

2.3 ACTIVE TRANSPORTATION MODE SHARE

Recent census and local transportation survey data clearly show that only a small fraction (5-9%) of Waterloo Region residents walk and cycle to work[8,9]. Yet nearly a third spent less than 15 minutes commuting or travelled less than 5 km: travel times and distances that are generally accessible to active forms of commuting. In general, many residents (25%) are choosing to walk for trips less than 2 km but few (<3%) are choosing to cycle for trips less than 5 km and a significantly larger group would consider walking or biking to regular destinations (42% and 20% respectively)[10]. Surveys also show that over 80% of residents participate in light exercise, such as walking and biking more than once per week, yet only 11.7% of these residents report walking or biking as a main way to get around their community[11]. Trips to school are another ideal target for mode shifting as students typically live within a few km of their school. Over 30% of school trips made by students under 18 use active transportation[12].

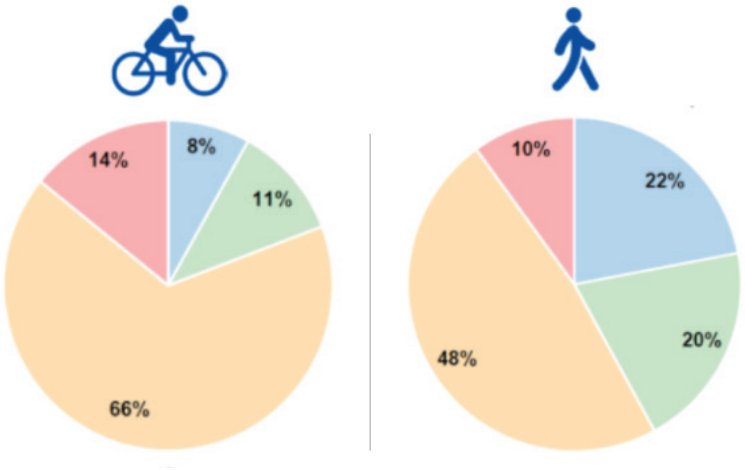
ClimateActionWR's Active Transportation Survey was conducted to support this report in 2020. There were 751 completed responses, of which 100 were part of our target population: open to biking/wheeling more (interested but concerned) and low income and/or belonging to a minority group. Close to half of respondents report walking to destinations weekly or more and nearly a quarter cycle weekly at least in the warm months. For the target population, walking is slightly more common, and cycling is much less common. More than half of respondents, including the population targeted, believe that there are places to go within walking and biking/wheeling distance of their homes. For more details, see Appendix B.

2.4 ACTIVE TRANSPORTATION ATTITUDES

Attitudes and interest in active transportation can be categorized into four groups:

- The fearless and strong use active transportation regularly, they will go nearly anywhere at any time under their own power;
- The enthused and confident will consider active transportation for many destinations if the conditions are right;
- The interested but concerned likes the idea of active transportation but do not feel comfortable or have concerns about using it to get to many destinations, they would choose active transportation if their barriers were addressed; and
- The no way no how group has either no interest in or ability to use active transportation.

A 2016 transportation survey showed that the interested but concerned group is the largest category for both biking and walking[13]. The strongest barriers to cycling were time, safety and cargo. The biggest barriers to walking were time, cargo and physical limitations.



Results from ClimateActionWR's survey showed a much larger percentage of respondents were 'no way no how' for biking for both the general public and low income/minority groups (32% and 35% respectively). The majority of respondents agree that active transportation is good for physical and mental health; good for the environment; they feel safe walking near their home; and they worry about their safety when walking/biking/wheeling near busy roads.

Figure 2 *Attitudes toward cycling and walking. Sourced from the Alternative transportation modes study: report offindings 2017[14].*

2.5 ACTIVE TRANSPORTATION AND DEMOGRAPHICS

The primary target population for active transportation hubs are those that are low income, immigrants/ newcomers, and minority groups. The following table shows the 2016 census data related to these categories for the Region of Waterloo, and the Cities of Cambridge, Kitchener and Waterloo[15]. Low income cut off after taxes (LICO-AT)[16] is used for the low-income category.

Characteristic	Region of Waterloo	City of Cambridge	City of Kitchener	City of Waterloo
Low Income	7%	6%	8%	11%
Immigrant	23%	20%	26%	25%
Visible Minority	19%	16%	22%	26%

Table 1: Local census data for low income, immigrant and visible minority populations.

Infrastructure Barriers

This report focusses on non-infrastructure barriers to active transportation as the hubs described here are designed to address these. However, access to bike lanes, trails, signage and bike parking facilities can also be major barriers to choosing active modes of travel. Communication and collaboration with both Regional and City governments can maximize the impacts of hub programs and infrastructure investments.

[16]In 2016, for communities 100,000-500,000, the LICO-AT was roughly $18,000-$46,000, depending on family size.

3.0 LOCAL BARRIERS TO ACTIVE TRANSPORTATION

Five major non-infrastructure barriers to cycling and four such barriers to walking in Waterloo Region were identified through our active transportation survey, the Alternative Transportation Modes Study[17], the Transportation Tomorrow Survey[18], a literature search, and conversations with community groups. This process was guided by the Building Bike Culture Beyond Downtown report and the resulting barriers are outlined below.

3.1 BARRIERS TO CYCLING

Long distances and travel times between destinations

Long distances and long travel times to destinations has been identified as a significant barrier to active transportation[19, 20]. Yet, as noted in section 2, residents very rarely choose to cycle even for very short distances of less than 5 km that would take an average cyclist less than 20 minutes to complete.

Perceptions of a trip's distance and the effort involved in traveling by bike can be overestimated by those who are unaccustomed to biking. An Irish study showed that passive commuters overestimated the distance between home and school by an average of 100% while active commuters were able to accurately estimate the distance travelled[21].

Safety concerns

Safety is listed as a top barrier to cycling in many local surveys[22, 23]. Safety concerns often relate to road design and traffic volumes. However, safety concerns may also relate to skills and confidence on the road. With skills training and practice, cyclists can learn to anticipate driver behaviour, send clear signals to other road users, choose safer routes, and navigate busier roads safely and confidently.

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Transporting cargo

Bikes typically do not come with storage spaces and utilitarian trips often require room for personal items, shopping or even children. Baskets, saddlebags, child carriers, trailers and cargo bikes are available to help address this issue. Even with these, the storage space may be inadequate, the added weight may increase the effort and time needed to reach a destination, or there may be additional concerns about safety with cargo on board. Social norms may also inhibit the use of cargo-carrying equipment.

Social norms

In our society, driving is the default way to get to destinations: it is the social norm. It can take time and effort to shift from using a personal vehicle as the default mode of transportation for all travel. However, for some, a shift to active transportation may be hampered by social stigmas. Indeed, for low income and minority groups, riding a bike can suggest a failure to afford a personal vehicle and the need to resort to what may be considered a childish means of travel[24]. A Toronto study reported that cycling is also viewed as unfeminine and a symbol of poverty[25]. The ClimateActionWR active transportation survey showed that just under 40% of respondents agree that “people who are like me do not bike or wheel”, which may include concerns about stigma. Conversations with staff at local social agencies suggest that this stigma is also present in Waterloo Region. Some suggested that targeting some low income residents with cycling programs could reinforce the stigma and unfairly ask those least responsible for emissions to make the greatest sacrifices. Messaging should also be mindful of the fact that for some, active transportation is a financial necessity, not a choice.

Family bike rides, however, are viewed as a manifestation of good parenting among all income groups[26]. While these trips are generally recreational, they may help to raise the profile of cycling, build cycling skills and confidence, and open the door to utilitarian family trips.

Access to affordable bikes and bike repair

The ClimateActionWR Active Transportation Survey (see appendix B for details) showed that close to a quarter of respondents did not own a bike. Not affording a bike was a reason for 16% of the general population but 37% of the target population. In conversations with community groups working with our target populations, access to low cost bikes was also noted as a barrier, with few options available for adult bikes. Inability to store a bike was also a barrier. Close to ten percent of all respondents noted that their bike/scooter/skateboard was in need of repairs.

3.2 BARRIERS TO WALKING

Long travel times

Surveys show that distances and/or the time it takes to get to destinations are major barriers to choosing to walk[27, 28]. Nearly a quarter of short trips under 2 km are walked in Waterloo region, a distance that takes 25 minutes for an average walker[29]. Far fewer residents walk for trips that are 2-5 km (2.4% of trips). The employed may be more likely to cite time poverty as a barrier to walking[30]. As with cycling, travel times may be overestimated by those who typically travel by personal vehicle. Pedestrian pathways can allow walkers to travel a shorter route to their destination than a comparable trip by car.

Transporting cargo

Difficulties carrying things while walking is another major barrier identified by local surveys. In general, walkers are limited by what they are able to comfortably carry on their person. Walking may therefore only be a viable mode choice for simple shopping trips or for destinations that do not require extra baggage. Carts are available to transport groceries and other items but use of these may have negative social stigmas, require storage space, take extra energy to push, and can be cumbersome to use.

Exhaustion or health barriers

Walking even short distances can be exhausting for those who are not in good physical condition or have mobility challenges. Local surveys show that physical exhaustion is among the top barriers to walking for all but the fearless and strong[31]. Many of these survey respondents are older and retired. Populations that are low income, middle class and/or unemployed are more likely to experience health barriers to walking[32].

Sedentary lifestyles and a car culture mean that more adults are in poor physical condition and this has long-term health consequences. Walking is a simple, inexpensive, and effective way to improve health conditions[33], promote healthy aging[34], and reduce car dependence.

Social norms/lack of interest

Work in the United Kingdom has shown that for many, walking is not seen as a normal means of everyday utilitarian travel and this limits the perception of walking as a viable option for getting around[35]. Our survey showed that 30-40% of respondents agree that “people who are like me do not walk to get around”. This may reflect physical abilities, but it may also reflect social norms and ingroup/outgroup identification.

Although no local research on social stigmas associated with walking is available, it is likely that some of the same stigmas associated with cycling may also exist for walking if it is perceived as an alternative to driving

4.0 PROGRAMMING TO ADDRESS BARRIERS

Programming that will be successful in increasing active transportation mode share for utilitarian trips under 5 km must change people's transportation habits. Behavioural change research[36] suggests that it is important to first target populations that are contemplating or preparing for change. Next, individual barriers must be addressed in a way that includes social support for behavioural change. Social support includes fun and inclusive face-to-face interactions that encourage and reinforce positive changes. Commitment strategies, feedback opportunities, and incentives can further promote sustained behavioural change.

As municipal governments continue to invest in physical active transportation infrastructure, active transportation hub programs can offer skills and knowledge supports, social supports, and address social norms. The table below shows how the barriers identified in section 3 can be addressed using these approaches. These proposed programs should be developed with partner groups who have strong positive relationships with their clients. Ultimately, it is the clients themselves who can best identify what supports they both need and want.

Figure 2. Cycling adoption theory cycle

Barrier	Skills/Knowledge Supports	Social Supports	Social Norm Programming	Physical Supports
Takes Too Long/Too Far (Overestimating Time/Distance)	Trip planning	Group rides/walks		Loaner e-bikes
Safety Concerns	Adult training workshops (e.g. CANBIKE)	Group rides/walks Buddy system (to build confidence)		
Transporting Items	Education campaign on carrying baggage		Education/awareness campaigns with images of people with carriers	Loaner e-bikes
Social Norms	Target parents as biking as a family is generally viewed positively	Offer programs to different groups e.g. churches, community centers	Education/awareness campaign using images of a diversity of people cycling/ walking Finding a champion from target populations	
Physically Exhausting/ Health Barriers		Buddy programs Group walking/ cycling programs aimed at people with low physical fitness	Education/awareness campaigns using images of all types of people on bikes	
Access to Bikes, Bike Repair	DIY bike repair Mobile bike repair			Access to low cost refurbished bikes Earn a bike

Table 2 How the local barriers to active transportation can be addressed with programs that fall under the categories of skills/knowledge supports, social supports, social norm programming, and physical supports.

4.1 PROGRAM DESCRIPTIONS

The following describe the different types of active transportation programs that could be offered by active transportation hubs. Some of these programs already exist in our communities but could be expanded, and some are new but have been successful elsewhere.

DIY bike repair facilities are an affordable and empowering way to help cyclists fix and maintain their bikes. These facilities require significant programming and storage space, although Markham Cycles and Scarborough Cycles have successfully operated out of a mid-sized shipping container. These can also require significant trained staff and volunteer time to guide DIY repairs and to disassemble unusable bikes for spare parts.

Recycle Cycles in Kitchener and the University of Waterloo Bike Centre offer DIY bike repair facilities, although the latter only serves University of Waterloo students and staff. Recycle Cycles has a waiting list for volunteers eager to help but struggles with limited storage space and the volunteer hours needed to refurbish or disassemble donated bikes.

Mobile bike repair programs can set up at events and neighbourhood sites to offer affordable bike repair services. These programs require storage space for a cargo bike or e-bike, tools, and access to affordable spare parts (e.g. from disassembled bikes that are not roadworthy). Trained staff and/or volunteer time depends on the scope of the program.

Kitchener Bike Rescue started mobile bike repairs in the summer of 2020, operating out of Victoria Park in Kitchener and various community centres in the cities of Kitchener and Waterloo. Their programs are limited by available volunteer hours and they are currently in need of further funding and storage space.

Earn a bike is a program where individuals from low income households are taught to refurbish donated bikes and, through their volunteer hours, earn a refurbished bike of their own. These are generally offered at sites that already have DIY bike repair facilities but require significant trained staff or volunteer time for mentorship.

Scarborough Cycles runs an 8-week earn a bike workshop program that had 80 youth (under 14 years old) and 50 regular participants in 2019[37] .

Safe cycling/walking workshops can include learning to ride, skills training, instruction on road rules, safe road riding training, information on all-weather cycling, bike maintenance, carrying cargo with a bike, guided bike rides, and more. These can be offered to the public in general or may target certain underserved populations such as women, minorities, newcomers, or parents. These workshops can take place outside and may be offered by instructors with special training (e.g. registered CAN-BIKE instructors). Online e-learning modules are also available through CAN-BIKE.

Cycling into the Future provides comprehensive bike training for students in Waterloo Region through the school system. Training is designed to be inclusive of all children and includes road rules and safety; bike tune-ups; tire repair; rodeo riding; road riding; assessment; and learn to ride. In 2019, they reached 1243 students in 17 schools; distributed 179 bikes and 195 helmets; and helped 75 first time riders. They are planning to develop parent-child cycling workshops and have piloted projects to support walking for Gr 3-4 students.

Recycle Cycles in Kitchener has offered bike repair workshops for general and target audiences.

Several local optimist clubs, bike shops and other organizations arrange bike rodeo events in Waterloo North, Southwest Kitchener, and in community centres across Cambridge. These annual events include bike tune-ups, safety training and bike skills training, and they are well attended.

Guided bike rides/walks help pedestrians and cyclists gain the skills and confidence to safely navigate their neighbourhood. These may be most effective when conducted in a person's own neighbourhood where they can become familiar with local routes and destinations within their range. Group rides can also help to build supportive relationships, challenge social norms, and provide the encouragement and accountability needed to develop new habits. It can be particularly effective to offer targeted tours: family bikes rides, women only bike rides, walking tours for people with low fitness levels, and others.

Recycle Cycles has offered monthly group bike rides starting from downtown Kitchener. Cycling into the Future's programs target the entire grade 4-5 population in Waterloo Region and include road-riding tours of neighbourhoods around specific schools.

The **Walking School Bus** program supports groups of elementary students in walking to school accompanied by adult volunteers Kitchener has 9 participating elementary schools, the city of Waterloo has 5 and there are no participating schools in Cambridge.

Buddy programs match an avid walker or cyclist with someone who is interested in exploring walking or cycling. The buddies plan regular outings to destinations in their neighbourhood while building confidence in navigating the roads and paths safely. These face-to-face interactions can strengthen commitment to a change in travel choices.

Scarborough's **Bike Host** program targets newcomers to Canada who practice safe cycling skills, practice their English, and learn about civic engagement all while exploring their new community with a supportive mentor. In 2016, 37 people completed the Bike Host program after which an average of 31% of participants' daily trips were cycled and 92% would recommend the program to friends and family.

Loaner e-bikes and cargo bikes offer potential cyclists the opportunity to test out e-bikes and cargo bikes before investing in one of their own. For many, e-bikes may be the solution for trips that are too long or too arduous on a regular bike. E-bikes also have great potential for helping seniors stay active as they age[38], and helping people with health challenges shift to a healthier lifestyle[39]. Cargo bikes are a great investment for those who are committed to cycling but are limited by an inability to transport cargo and/or children.

Markham Cycles has partnered with a local library to loan out standard, cargo, tandem, recumbent, and ebikes using a library card.

Educational and awareness campaigns are media campaigns about active transportation that target a broad audience. They may provide information on topics such as road sharing or navigating traffic circles; they can increase awareness of programs offered in the community; and they can help to change social norms. To combat stereotypes and promote cycling by a diversity of residents, it is important that people of all ages, fitness levels, ethnicities and incomes see images of people they can identify with in these campaigns.

BikeWR has run the following region-wide campaigns: Who is a Cyclist?; How to Navigate a Pedestrian Crossover; Bright On!; and Thumbs Up, WR.

CycleWR is running a region-wide campaign called “Discover your Superpower: Walking and Wheeling to School”.

Commitment strategies ask the user to make a public commitment to a change in behaviour for a certain time, often after they have participated in an event that models or introduces that behaviour change. Prompts and incentives can be used to reinforce the commitment. Studies have shown that once the new behaviour has been sustained for a period of time, often months[40], it is more likely to lead to lasting behavioural changes[41].

TravelWise in Waterloo Region is a workplace program that has offered prizes for participating in bike to work and winter walk to work challenges.

King County in Washington State operates a community-based social marketing campaign called **In Motion** that involves information, action commitments, prompts and incentives to change travel behaviour. Since 2004, they have worked with 40 neighbourhoods, reduced over 5 million km of drive alone trips, and saved over 1,500 tonnes of associated greenhouse gases.

Trip planning maps and apps can help users plan out the best routes to their destinations and estimate total travel times. These can also highlight supportive features such as secure bike parking, bike repair stations, and connections to public transportation. Users may also be able to choose routes based on their comfort levels on different types of roads and trails.

The Region of Waterloo and all three cities have bike and trail maps, and **BikeWR** also has maps on its website. Google Maps and other mapping programs can also help with route planning and travel times but generally do not include supportive features. No trip planning apps specifically designed for Waterloo Region were found.

A high profile **active transportation champion** can be very effective at promoting behavioural changes and changing social norms within their community. Even everyday citizens can be effective champions of active transportation within their circle of family and friends: they may just need some extra encouragement and support to start a conversation.

As a volunteer **BYCS bicycle mayor** for Waterloo, Arcy Canumay plans to work with community stakeholders to make Waterloo one of the leading cycling cities in Canada.

Fort Collins, Colorado has a Bicycle Ambassador Program where residents can teach classes, participate at events, report infrastructure opportunities, and lead by example. In 2020, 110 bicycle ambassadors connected with 1,604 community members at events and in courses.

Amplifying the impact. While each of these programs can be effective in increasing active transportation mode share, they are likely to have the greatest impact if the programs are coordinated and promoted together across the region. Their impacts can also be amplified by integrating them with infrastructure development, transit plans, policies that restrict car use, public health planning, and other related developments[42].

4.2 PROGRAM EVALUATION

Active transportation hub programs can be evaluated using the following metrics:

- Number of participants served;
- Number of participants who would recommend the program to others;
- Number of volunteer and staff hours required; and
- Program costs.

The active transportation mode share impacts of active transportation hubs can be estimated based on:

- Travel mode share surveys, such as the Transportation Tomorrow Survey,
- Census data on commute mode share, and
- Trail usage counters[43] placed on trails and bike lanes near the hub before and after programming.

The climate mitigation impacts of active transportation hubs can be estimated based on:

- Changes in travel mode share for short trips and municipal models for community greenhouse gas emissions[44].

4.3 GAPS IN EXISTING ACTIVE TRANSPORTATION PROGRAMMING

Waterloo Region

Across the region, there is a need to promote, expand, and enhance existing programming to reach underserved communities and populations. One notable example is high school students who generally live within active transportation distance of their school but have few supports to encourage this mode of travel. Transportation habits established in the teen years can have lasting impacts on travel choices.

Cambridge

Cambridge is underserved by existing active transportation programming and major roads make it difficult to access programs offered in Kitchener and Waterloo. The city lacks an accessible and low cost bike repair facility Such a facility would ideally be part of an active transportation hub that offers a variety of programs including those listed above. Cambridge's population is concentrated in three main areas: Hespeler, Preston, and Galt. A full time hub will therefore have a limited client base unless it also offers programming at events and supports part time hubs at partner locations throughout the city. This programming should be offered on a predictable and regular basis to allow positive relationships to form.

Kitchener

Kitchener has many active transportation supports, including what is in essence a bike hub: Recycle Cycles. These supports, however, are in very high demand and often serve only a segment of the population. Furthermore, many of these supports are located in the downtown which can be difficult to access for those living on the other side of the expressway. The best approach to promoting active transportation in Kitchener may be to engage an Active Transportation Hub Coordinator who can promote, expand, enhance existing programs, and establish part time active transportation hubs in underserved neighbourhoods. The part time hubs would provide space and support for existing programs and develop additional programs that fill service gaps. Community centres have expressed interest in partnering to offer active transportation programs.

Waterloo

The City of Waterloo enjoys the highest walking and cycling commuting mode share in the region. The low cost bike repair facilities at the University of Waterloo are aimed at students and staff, while those at Recycle Cycles may be too far or otherwise difficult for Waterloo residents to access. There are also four bike shops in the city and many of the active transportation supports located in Kitchener are accessible to those living in Waterloo. Community groups working in the City of Waterloo have noted that there is an unmet need for affordable bike repairs and cycling supports. However, there are very few potential hub locations that would be accessible to the majority of residents of Waterloo. An Active Transportation Hub Coordinator could seek opportunities to promote, expand and enhance existing programs in underserved neighbourhoods while developing programs to fill service gaps and seeking suitable sites for a full time or part time hub.

4.4 ESTIMATED MATERIAL COSTS

Program	Item	Estimated Cost
Active Transportation Hub	Shipping container[45] - midsized, unmodified, delivered Tent or shelter with branding	~$3000[46] $1,000-1,500[47]
DIY Bike Repair/Earn a Bike	Bike stand and tools Spare parts Storage space	$300-$500/station[48] $1,800[49] varies
Mobile Bike Repair	Bike stand and tools Spare parts E-cargo bike Cargo bike Storage space Utility trailer for storage space	$300-$500/station[50] $1,800[51] $4,000-$7,000[52] $1,000-$2,500[53] Varies $6,500+[54]
Loaner E-Bikes	E-bike Storage space	$2,700-$4,000/bike[55] varies
All Programs	First aid kits/safety materials Promotional materials	$250-$350[56] varies

Table 3 Estimated material costs for active transportation hubs.

[45]City of Waterloo zoning does not currently allow shipping containers on city properties.

5.0 TARGET NEIGHBOURHOODS

5.1 EVALUATING POTENTIAL TARGET NEIGHBOURHOODS

A target neighbourhood has high active transportation potential but low walking and cycling mode share, and contains a high proportion of underserved populations (low income, immigrants/newcomers, and ethnic/religious minorities). Guided by the Building Bike Culture Beyond Downtown report, several maps were used to identify target neighbourhoods. Links to some of the maps are included in the list below and the remaining maps can be found in Appendix C.

High active transportation potential can be assessed using the following data:

- Cycling potential maps from the municipality based on existing road network connectivity, land use mix, permeability, topography (available for Cambridge[57] and Kitchener only, see Kitchener Cycling and Trails Master Plan);
- % of households without a car from the 2016 Transportation Tomorrow Survey;
- % of trips 0-2 km (walking and biking distance) and 2-5 km (biking distance) from the 2016 Transportation Tomorrow Survey;
- Located within the City of Cambridge active transportation priority area to support rapid transit, found in the Moving Cambridge report;
- Walk score map; and
- Population density from 2016 Census (high population density areas have greater total active transportation potential).

Low walking and cycling mode share are assessed using:

- Walking commuting modal share from 2016 Census;
- Cycling commuting modal share from 2016 Census;
- % walking primary mode share from 2016 Transportation Tomorrow Survey; and
- % cycling primary mode share from 2016 Transportation Tomorrow Survey.

High proportion of underserved populations are based on:

- Prevalence of low income based on low income cutoff after tax (LICO-AT) from 2016 Census;
- Immigrant as a percentage of total population from 2016 Census;
- Visible minority as a percentage of total population from 2016 Census; and
- Equity maps from the municipality based on percentage of youth, seniors, immigrants, indigenous, low income (available for Cambridge[58] and Kitchener only, see Kitchener Cycling and Trails Master Plan).

The factors above can help to identify neighbourhoods that are likely to benefit from active transportation programs. Interest from the target community is the most important factor, however, any community that expresses interest should, if feasible, be offered programs. Conversely, a neighbourhood that resists the introduction of active transportation programming is a poor candidate no matter what its rating.

[57]Cambridge's cycling potential map is not publicly available.
[58]Cambridge's cycling equity map is not publicly available.

5.2 TARGET NEIGHBOURHOODS IN WATERLOO REGION

Figure 4 shows the locations of 11 target neighbourhoods and shows how each is rated using the factors listed above. Four of these neighbourhoods are potential targets for full time locations, with the goal of having one in the City of Cambridge and one in the City of Waterloo: these are Elgin Park/North Galt, Preston Central, Central Waterloo, and Lakeshore Village/Sunnydale. The remaining neighbourhoods, including all identified neighbourhoods in Kitchener, are targets for part time active transportation hubs. Appendix D contains detailed maps of each neighbourhood showing 2 km (walking distance) and 5 km (cycling distance) radii from its core, key destinations, and existing plus planned trails and bike lanes.

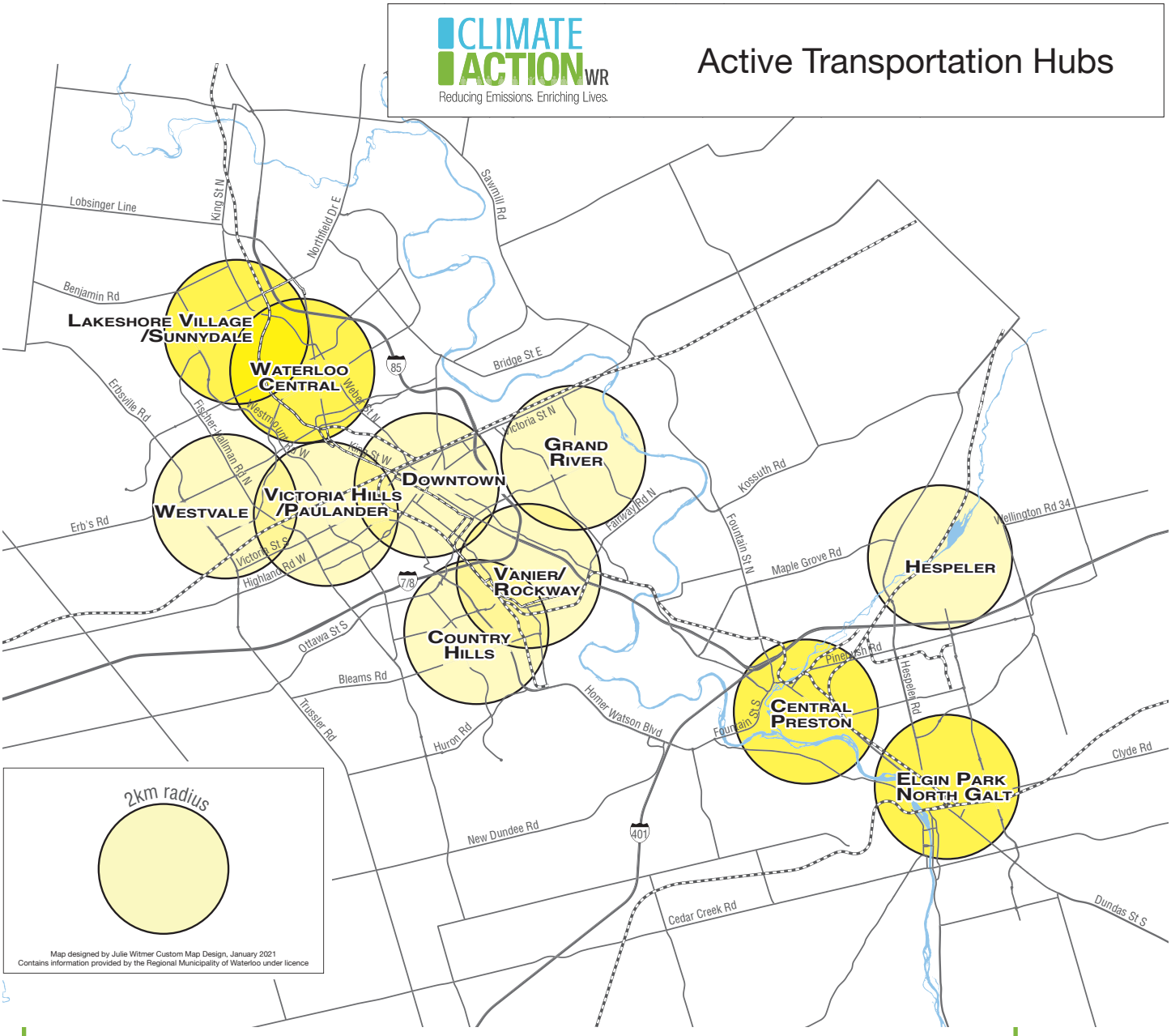


Figure 4 Locations of target neighbourhoods for active transportation hubs. Dark markers show possible targets for full time hubs while pale markers show target neighbourhoods for part time hubs.

Four neighbourhoods (see dark yellow circles) are targets for full time active transportation hubs. Finding a partner organization that works in or near these neighbourhoods is a priority. It may be necessary to look beyond the borders of the neighbourhood to find organizations with strong, positive relationships with the target community: hubs have been successful in less ideal locations but strong partners.

Seven neighbourhoods (see pale yellow circles) are targets for part time active transportation hubs. These part time hubs can be temporarily set up in a community to offer active transportation programs targeted to the community's needs and wants. Potential partners provide the sites for programs and any necessary supports. Storage needs may be met on or offsite (many part time hubs may share resources stored in one site). Partners may include municipalities (e.g. parks), community centres, schools, faith communities, cultural community centres, event planners, major employers, and others. Ideally, programs should be offered on a recurring basis (e.g. once a week or month) to provide continuity, reliable access, and to allow supportive relationships to form.

6.0 PARTNERSHIPS

Community active transportation hubs typically have multiple partners, each playing different roles. These roles may include funding, facilities, staff and volunteers, links to the community, and programming. In return, the active transportation hub should further the partner organization's goals or mission: the best and most enduring partnerships are those in which both parties benefit.

Active transportation hub benefits include:

- ***Promoting physical activity,***
- ***Promoting physical health,***
- ***Promoting mental health,***
- ***Waste diversion,***
- ***Reducing air pollution,***
- ***Immigrant/newcomer settlement,***

6.1 EVALUATING POTENTIAL PARTNERS

Appendix E includes a link to a spreadsheet of all local organizations identified throughout this project and guidelines for how they can be systematically evaluated for their suitability as a partner. Although the ratings for each characteristic are numerical (0-4), attention should be focused on the ratings for the elements that best reflect a hub's needs rather than the overall score.

General criteria

All potential partner organizations are rated based on mission alignment, staff interest, organizational strength, opportunities for mutual benefits, and their history of partnerships. There are a great diversity of organizational goals that may be relevant for community active transportation hubs, see the callout to the right on the benefits of active transportation hubs[59].

Funding

Organizations may be able to provide funding directly or indirectly. Businesses may be able to provide direct sponsorship for events, startup costs, operational costs, and they may also provide discounts for their products or services. Not for profit organizations can apply for grant funding from a variety of local, provincial, and federal sources. A sample list of funding sources can be found in Appendix F.

Links to the community

All organizations on the potential partner list have links to the community and/or to our target groups. They can help with program development, outreach, and promotion of active transportation hub programming and events.

Staff and volunteers

An Active Transportation Hub Coordinator is recommended for both full and part time hubs. Their job may include:

- Supporting the promoting, expansion, and enhancement of existing programs;
- Building positive relationships with clients;
- Developing and running programs;
- Seeking new funding and partnerships;
- Recruiting and training staff and volunteers; and
- Completing other administrative tasks.

One Coordinator may serve multiple hubs.

Ideally, the Active Transportation Hub Coordinator is an employee of a partner organization to ensure integration into their existing programming but their salary may come from other sources. At the Gateway Bike Hub in North York, for example, staff are employed by non-profit community organizations but funded by City of Toronto Solid Waste Management. Potential staff partnerships are evaluated based on existing staff knowledge, workspace availability, volunteer capacity, and financial capacity.

Facilities

Active transportation hubs require facilities to store materials, repair bikes, and to run programs. Initially, many community bike hubs have operated out of shipping containers situated in the parking lot of a community partner, another option is an enclosed utility trailer as has been used by Kitchener's mobile skate park and the Create Waterloo program. They may also rent or access other indoor and/or outdoor spaces on an as needed basis for programming. Part time hubs need onsite programming space and facilities to store resources. Resources and storage facilities may be shared by multiple part time hubs. If programming includes accepting donated bikes for refurbishment or disassembly for spare parts, additional space will be required. Potential facility partners are rated based on location, space in a building, space for a shipping container.

Programming

Programming partners may help in delivering programs and have existing relationships with target populations. Programs offered by the community active transportation hub may extend or enhance programs already being offered by the partner organization or they may complement existing programming. Potential programming partners are rated based on staff capacity, access to programming space, and access to programming resources.

6.2 POTENTIAL MAJOR PARTNERS

The following organizations have been approached and have expressed significant interest in partnering to develop active transportation hubs. Further work is needed to identify an organization that is willing to take the lead in developing active transportation hubs. Space and facilities are also in high demand for most community organizations, although some of these organizations have shown a willingness to explore possibilities for use of space or siting of a shipping container.

Carizon serves the Waterloo Region with a mission to "help families thrive in their communities by strengthening their mental health and wellbeing". They operate several small community centres and have hosted bike programs in the past. They are open to hosting further programs. They are also open to developing and offering programs if staff and overhead funding were available but have no suitable hub or storage space.

Cambridge Self-Help Food Bank serves Cambridge residents and their vision is that "every person will have access to healthy foods and opportunities for growth". They are in the process of developing a wellness hub that uses food as a vehicle for programming on health and wellness. There may be interest in including active transportation in that programming. At the current time, they are strained for space and challenged by the ongoing COVID-19 pandemic.

Kitchener Downtown Community Health Centre offers primary health care, community health supports, and a variety of programs to help clients manage their health. Their clients come from across Kitchener and include a high proportion of low income, minority groups, and newcomers to Canada. They currently operate a popular supportive walking group and have identified a need for services to support cycling. They are open to hosting further programs, especially if funding were available, but currently have no suitable hub or storage space.

The **University of Waterloo** is a major employer within Waterloo Region with a large student population, many of which are low income and belong to minority groups. The University is a member of TravelWise, has offered cycling programs, and the student association operates a Bike Centre with bike repair facilities and bike rentals. The Sustainability Office is interested in having further conversations about active transportation programming.

Recycle Cycles is a part of The Working Centre, an organization dedicated to using creative action to build community, address unemployment, and reduce poverty. They have expressed interest in learning more about possible active transportation hubs but have been unavailable to meet due to pressures related to COVID-19.

Langs operates in Cambridge and as a mission is "committed to ensuring that every person in our neighbourhoods will have a place to call home for health, wellness and community support". They operate community hubs that bring partners together to provide health and social services. They have expressed interest in exploring how active transportation supports might enhance their programming and what a partnership might look like.

Community Centres - Community centres (CC) typically have strong relationships with their communities and are always seeking new programs that meet the needs and interests of their clients, they also typically lack storage space. In Cambridge, Alison Neighbourhood CC and Greenway Chaplin CC, both near Elgin Park/ North Galt, have expressed particular interest in active transportation programming. In Kitchener, Community Centres have expressed interest in partnering to provide active transportation programming in their centres but due to COVID are not currently in a position to explore this further. In Waterloo, most community centres are under construction and are not looking for new programs at this time.

The Region of Waterloo and the Cities of Cambridge, Kitchener and Waterloo all have goals of promoting a transportation mode shift from personal vehicles to active forms of transportation. Active transportation hubs can allow municipal governments to learn directly from community members about local infrastructure challenges and to ensure their active transportation investments work synergistically with other community supports. One or more of these municipal governments also support existing active transportation programs through partnerships with Cycling Into The Future, BikeWR, Student Transportation Services of Waterloo Region (supports School Travel Planning), The Working Centre (operates Recycles Cycles), and TravelWise. Members of the municipal transportation departments and sustainability offices have expressed interest in active transportation hubs. The Kitchener-Waterloo Joint Services Initiative has been proposed as a possible mechanism for developing hubs that support both cities.

7.0 RECOMMENDATIONS

1. Find one or more partners interested in taking the lead in developing active transportation hubs, using section 6 as a guide to evaluating partners.

    a. ClimateActionWR may be the best situated to find such a partner.

    b. Promoting, expanding, and enhancing existing programs should be a key role of any active transportation hub. Promoting and enhancing existing programs may include finding additional funding or volunteers, marketing, coordinating the delivery of multiple programs to a community, assistance with program development and delivery, and other supports.

2. Reach out to Waterloo Region municipalities to explore how they can support active transportation hubs in their communities.

3. Plan for a mix of full time and part time active transportation hubs. Full time hubs have regular hours and drop in programs that often include bike repair facilities. Part time hubs are communities that host active transportation programs on a regular basis.

4. Prioritize finding facilities for full time hubs in the cities of Cambridge and Waterloo, and facilities to store part time hub resources in all three cities. Consider using a shipping container if indoor space is not available.

5. Across the region,

a. Prioritize the promotion, expansion, and enhancement of existing programs.

i. Potential partners include Cycling into the Future, Kitchener Bike Rescue, Walking School Bus, BikeWR, CycleWR, and TravelWise.

b. Explore the potential to form partnerships with local school boards to promote active transportation in high schools using active transportation hubs or other programs.

6. In the City of Cambridge:

a. Prioritize the development of a full time active transportation hub with bike repair facilities and ability to support part time active transportation programming at other sites in Cambridge.

i. A full time hub is recommended for either Elgin Park/North Galt or Preston Central. The alternate site and Hespeler are recommended part time hubs. See section 5 and appendix D for more information.

ii. Langs, Alison Neighbourhood Community Centre, Greenway Chaplin Community Centre, and Cambridge Self Help Food Bank have expressed interest in forming partnerships.

b. Explore opportunities to promote, expand, and enhance existing programs.

i. Potential partners include Cycling into the Future, Kitchener Bike Rescue, Walking School Bus, BikeWR, CycleWR, and TravelWise.

7. In the City of Kitchener:

a. Prioritize the promotion, expansion, and enhancement of existing programs.

i. Potential partners include Recycle Cycles, Cycling Into the Future, Kitchener Bike Rescue, Walking School Bus, BikeWR, CycleWR, and TravelWise.

b. Develop part time hubs to fill gaps in programming:

i. Target neighbourhoods include Victoria Hills/ Paulander, Vanier/Rockway, Grand River, Country Hills, and Downtown. See section 5 and appendix D for more information.

ii. Potential partners include Carizon, Kitchener Downtown Community Health Centre, neighbourhood community centres, and The Working Centre.

8. In the City of Waterloo:

a. Prioritize the promotion, expansion, and enhancement of existing programs.

i. Potential partners include University of Waterloo Bike Centre, Cycling Into the Future, Kitchener Bike Rescue, Walking School Bus, BikeWR, CycleWR, and TravelWise.

b. Develop full time and/or part time hubs:

i. Lakeshore Village/Sunnydale or Central Waterloo are recommended neighbourhoods for a full time hub. The alternative site and Westvale are recommended for part time hubs. See section 5 and appendix D for more information.

ii. Potential partners include Carizon and neighbourhood community centres.

9. Hire one or more Active Transportation Hub Coordinator(s) for full time and part time hubs. Their role may include supporting the promoting, expansion, and enhancement of existing programs; building positive relationships with clients; developing and running programs; seeking new funding and partnerships; recruiting and training staff and volunteers; and completing other administrative tasks. One Coordinator may serve multiple hubs.

10. Seek funding from a variety of sources including municipal funding, sponsorship (see list of potential partners, financial section in appendix E), and grants (see appendix F).

11. Develop a portfolio of programs to address local barriers to active transportation using section 4 as a guide.

12. Ensure program offerings match the needs and wants of the target communities by seeking their input.

13. Plan for ongoing program evaluation including participation rates, satisfaction surveys, staff hours, volunteer hours, and costs (see section 6.1).

14. Plan to estimate the mode share and climate impact of active transportation hubs using travel mode surveys and trail usage counters (see section 4.2).

15. Plan to use a cargo e-bike if possible to transport part time hub materials and set an example to the community.

16. In education and awareness campaigns, seek images that represent a diversity of ages, abilities, ethnicities and incomes (see section 4.1).

17. Plan for active transportation hub space in new and expanding community centres.

18. In the long term, seek opportunities to extend active transportation programming to new communities including the Townships of Waterloo Region.

8.0 CONCLUSIONS

Achieving our long term target of an 80% reduction in greenhouse gas emissions below 2010 levels by 2050 will require a shift to greater use of active transportation, particularly for trips less than 5 km. Research suggests that while a small fraction of residents use active means for these trips, there is a very large population that would consider active transportation: they are interested but concerned. Survey data reveals that major barriers to walking and cycling include long distances and travel times, safety concerns, cargo, physical ability, social norms, and access to affordable bikes. Active transportation hubs have been effective at addressing many of these barriers by providing welcoming spaces with bike repair facilities, workshops, neighbourhood tours, educational and awareness campaigns and other supports to choosing active transportation. In Waterloo Region, there are 11 neighbourhoods that would benefit from active transportation hub programs, either full time facilities or hub programs that are offered on a regular basis. The feasibility of such hubs is dependent on the ability to find strong program partners who can provide links to the community, funding, staff and volunteers, facilities, and/or programming. Several potential major partners across Waterloo Region have been identified. This report includes 17 recommendations for how to develop active transportation hubs in the Waterloo Region that meet the specific needs of each of the three cities (Cambridge, Kitchener, and Waterloo). This is an exciting opportunity for Waterloo region and its residents, let's make it happen!

APPENDIX A:
links for local active transportation resources

ACTIVE TRANSPORTATION CLUBS

- BikeWR
- Cycle Waterloo
- CycleWR
- Grand River Cycling Club
- Kitchener Easy Riders
- Waterloo County
- Wanderers
- Waterloo Cycling Club
- Woolwich Cycling
- Woolwich On-Road Cycling Group

BIKE SHOPS AND BIKE REPAIR CENTRES

- Black Arrow Cycles
- Ciclo Werks
- Cycle Electric
- Eastside Cycles
- Grand River Cycle
- King Street Cycles
- Kitchener Bike Rescue
- McPhail's Cycle and Sports
- Recycle Cycles
- Ski N Cycle Hut
- Swift Bicycles
- The Hub Cycle Shop
- University of Waterloo Bike Centre
- Waterloo Bike Shop
- Wheels on Peel
- Ziggy's Cycles & Sports

Municipal Active Transportation Reports

Region of Waterloo

The Region of Waterloo's latest transportation master plan (2018) is entitled Moving Forward and includes strategies and policies to encourage active transportation to the year 2041. Community input into the plan suggests that there is strong interest in alternatives to personal vehicles but travel times and safety remain concerns. Walking and cycling accounted for 8.6% of afternoon rush hour trips in 2016, and the region has a goal of increasing this to 12% by 2041[60].

Two of the five strategies outlined in the transportation master plan are directly related to active transportation: "Build a Transportation Network that Supports all Modes of Travel", and "Promote a Healthy Community". Action item 9 of the plan is to "Define and measure the health benefits of walking, cycling and public transit, for people travelling in and around the Region (2019–2021)".

City of Cambridge

Cambridge's 2020 transportation master plan is called Moving Cambridge and is supported by a Bike Your City Cycling Master Plan, also released in 2020. Currently, the cycling network includes 234 km of trails and on-road facilities and there are plans to increase this to 358 km. The city has adopted the Region of Waterloo's goals of increasing afternoon rush hour trips from 8.6% in 2016 to 12% in 2041.

Numerous action items in the transportation master plan relate directly to active transportation. These are listed here:

Item 5.3 Active transportation

- Identify gaps in the current network
- Complete the trail spine
- Overcome barriers
- Serve new development areas
- Support rapid transit
- Integrate with neighbouring municipalities and Region.

Item 6.3 Cycling Maintenance and Operations

- Improve monitoring of trail surfaces, waste bins, and signage
- Work to reduce time to resolve problems
- Use mobile technology to document deficiencies, submit maintenance requests, and monitor conditions
- Include bikeways in the seasonal maintenance program
- Trim trees and other vegetation regularly to maintain clear, safe, and visible trails/paths

Item 6.4 Transportation Demand Management (TDM)

- Allocate staff to manage and support TDM programs, and to promote and monitor active transportation use
- Continue to support TravelWise, and expand programs to neighbourhoods and schools
- Include walking and cycling infrastructure at transit stations and stops

Item 6.6 Core Area Rights of Way

- Use updated cross-sections, which now include cycling facilities

City of Kitchener

Kitchener's Cycling and Trails Master Plan was released in 2020 and supports the 2013 Transportation Master Plan.

Walking and cycling are the targets for two of the eight major implementation measures for the Transportation Master Plan, the details of which are listed below:

5.3 ACTIVE TRANSPORTATION – WALKING

- 5.3.1 Implement the Pedestrian Charter and Multi-use Pathways and Trails Master Plan as citywide pedestrian strategies for the pedestrian network and pedestrian environment.
- 5.3.2 Develop new policy for sidewalk infilling in existing urbanized areas and sidewalks in new development areas based on "Complete Streets" principles.
- 5.3.3 Implement more attractive streetscapes with higher-order pedestrian amenities such as street furniture, trees, and wayfinding where required.
- 5.3.4 Establish pedestrians as a priority in developments and encourage the highest level of pedestrian-oriented design and amenities through the planning review process.
- 5.3.5 Continue the City's Sidewalk Replacement Program annually.
- 5.3.6 Encourage active travel to/from schools.
- 5.3.7 Ensure year-round maintenance programs for the pedestrian network and review the City's sidewalk maintenance and snow-clearing practices.

5.3 ACTIVE TRANSPORTATION – CYCLING

- 5.3.8 Implement the Cycling Master Plan and Multi-use Pathways and Trails Master Plan, plus the Regional Cycling Master Plan Update.
- 5.3.9 Plan for bicycle-friendly communities within Kitchener by developing and updating policies, guidelines and programs to include bicycle parking where people live, work, shop and play.
- 5.3.10 Integrate cycling into municipal practices and consider the needs of cyclists in transportation projects.
- 5.3.11 Integrate cycling with other modes and provide for bicycle facilities at major transit connectors, stations and stops to encourage multi-modal cycling and transit.
- 5.3.12 Encourage active transportation for school trips by identifying and addressing barriers to cycling to and from schools.
- 5.3.13 Promote and support cycling with partnerships with the Region and other stakeholders.
- 5.3.14 Ensure maintenance and snow clearing of cycling routes through the review and update of street maintenance and snow-clearing practices.

City of Waterloo

The City of Waterloo's updated transportation master plan will be available in 2021. The 2011 Transportation Master Plan included a plan for Bikeways and Trails. Five of their 20 action items were directly related to active transportation:

- Action item 3: Create an Active Transportation / TDM Manager staff position in the CAO's office to guide implementation of the TMP.
- Action item 6: Update the City's sidewalk winter control practice with staged implementation of City responsibility for winter sidewalk maintenance).
- Action item 8, 11, and 16: Implement the recommended Bikeways and Trails Master Plan with projects in the short (0-5 yrs), medium (5-10 yrs) and long term (10-20 yrs).

Townships of Waterloo Region

The following are links to municipal plans and resources related to active transportation in the townships of Waterloo Region.

- North Dumfries Trails and Cycling Master Plan (2014)
- Wellesley Township Community Part, Recreation and Culture Master Plan (2014)
- Wilmot Township Trails Master Plan
- Woolwich Parks and Trails webpage
- Woolwich Cycling webpage

APPENDIX B:
ClimateActionWR 2020 active transportation survey results

Background. The active transportation survey was developed to better understand the attitudes and barriers to active transportation in Waterloo Region plus the programs that are likely to overcome these. The survey was open between Nov 20 and Dec 14, 2020 and was distributed through ClimateActionWR's social media, professional networks, and personal networks. A prize draw for one of 10 $20 local business vouchers was used as an incentive.

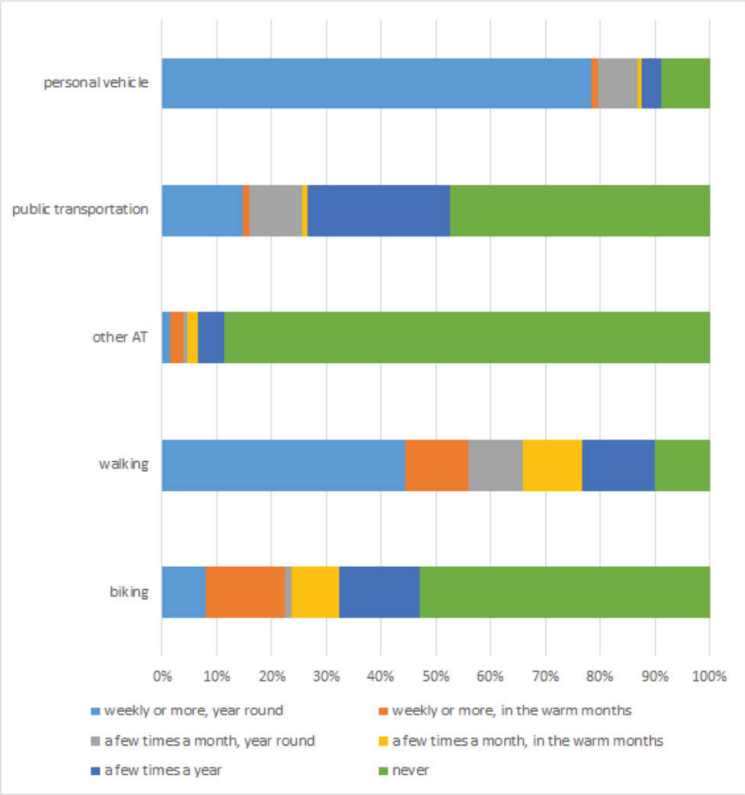
A total of 751 complete responses were received. Of these, 100 respondents met our key target criteria: 1) self-identifying as "interested but concerned" for biking/wheeling and 2) self-identifying as lower income (<$50K annual household income) and/or part of a minority group. Results for this target group are shown alongside the results from all surveys but with a coloured background.

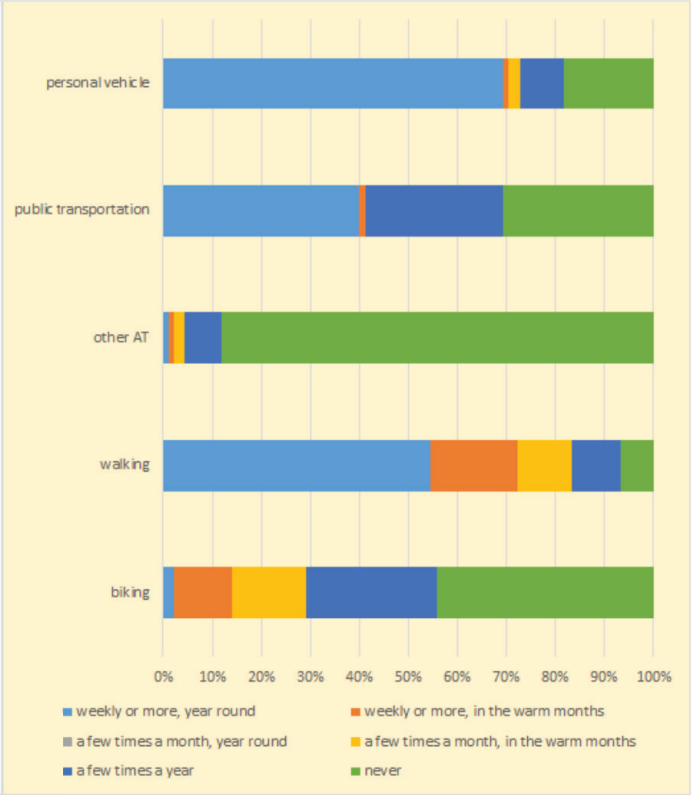
A total of nine survey questions were used to identify common mode share, attitudes toward active transportation, barriers to active transportation, and interest in active transportation programs or campaigns. The data was analyzed qualitatively.

Quality of the data. A significant number of very negative and repetitive comments plus some negative comments on Facebook in the context of the survey suggests that the survey was a target for trolling. My best estimate, based on the comments, is that less than 5% of respondents took the survey with malicious intent.

Mode share. A personal vehicle is the dominant mode share for the general and target populations. Walking is also regularly used year round by a large number of respondents but cycling is more commonly used in the warm months of the year. The target population is notably more likely to take public transportation and walk on a regular basis and it is slightly more likely to bike to destinations. Other forms of active transportation are rarely used by both groups for utilitarian travel. These results are consistent with those obtained from other local surveys of transportation choices [61, 62].

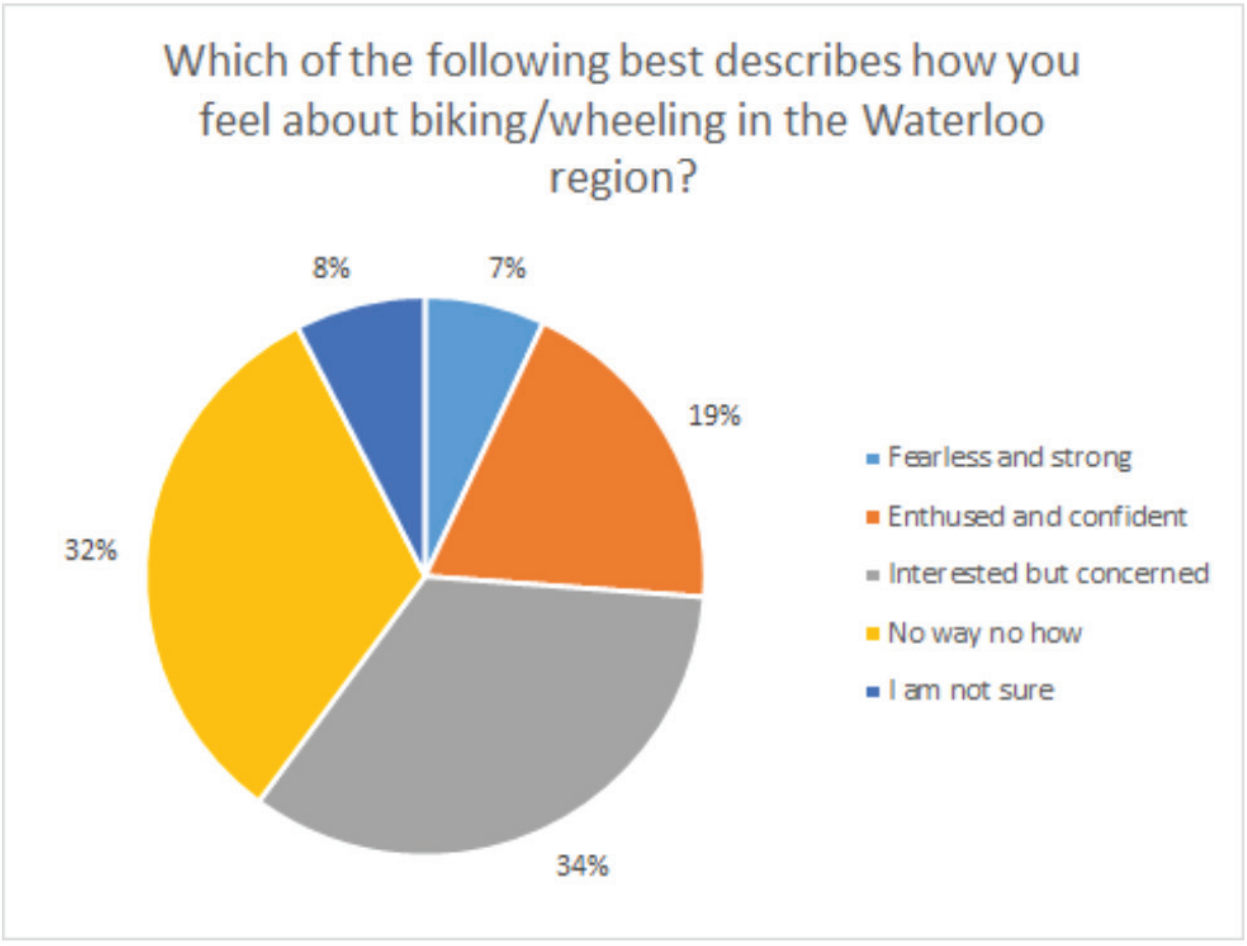
Please indicate how often, on average, you travel by each of the following methods for the purposes of reaching a destination (i.e. not for recreation).





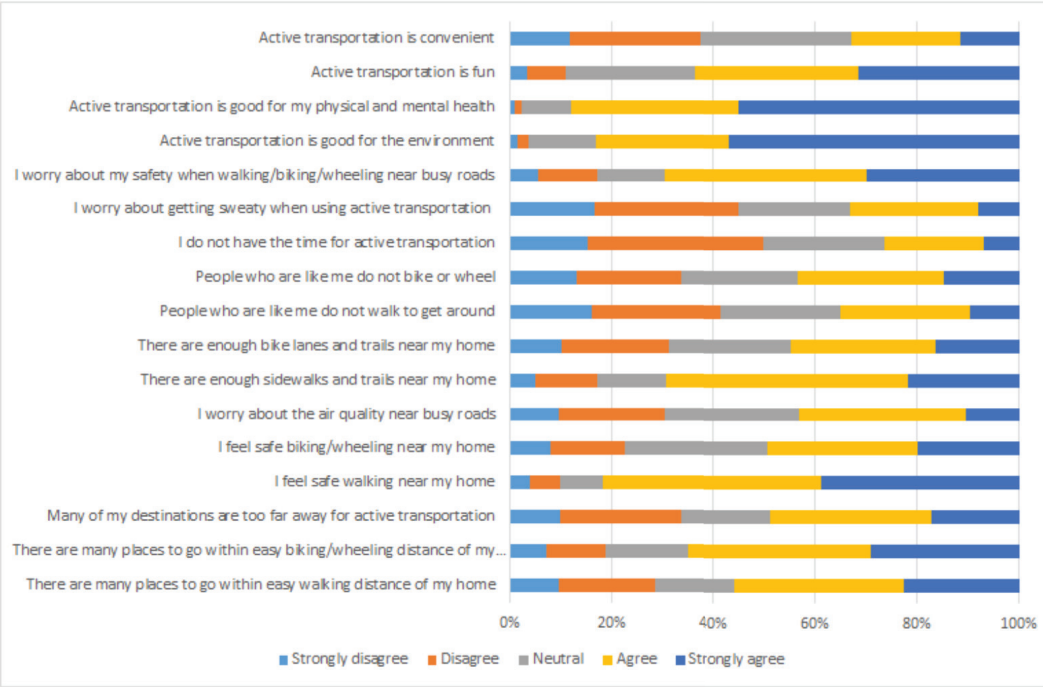
Confidence biking/wheeling. The largest proportion of the survey population self-identifies as “interested but concerned” about biking/wheeling in Waterloo Region. They like the idea of biking or wheeling but do not feel comfortable using that mode to travel in our region. A close second are the “no way no how” group that has no interest in biking or wheeling. A further major segment is “enthused and confident”, they will bike or wheel to most destinations when the conditions are right. The results for the general population and for the subset with low income and/or minority groups are very similar (not shown). This distribution is significantly different from that obtained in the 2017 Region of Waterloo Alternative Transportation Modes Study where 66% of respondents self-identified as “interested but concerned” and 14% were “no way no how”[63].

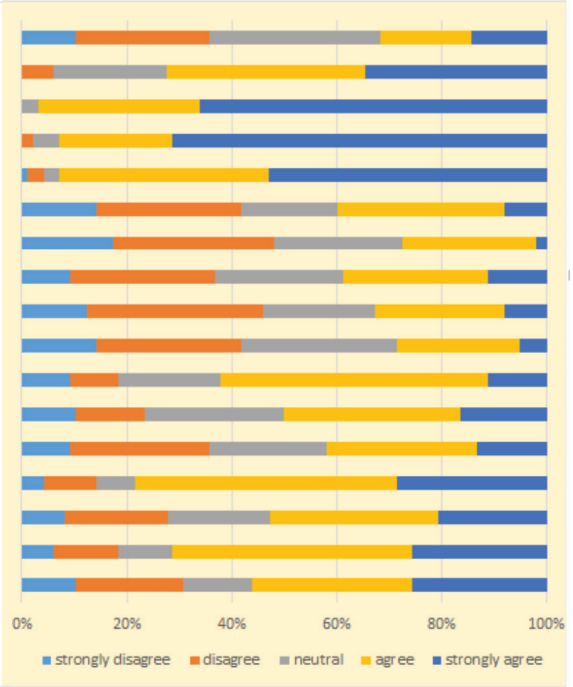
Survey responses from the target population only included those who self-identified as interested but concerned.



Attitudes toward active transportation. The majority of the general public and our target population agree that active transportation is good for physical and mental health; good for the environment; they feel safe walking near their home; and they worry about their safety when walking/biking/wheeling near busy roads. The general population is more likely than the target population to agree that there aren't enough trails and bike lanes near their home but they do feel safer biking near their home. The target population is slightly more likely to worry about air quality near busy roads and to worry about getting sweaty when using active transportation. More than half of both populations believe that there are places to go within walking and biking/wheeling distance of their homes.

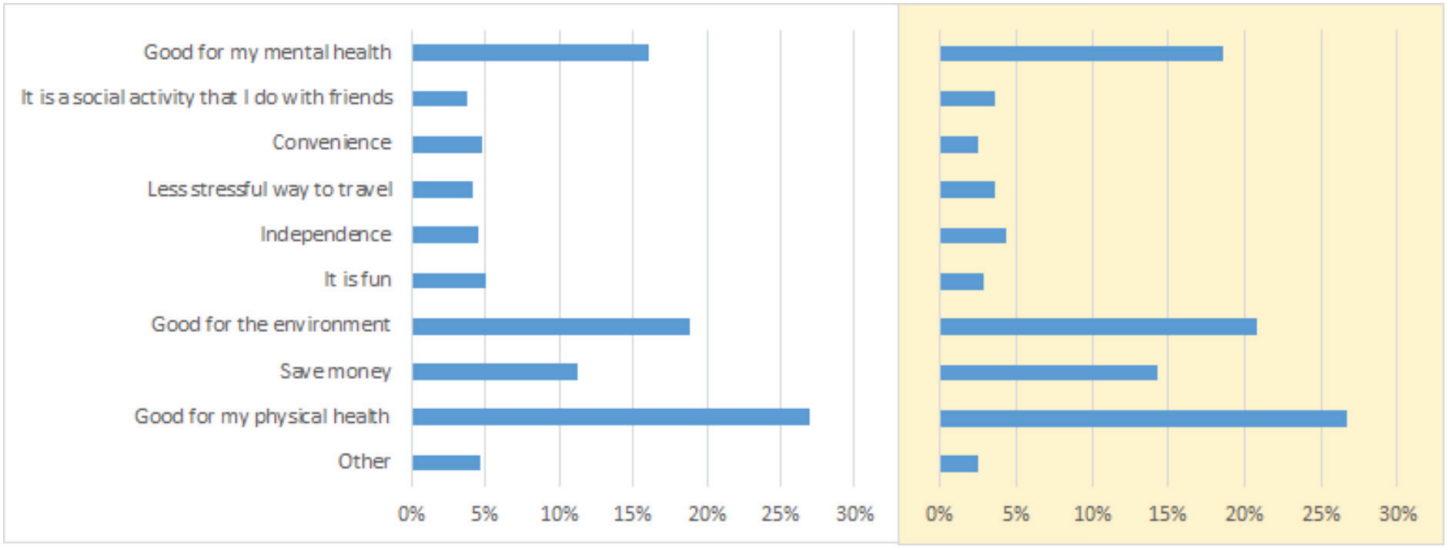
Below are statements about active transportation that you may or may not agree with. Please check the answer that best applies to you.





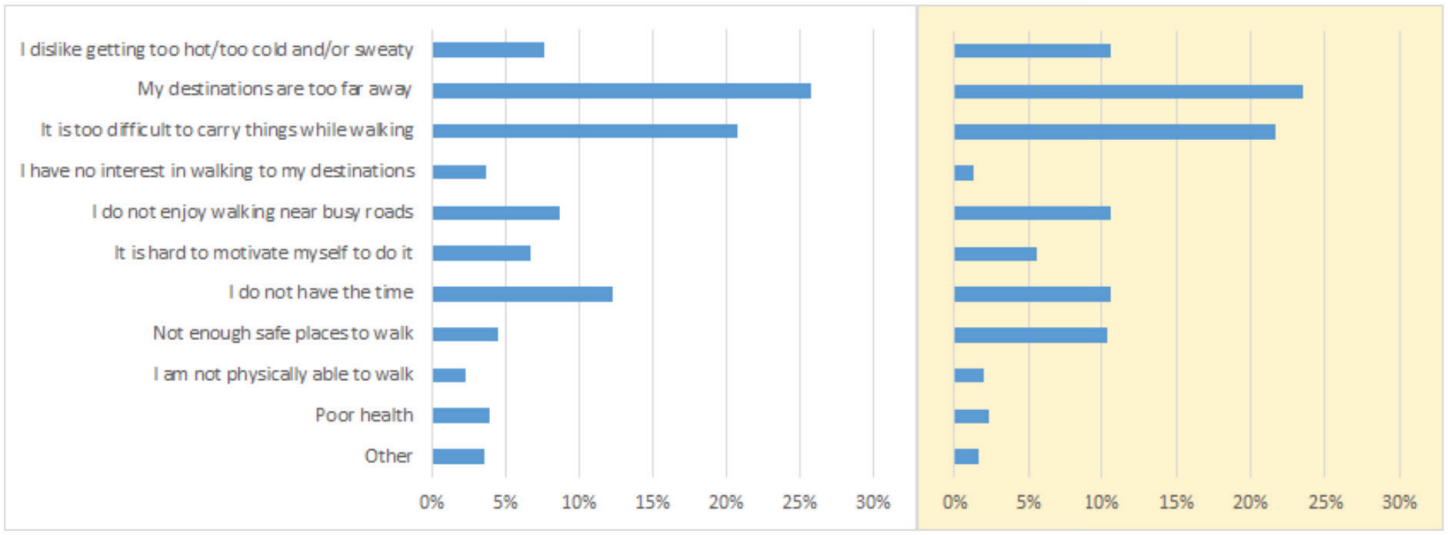
Top reasons to choose active transportation. For both the general population and the target population, the top 3 reasons to choose active transportation are good for my physical health, good for the environment, and good for my mental health respectively.

What are your top 3 reasons for choosing active transportation to get to your destinations?



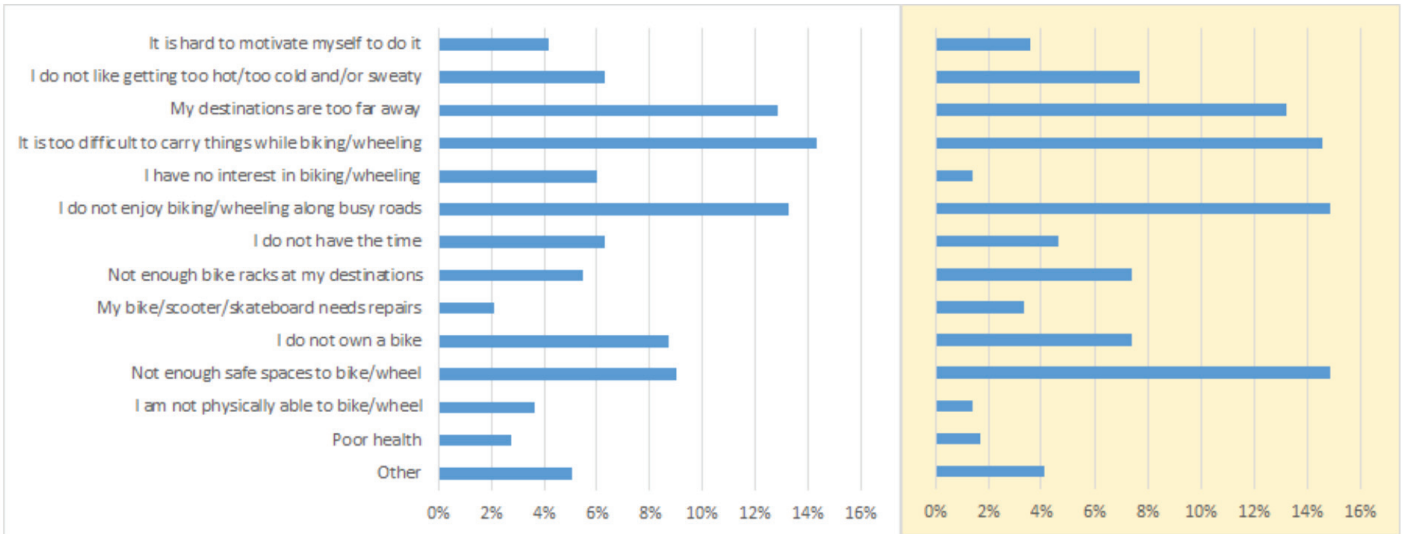
Top barriers to walking to destinations. For both the general population and the target population, the distance to destinations and difficulties carrying things while walking are the biggest barriers. Not having the time to walk to destinations is also a major barrier. These results are consistent with those from the 2017 Alternative Transportation Modes Study[64]. For our target population, not having enough safe places to walk, not enjoying walking near busy roads and a dislike of getting too hot/too cold and/or sweaty are more significant barriers than for the general population.

What is preventing you from choosing to walk to destinations more often?



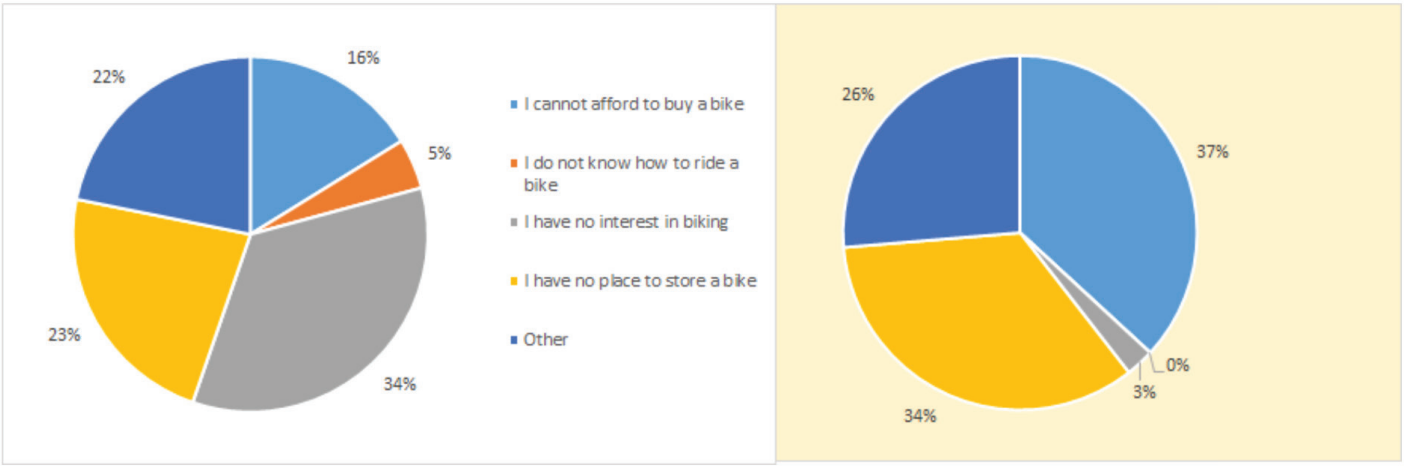
Top barriers to biking/wheeling to destinations. For both the general population and the target population, difficulties carrying things while biking/wheeling, not enjoying biking/wheeling near busy roads, and destinations being too far are top barriers. These results are consistent with those from the 2016 Alternative Transportation Modes Study[65] . For the target population, not having enough safe spaces to bike/wheel is also a top barrier factor.

What is preventing you from choosing to bike/wheel to destinations more often?



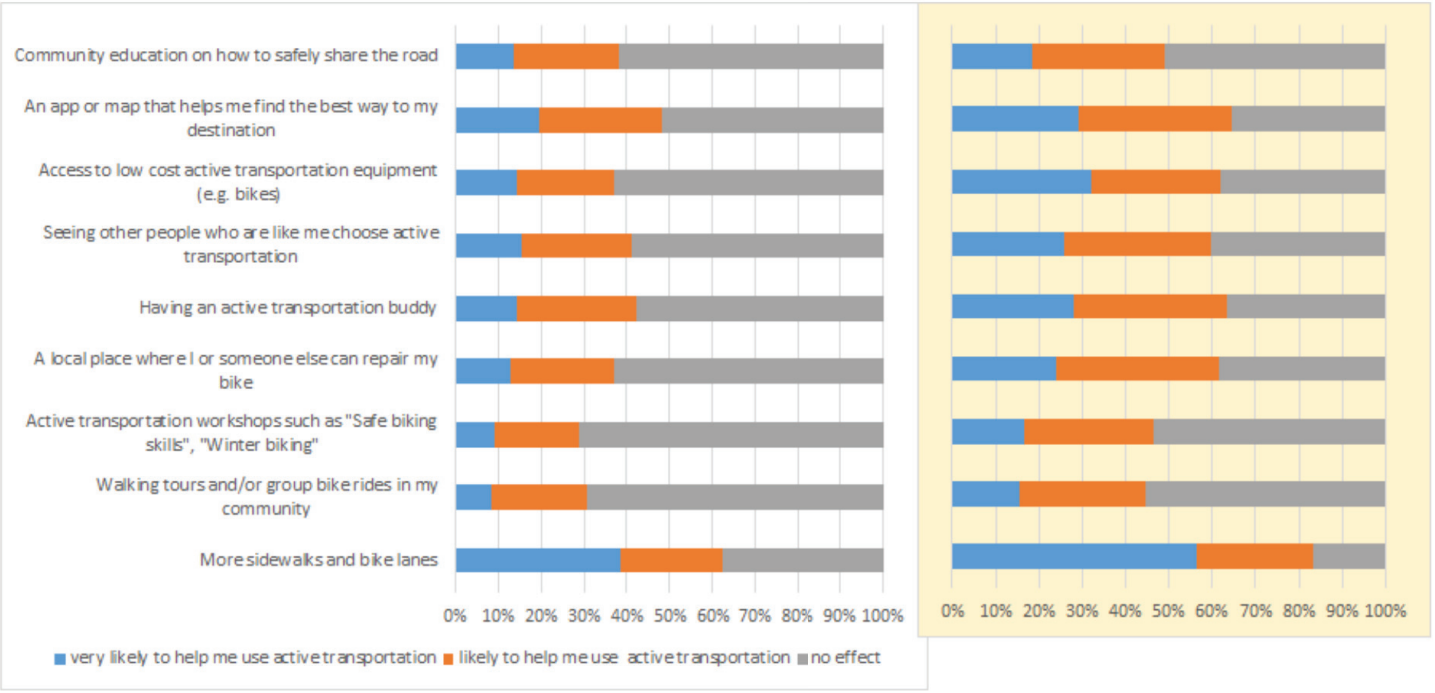
Reasons to not own a bike. 23% of general respondents noted not owning a bike as a barrier to biking. The major reasons are no interest in biking, no place to store a bike, other reasons (many noted physical health reasons), and not affording a bike. For the target population, 27% noted not owning a bike as a barrier to biking. The major reasons are not being able to afford a bike, no place to store a bike, and other reasons (many noted feeling unsafe on a bike).

You noted that you do not own a bike. We would like to know why.



Programs that are likely to encourage active transportation. The same trends are seen for the general population and the target population when it comes to the likelihood of listed programs and supports encouraging active transportation. However, the target population is more receptive to these programs than the general population. Indeed, the only program that is likely to encourage more than half of respondents to consider active transportation is bike lanes, while for the target population, nearly all programs are likely to encourage more than half of respondents to try active transportation. More sidewalks and bike lanes are by far the most popular measure to encourage active transportation. Walking tours and/or group bike rides in their communities are the least likely to encourage active transportation. Other notable measures that fared slightly better than the others are having an app or map to help find the best way to destinations, having an active transportation buddy, a local place to go for bike repairs, and seeing others like them choose active transportation. Access to low cost active transportation equipment (e.g. bikes) is also important, particularly for the target population.

How likely are each of the following to encourage you to use more active transportation to get to your destinations?

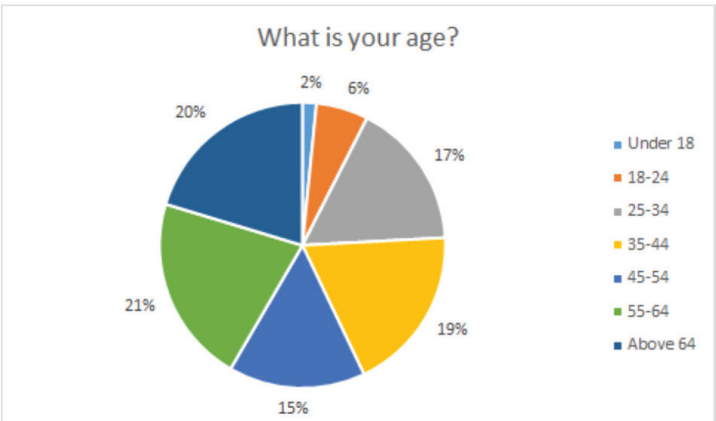


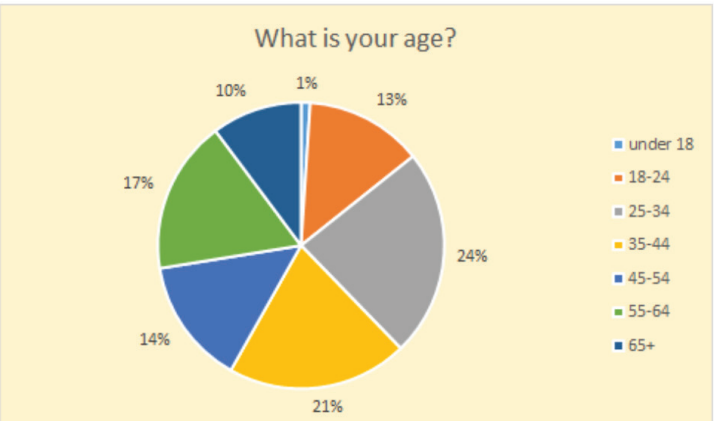
Comments. Respondents had an opportunity to share extra information about active transportation. The most common themes from the comments are listed below.

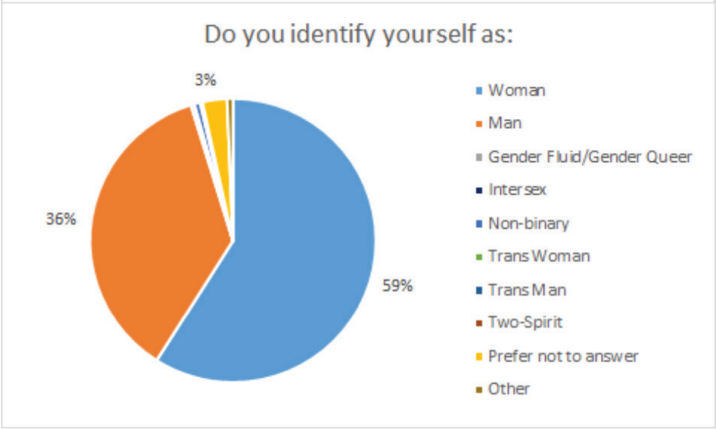
- 113 noted a need for more interconnected bike trails or bike lanes.
- 79 noted concerns about safety when using active transportation.
- 57 noted they were unhappy with on street bike lanes.
- 22 expressed concerns about cyclists not following the rules.
- 22 noted distances to destinations were too far for active transportation.
- 14 expressed concerns about bike thefts.

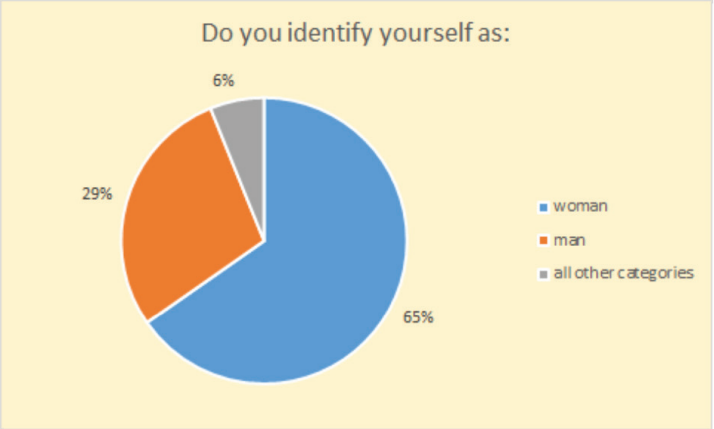
Demographics. General survey respondents are fairly evenly distributed between the ages of 25 and over 65, with a slight bias toward older respondents. The majority identify as female and the majority do not self-identify as belonging to a minority group. Income distribution is fairly evenly distributed.

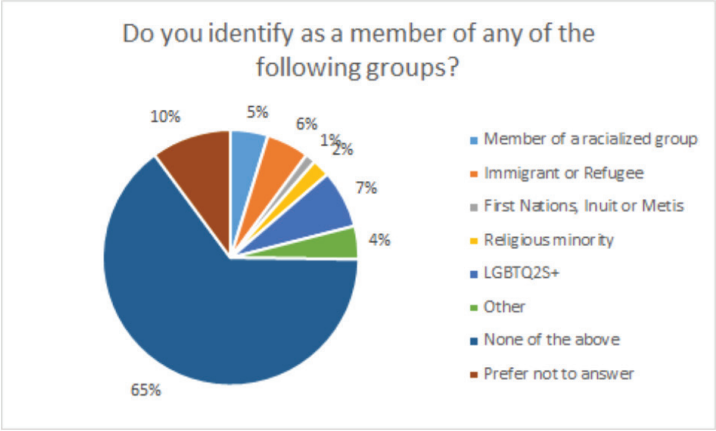
The target population has already been selected for low income (>$50,000) and/or self-identifying as a minority group. This population is fairly evenly distributed for age with a slight bias toward younger and middle age respondents. The majority identify as female.

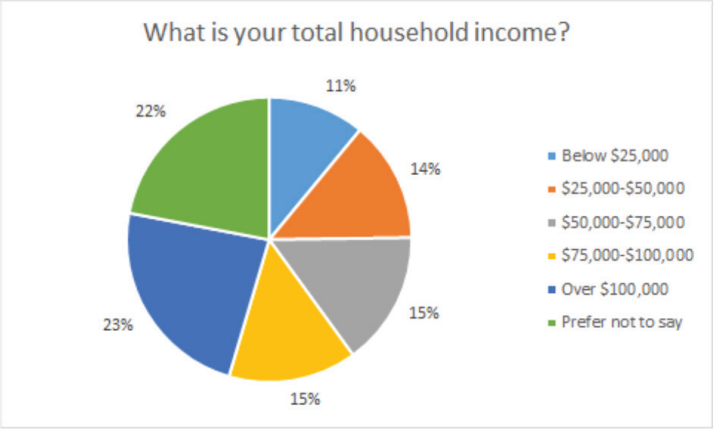












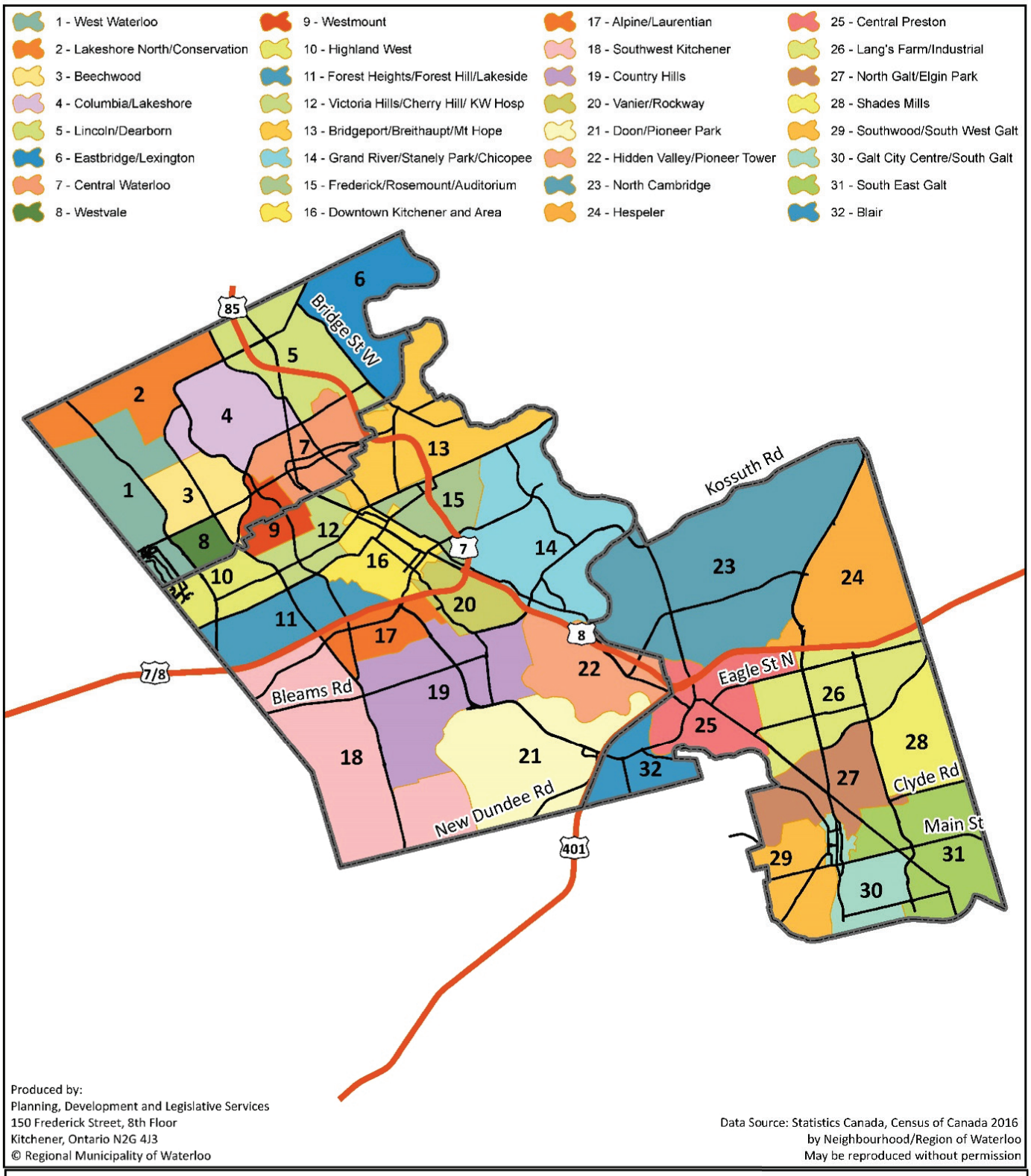
Major Conclusions.

- Active transportation consists primarily of walking and biking among respondents.
- Residents commonly walk to destinations year round but only a few bike in the colder months, suggesting that there may be room for growth with appropriate supports.
- Our target population bikes less than the general population, suggesting that there is room for growth.
- Active transportation is still not seen as a social norm by a significant portion of the population, particularly among our target population, as suggested by agreement to the statement, "people like me do not walk/bike/wheel to get around".
- Active transportation is commonly seen as good for physical and mental health and good for the environment: these may be important messages for marketing.
- Common barriers to active transportation are distances, the need to transport baggage, and feeling unsafe near busy roads. Safety is a particular concern among our target population.
- Greater access to affordable bikes and at home bike storage are needed, especially among our target population.
- Our target population may be underserved by active transportation supports and infrastructure: they are more open to all forms of active transportation programming and have greater concerns about actively travelling on major roads and/or near their homes.

APPENDIX C:
Maps used to identify target neighbourhoods

The following pages contains maps derived from the 2016 Census and the 2016 Transportation Tomorrow Survey[66] . More granular maps from the 2016 Census can also be downloaded generated with Censusmapper. Maps include:

- Map of 2016 neighbourhoods;
- Walking commuting modal share from 2016 Census;
- Cycling commuting modal share from 2016 Census;
- Population from 2016 Census (high population density areas have greater total active transportation potential);
- Immigrant as a percentage of total population from 2016 Census;
- Visible minority as a percentage of total population from 2016 Census;
- Prevalence of low income based on low income cutoff after tax (LICO-AT) from 2016 Census;
- % walking primary mode share from 2016 Transportation Tomorrow Survey;
- % cycling primary mode share from 2016 Transportation Tomorrow Survey;
- % of households without a car from the 2016 Transportation Tomorrow Survey;
- % of trips 0-2 km (walking and biking distance) from the 2016 Transportation Tomorrow Survey; and
- % of trips 2-5 km (biking distance) from the 2016 Transportation Tomorrow Survey.


1 - West Waterloo
2 - Lakeshore North/Conservation
3 - Beechwood
4 - Columbia/Lakeshore
5 - Lincoln/Dearborn
6 - Eastbridge/Lexington
7 - Central Waterloo
8 - Westvale
9 - Westmount
10 - Highland West
11 - Forest Heights/Forest Hill/Lakeside
12 - Victoria Hills/Cherry Hill/ KW Hosp
13 - Bridgeport/Breithaupt/Mt Hope
14 - Grand River/Stanely Park/Chicopee
15 - Frederick/Rosemount/Auditorium
16 - Downtown Kitchener and Area
17 - Alpine/Laurentian
18 - Southwest Kitchener
19 - Country Hills
20 - Vanier/Rockway
21 - Doon/Pioneer Park
22 - Hidden Valley/Pioneer Tower
23 - North Cambridge
24 - Hespeler
25 - Central Preston
26 - Lang's Farm/Industrial
27 - North Galt/Elgin Park
28 - Shades Mills
29 - Southwood/South West Galt
30 - Galt City Centre/South Galt
31 - South East Galt
32 - Blair
Bridge St W
Kossuth Rd
Bleams Rd
New Dundee Rd
Eagle St N
Clyde Rd
Main St
85
7
8
7/8
401
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150 Frederick Street, 8th Floor
Kitchener, Ontario N2G 4J3
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Data Source: Statistics Canada, Census of Canada 2016
by Neighbourhood/Region of Waterloo
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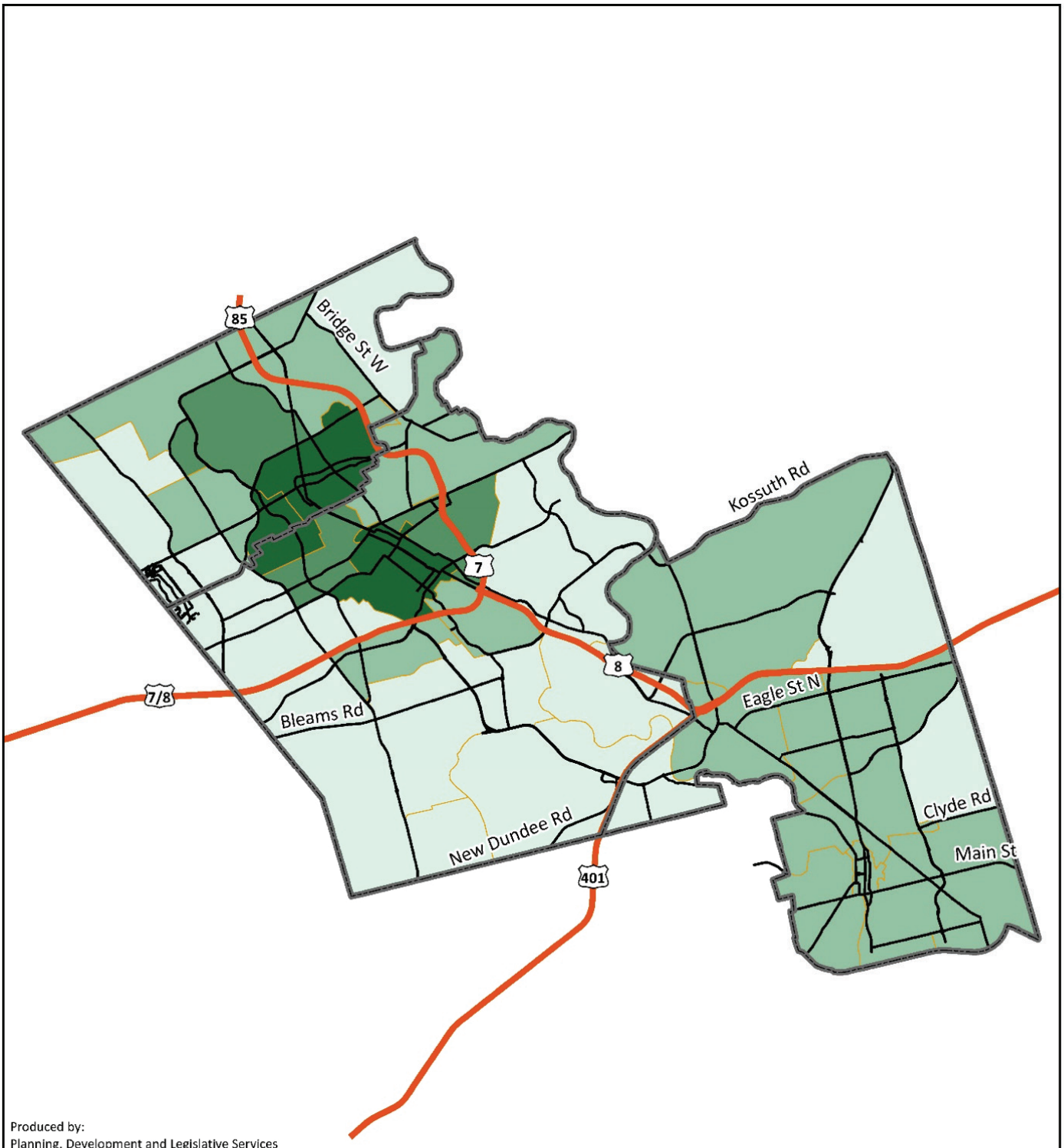
Region of Waterloo
Census 2016 Neighbourhoods
Regional Municipal Boundaries
0
2,500
5,000
Meters



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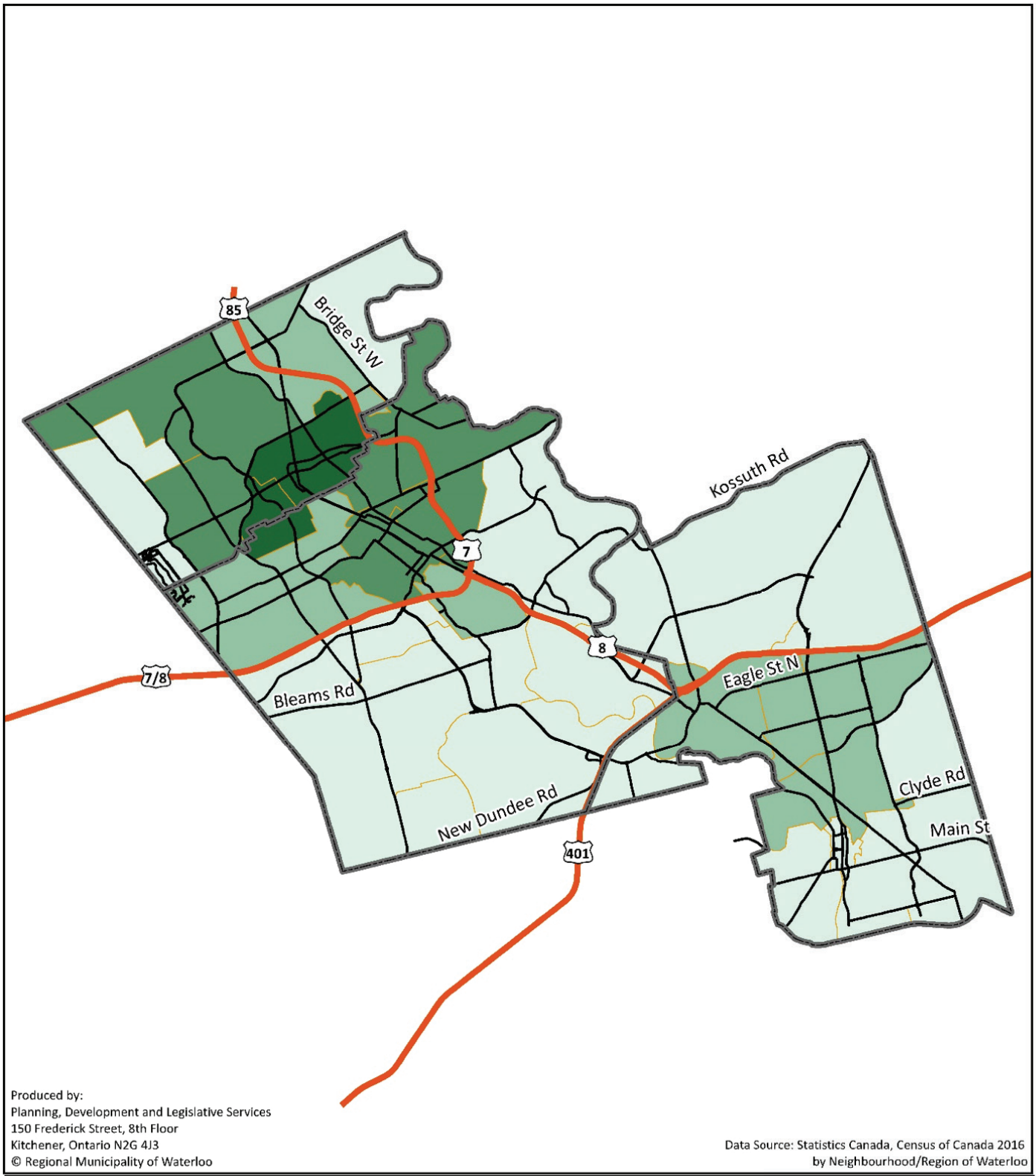
Data Source: Statistics Canada, Census of Canada 2016
by Neighbourhood/Region of Waterloo

Region of Waterloo

Walking Commuting Modal Share (Census 2016)

- Regional Municipal Boundaries
- 0 to 3 Percent
- 3 to 7 Percent
- 7 to 11 Percent
- 11 to 15 Percent

0 2,500 5,000 Meters



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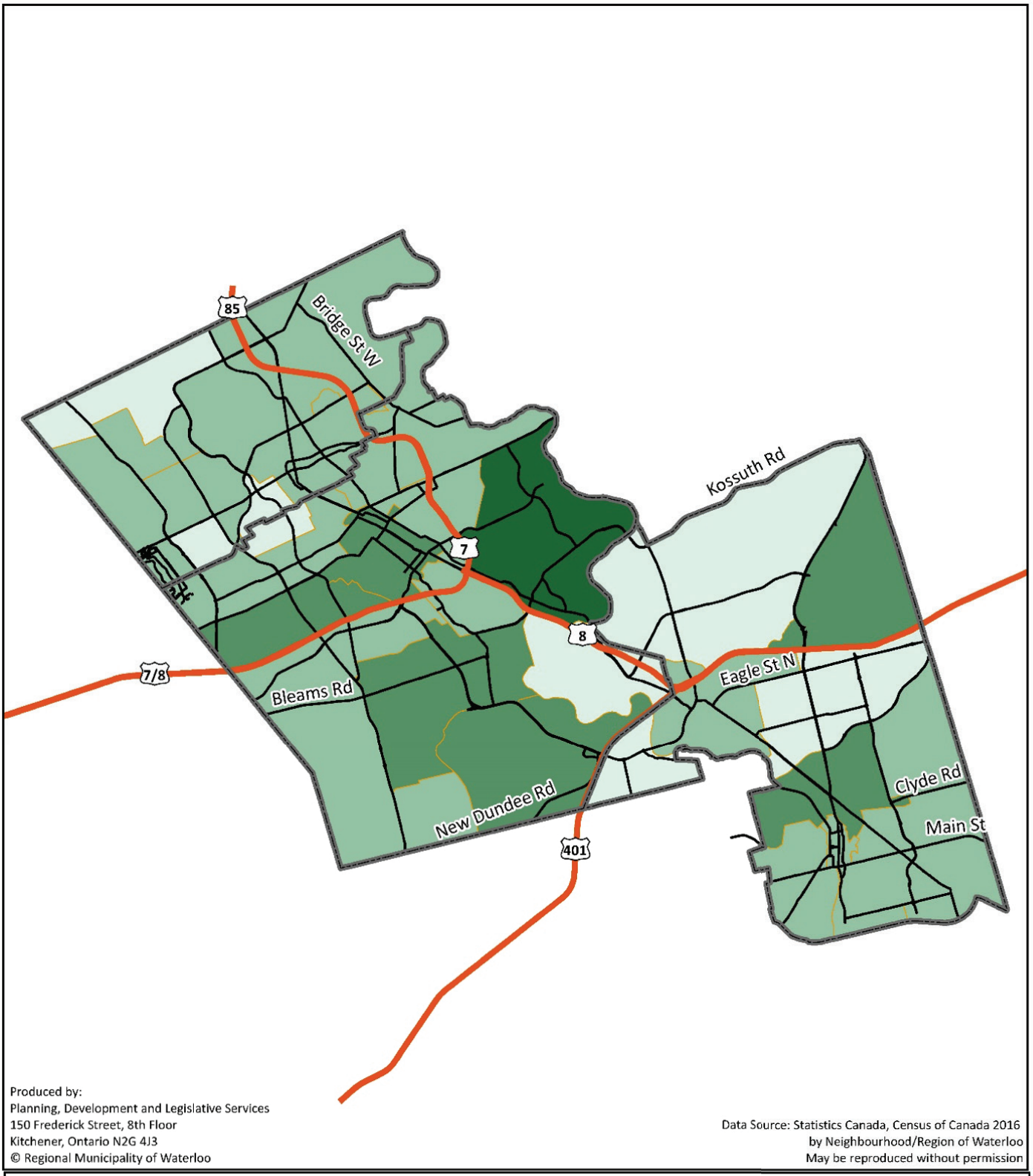
Data Source: Statistics Canada, Census of Canada 2016
by Neighbourhood/Region of Waterloo

Region of Waterloo

Biking Commuting Modal Share (Census 2016)

- Regional Municipal Boundaries
- 0 to 0.7 Percent
- 0.7 to 1.4 Percent
- 1.4 to 3 Percent
- 3 to 4.5 Percent

0 2,500 5,000 Meters



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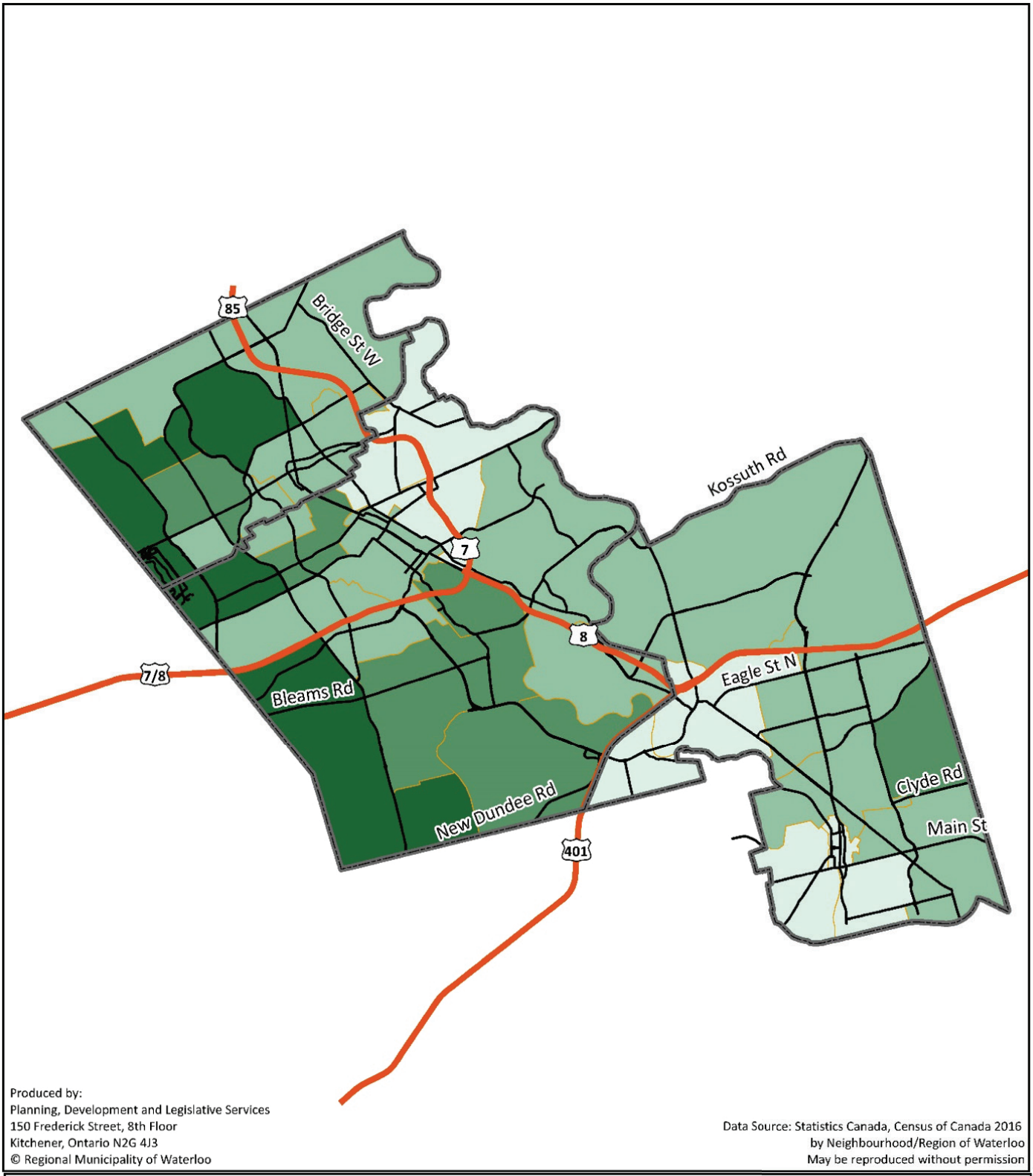
Data Source: Statistics Canada, Census of Canada 2016
by Neighbourhood/Region of Waterloo

Region of Waterloo

Total Population (Census 2016)

- Regional Municipal Boundaries
- Upto 8,500 Persons
- 8,501 to 18,000 Persons
- 18,001 - 25,000 Persons
- 25,000 - 40,500 Persons

0 2,500 5,000 Meters


85
Bridge St W
Kossuth Rd
7
8
7/8
Bleams Rd
Eagle St N
Clyde Rd
Main St
New Dundee Rd
401
Produced by:
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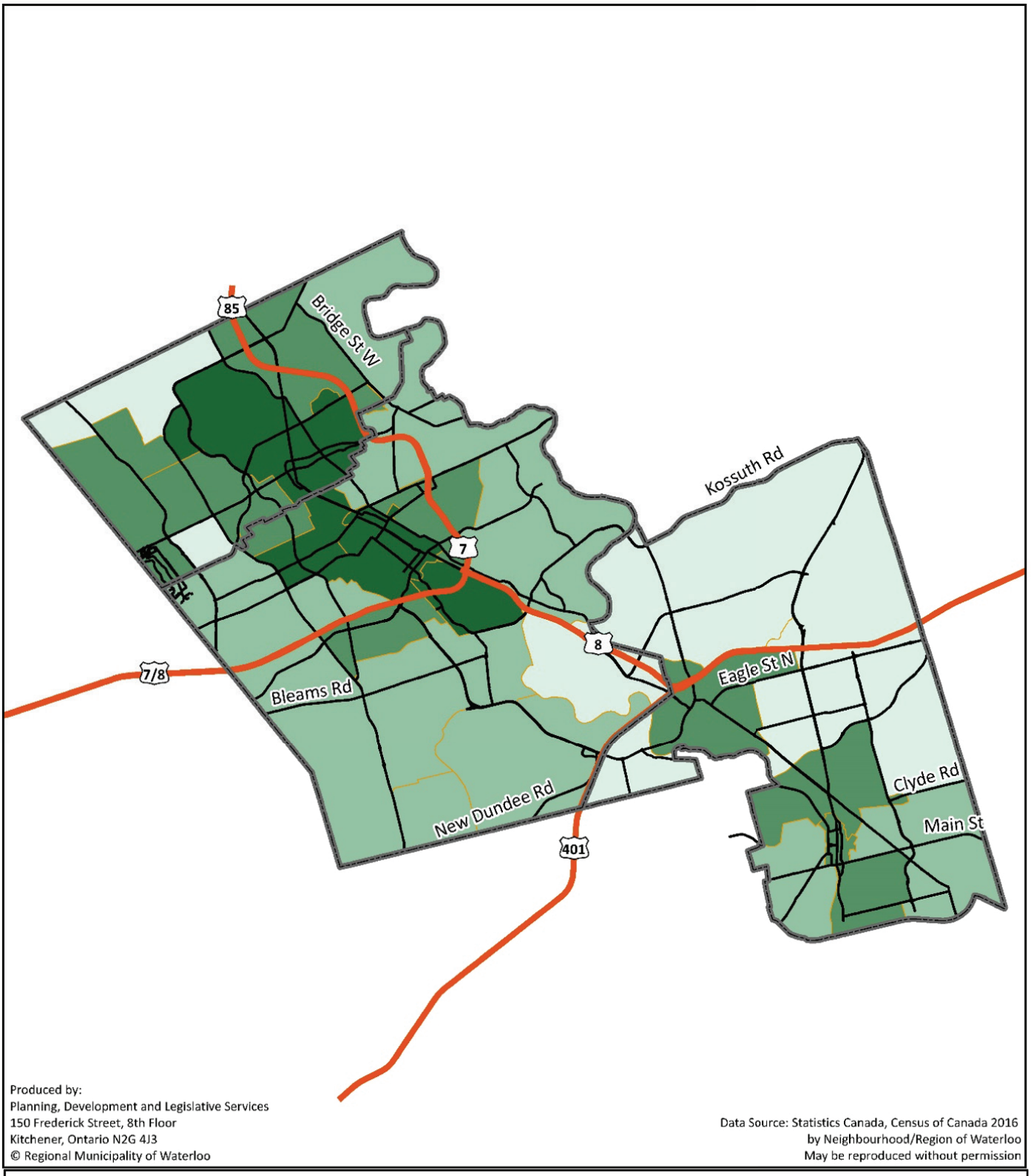
Region of Waterloo
Percent Visible Minority (Census 2016)
Regional Municipal Boundaries
6 to 11.4 Percent
11.5 to 21.5 Percent
21.6 to 31 Percent
31 to 46 Percent
0
2,500
5,000
Meters



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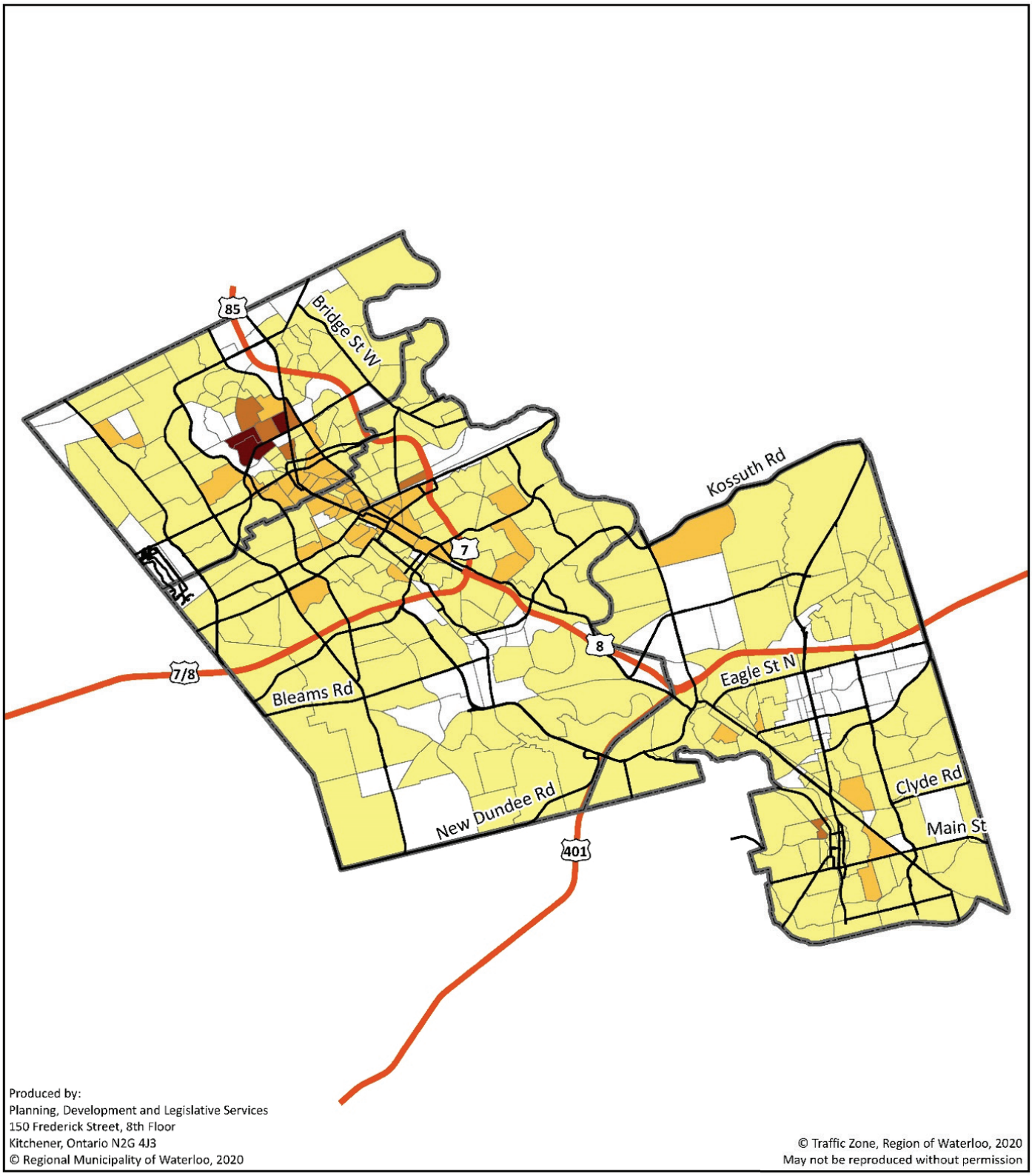
Data Source: Statistics Canada, Census of Canada 2016
by Neighbourhood/Region of Waterloo

Region of Waterloo

Low Income Households based on LICO-AT (Census 2016)

- Regional Municipal Boundaries
- 0 to 3 Percent
- 3 to 6 Percent
- 6 to 10 Percent
- 10 to 22 Percent

0 2,500 5,000 Meters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Kossuth Rd
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Bleams Rd
Eagle St N
Clyde Rd
Main St
New Dundee Rd
401
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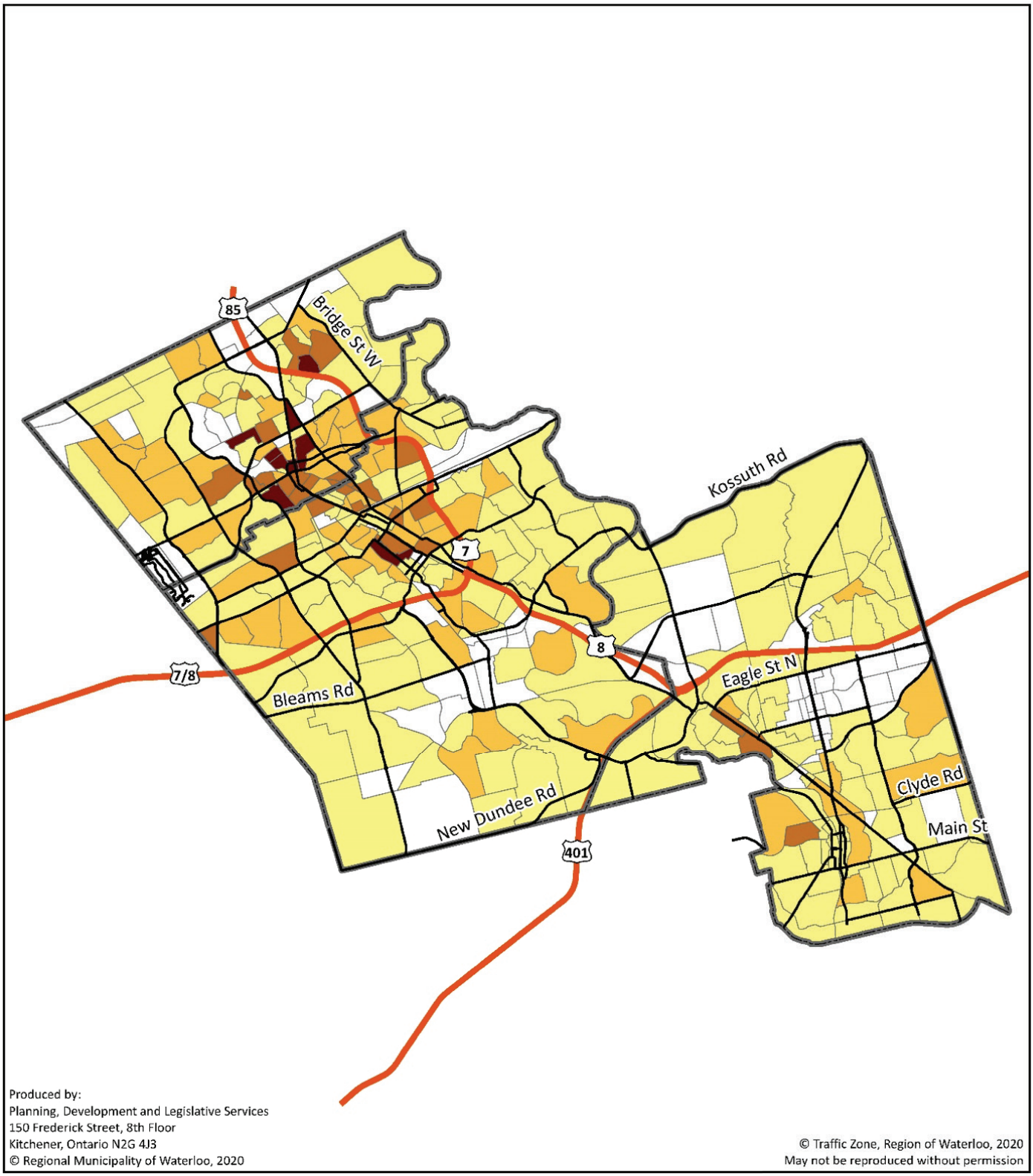
Region of Waterloo
Percent of Walking Primary Mode Share
Regional Municipal Boundaries
0 to 10 Percent
10 to 25 Percent
25 to 50 Percent
50 to 100 Percent
No Data
0
2,500
5,000
Meters



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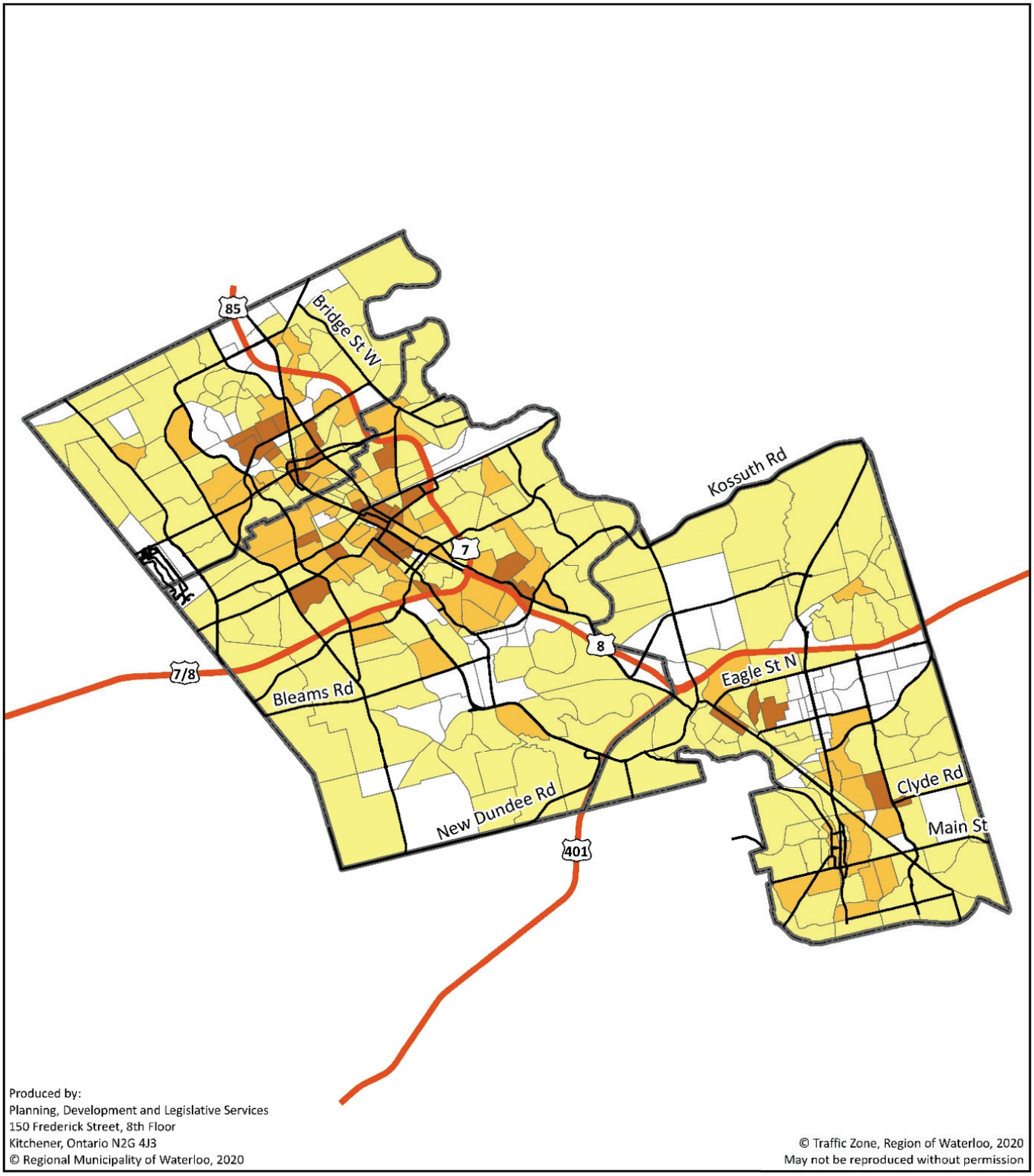
Region of Waterloo

Percent of Cycling Primary Mode Share

- Regional Municipal Boundaries
- 0 to 1 Percent
- 1 to 5 Percent
- 5 to 10 Percent
- 10 to 45.56 Percent
- No Data

0 2,500 5,000 Meters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Bridge St W
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Eagle St N
Clyde Rd
Main St
New Dundee Rd
401
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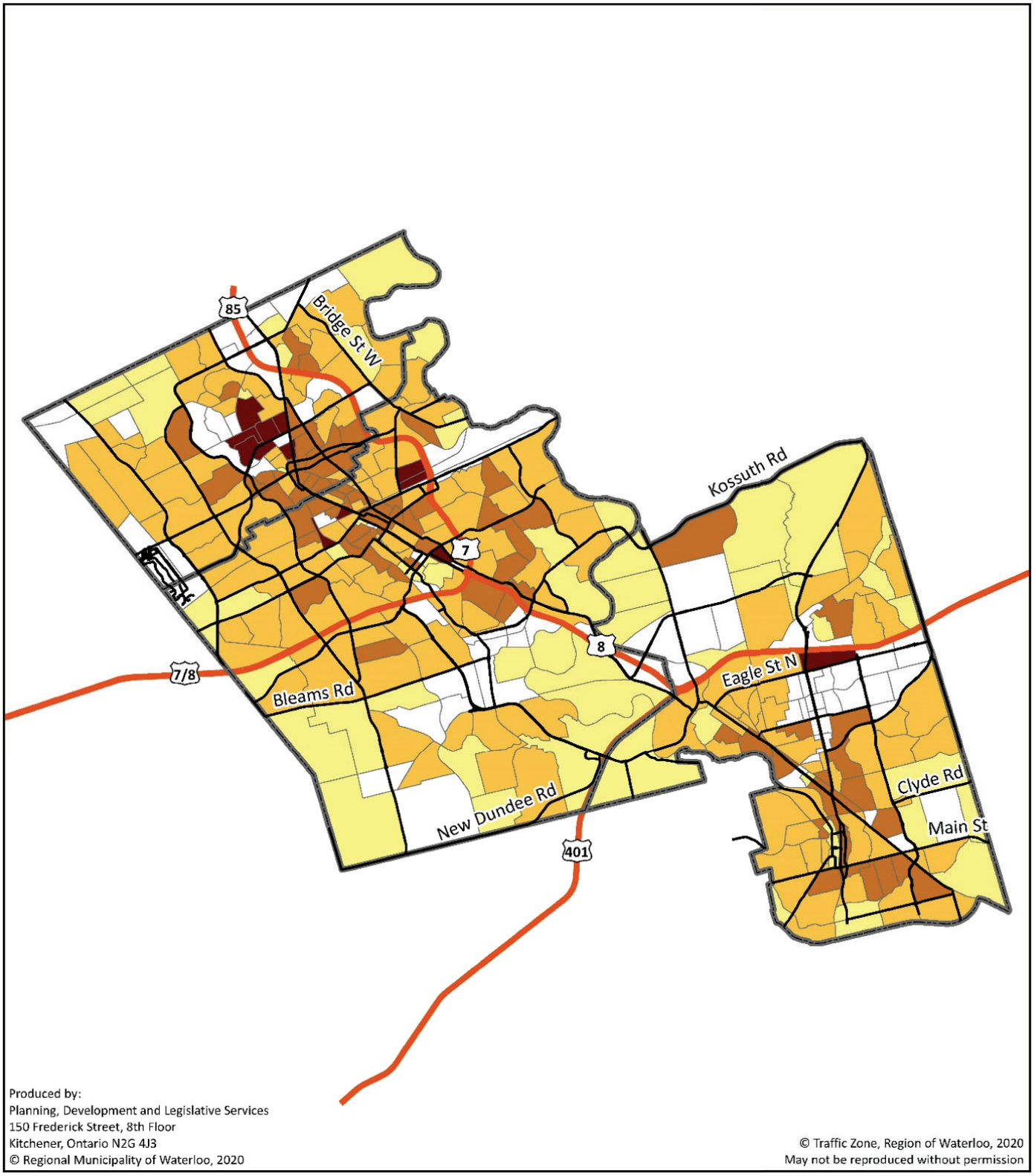
Region of Waterloo
Percent of Household without a Car
Regional Municipal Boundaries
0 to 10 Percent
10 to 25 Percent
25 to 50 Percent
50 to 100 Percent
No Data
0
2,500
5,000
Meters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Eagle St N
Clyde Rd
Main St
New Dundee Rd
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Region of Waterloo
Percent of Trips 0-2 KM
Regional Municipal Boundaries
0 to 10 Percent
10 to 25 Percent
25 to 50 Percent
50 to 100 Percent
No Data
0
2,500
5,000
Meters


85
Bridge St W
Kossuth Rd
7
8
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Bleams Rd
Eagle St N
Clyde Rd
Main St
New Dundee Rd
401
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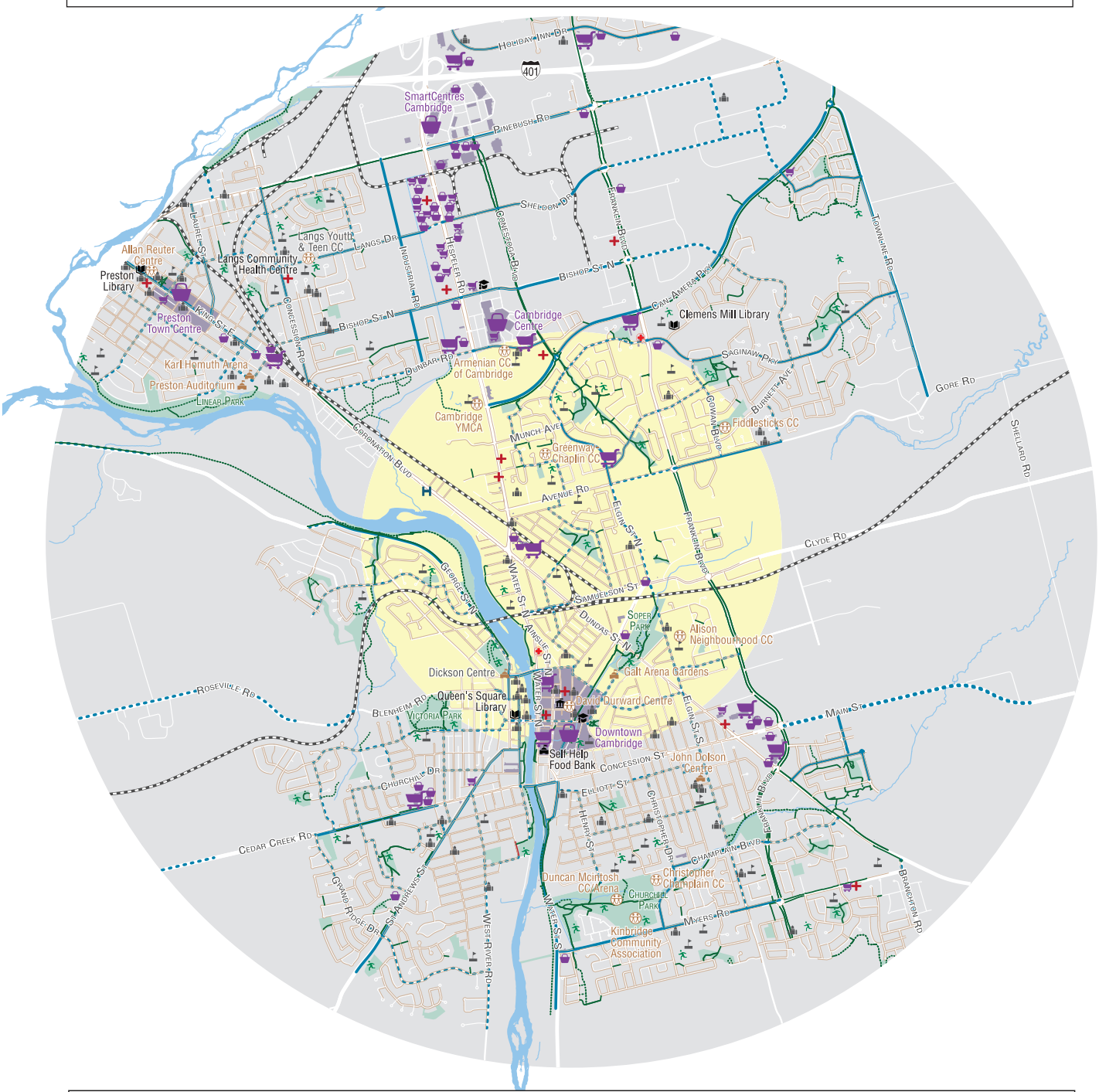
Region of Waterloo
Percent of Trips 2-5 KM
Regional Municipal Boundaries
0 to 10 Percent
10 to 25 Percent
25 to 50 Percent
50 to 100 Percent
No Data
0
2,500
5,000
Meters

APPENDIX D:
Asset maps for target neighbourhoods

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

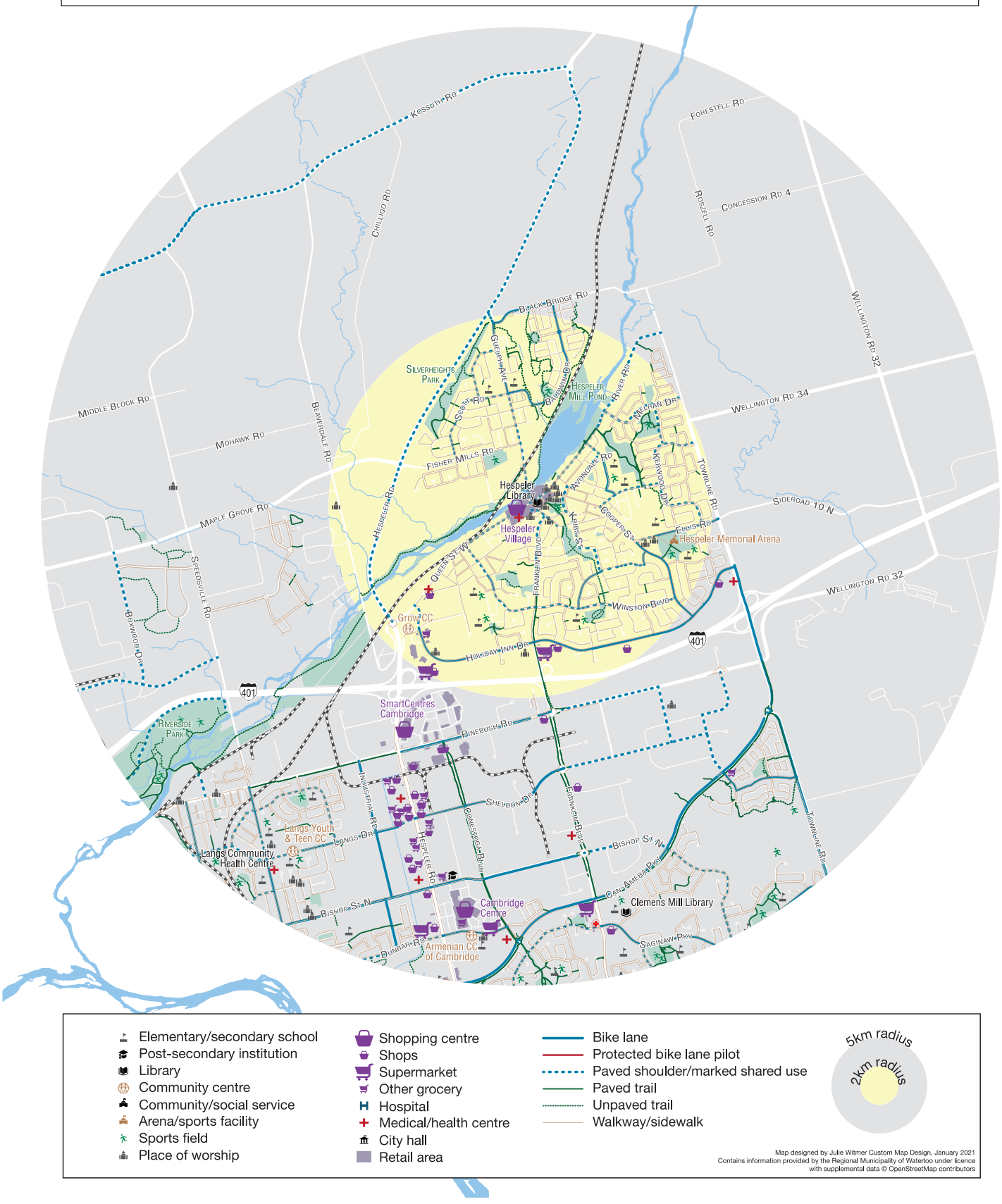
Elgin Park - North Galt
Active Transportation Hub



- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk
- 5km radius
- 2km radius

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

Hespeler
Active Transportation Hub



- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

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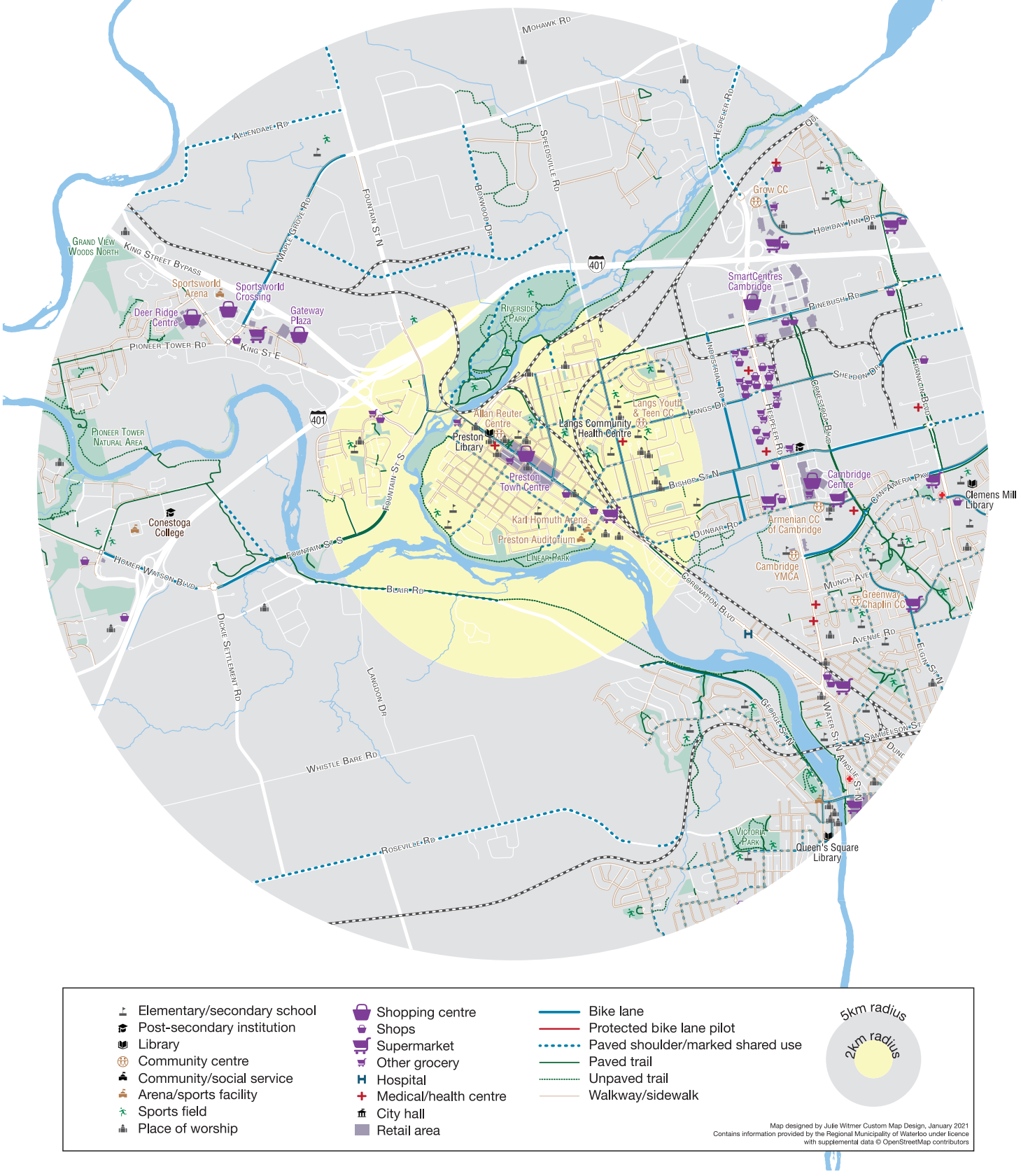
Preston Central
Active Transportation Hub

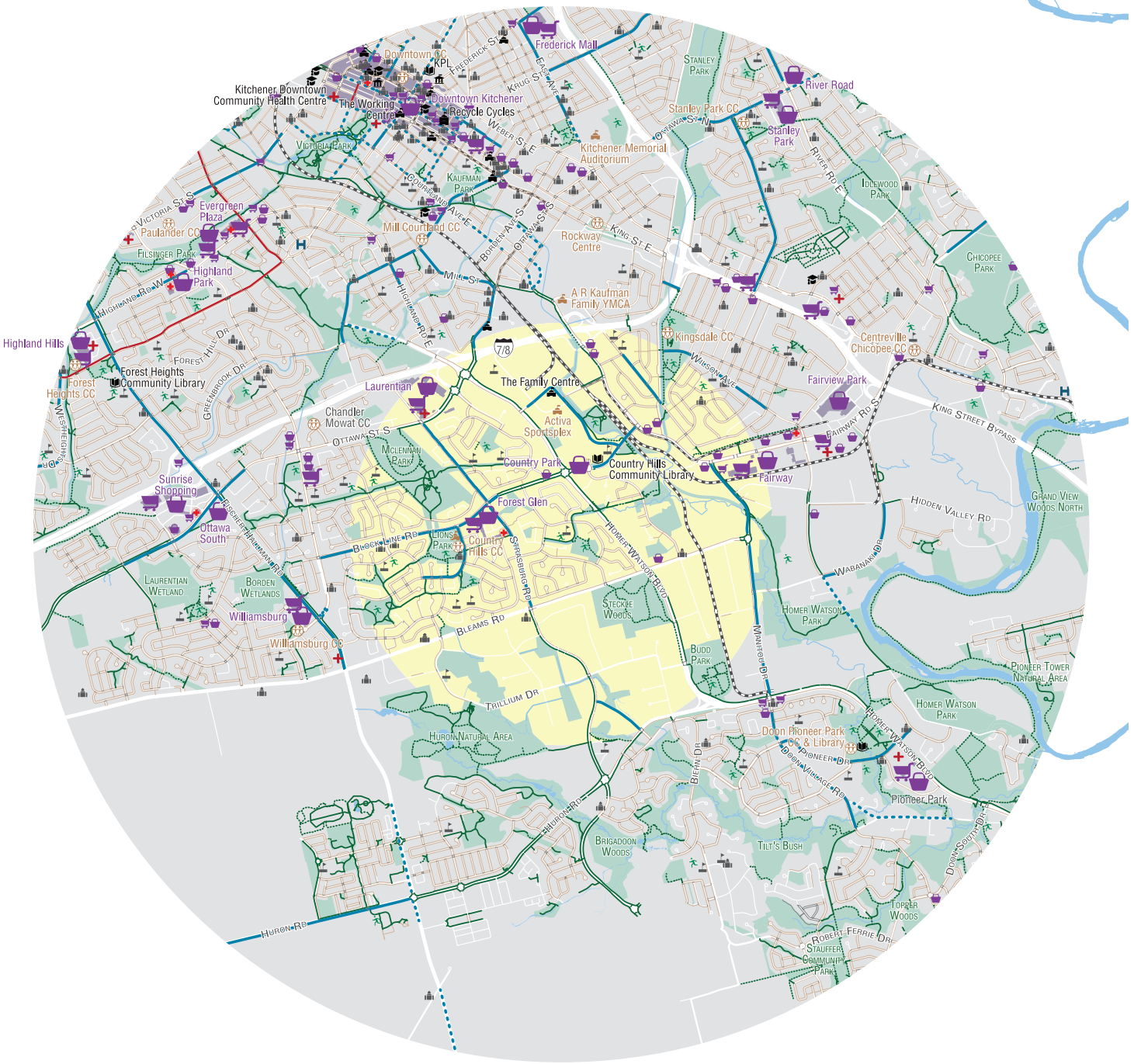


- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- H Hospital
- \+ Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

Country Hills
Active Transportation Hub



- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

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Reducing Emissions. Enriching Lives.

Downtown Kitchener
Active Transportation Hub

- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

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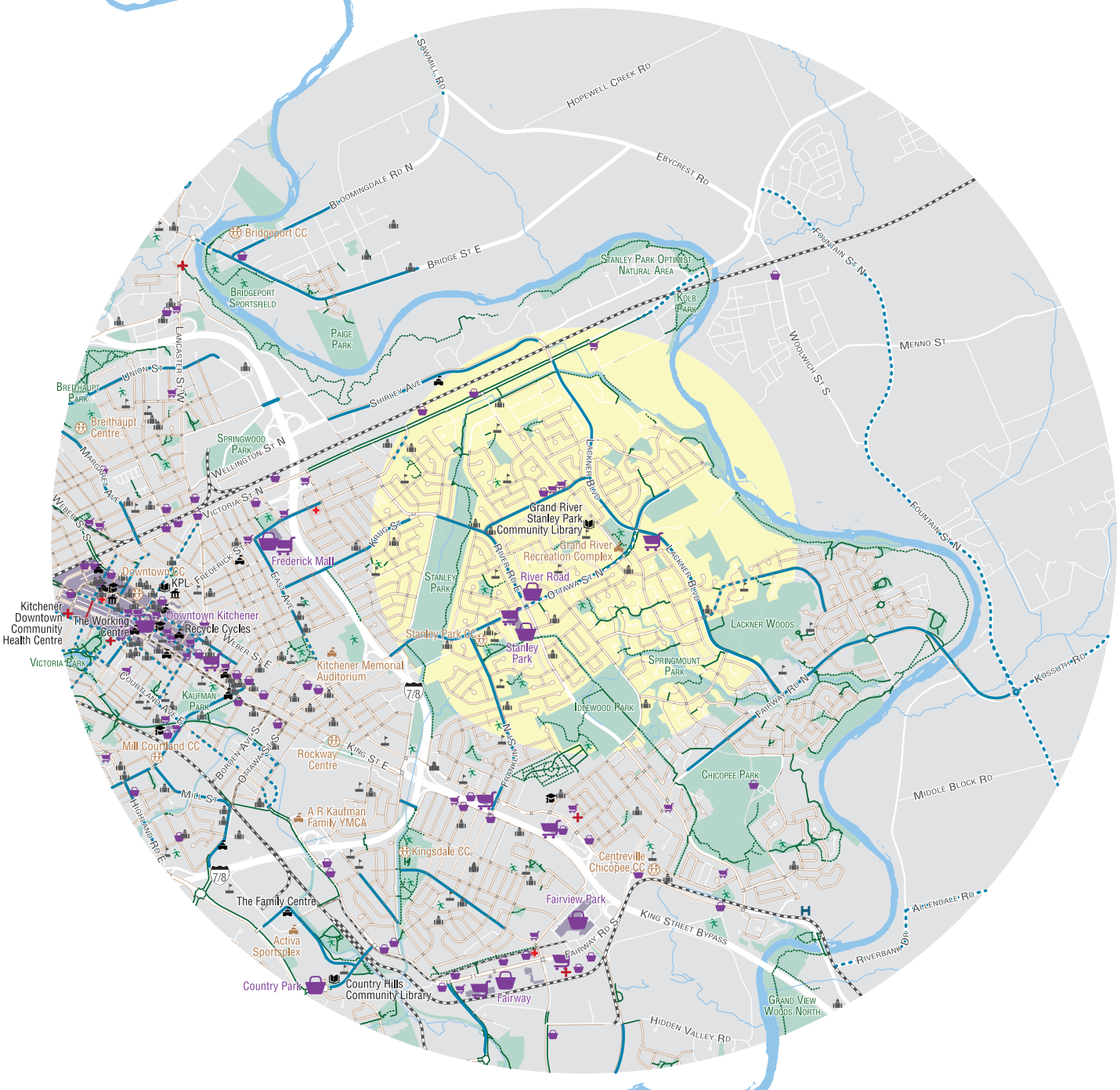
CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

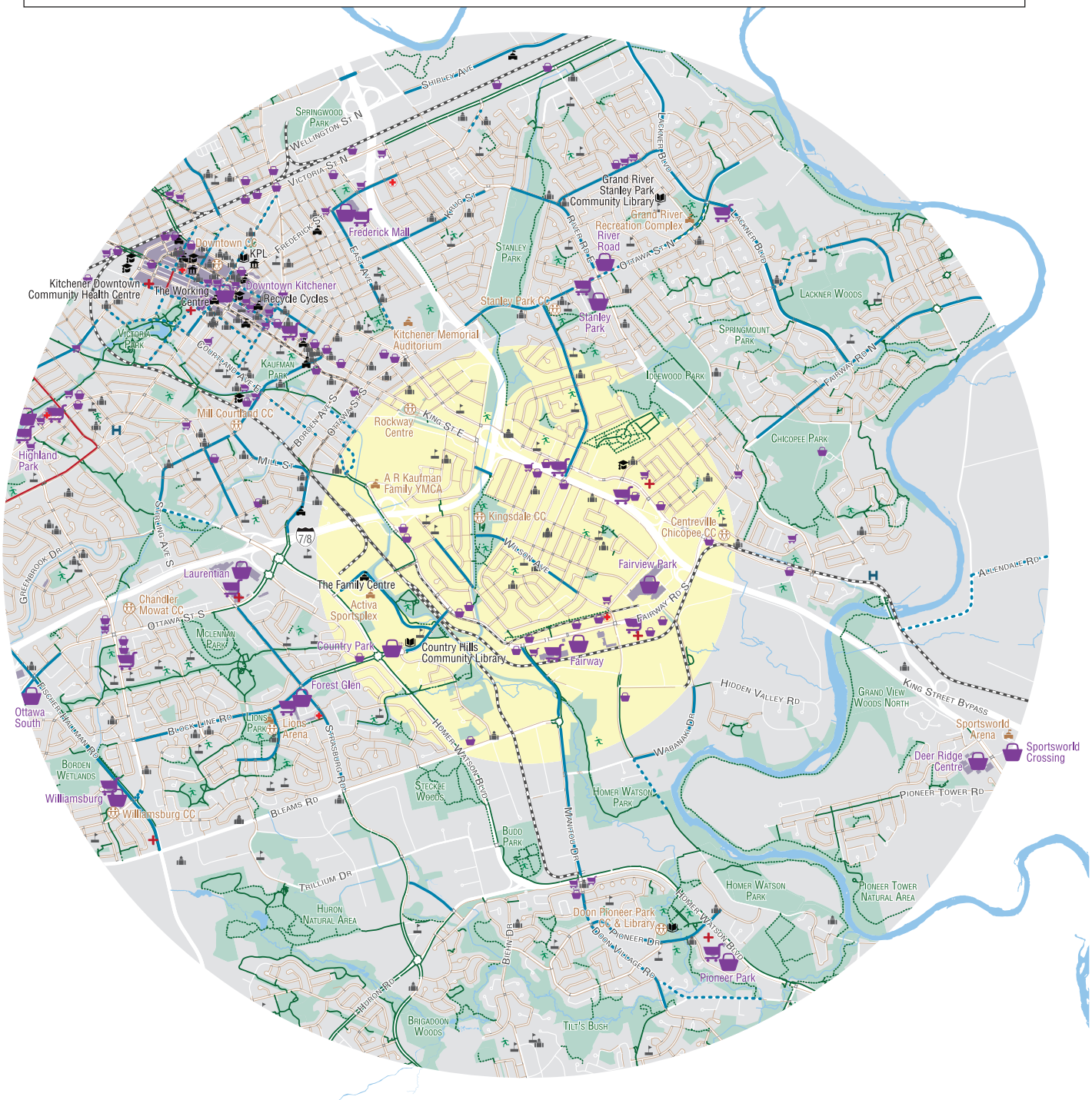
Grand River
Active Transportation Hub



- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk
- 5km radius
- 2km radius

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

Vanier - Rockway
Active Transportation Hub



- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk
- 5km radius
- 2km radius

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

Victoria Hills - Paulander

Active Transportation Hub

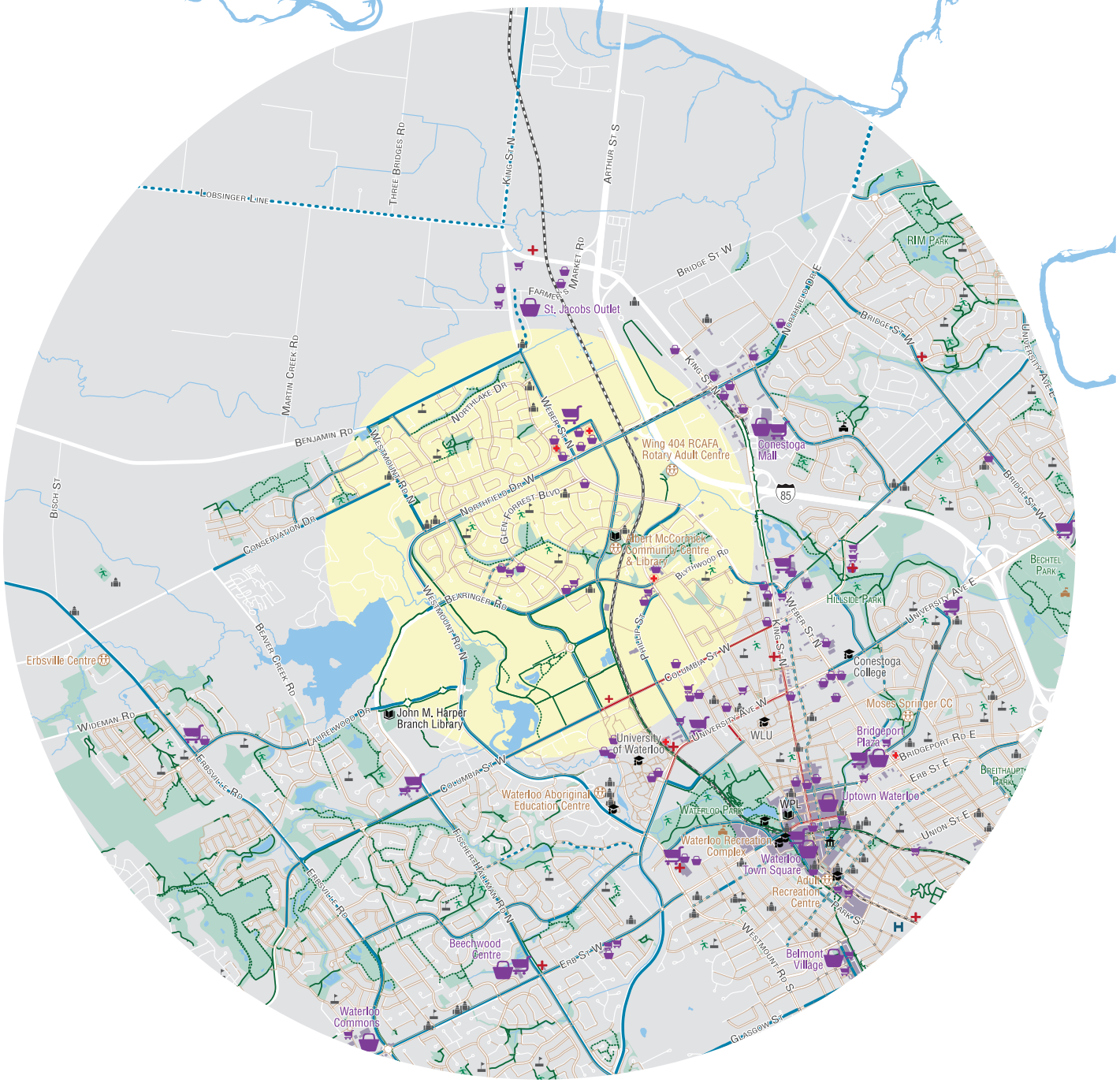
- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

Map designed by Julie Witmer Custom Map Design, January 2021

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

Lakeshore Village/Sunnydale
Active Transportation Hub



- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

CLIMATE ACTION WR
Reducing Emissions. Enriching Lives.

Waterloo Central
Active Transportation Hub

- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

Map designed by Julie Witmer Custom Map Design, January 2021
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Westvale
Active Transportation Hub

- Elementary/secondary school
- Post-secondary institution
- Library
- Community centre
- Community/social service
- Arena/sports facility
- Sports field
- Place of worship
- Shopping centre
- Shops
- Supermarket
- Other grocery
- Hospital
- Medical/health centre
- City hall
- Retail area
- Bike lane
- Protected bike lane pilot
- Paved shoulder/marked shared use
- Paved trail
- Unpaved trail
- Walkway/sidewalk

5km radius
2km radius

APPENDIX E:
Lists of potential partners and target neighbourhoods

▷ The potential partners excel sheet is available upon request of the ClimateActionWR team. The spreadsheet includes a list of potential partners and their evaluation criteria.

The table below lists the identified target neighbourhoods for active transportation hubs and how they are rated in the areas of active transportation potential, walking/cycling mode share, and prevalence of underserved populations. Neighbourhoods in red are those that are potential full time hub sites, with a total of two sites to be developed: one in Cambridge and one in Waterloo. Part time hubs are recommended for the remaining neighbourhoods.

Neighbourhood	City	Active Transportation Potential						Walking/Cycling Mode Share				Prevalence of Underserved Population			
		Cycling potential map	% homes with no car	% trips 0-2 km	% trips 2-5 km	Walkscore	Population density	Walk commuting mode share	Cycle commuting mode share	% walking 1' mode share	% cycling 1' mode share	Prevalence of low income	% immigrants	% visible minorities	From equity map
Elgin Park/North Galt	*Cambridge*	*high*	*high*	*high*	*high*	*med*	*med*	*med*	*low*	*low*	*low*	*high*	*high*	*high*	*high*
Preston Central	*Cambridge*	*high*	*high*	*high*	*high*	*med*	*high*	*high*	*med-high*	*low*	*med*	*med*	*low*	*low*	*low*
Hespeler	*Cambridge*	*med-high*	*low*	*med*	*med-high*	*med*	*med-high*	*low*	*low*	*low*	*low*	*low*	*low-med*	*med*	*low*
Victoria Hills/Paulander	*Kitchener*	*high*	*high*	*high*	*high*	*med*	*high*	*med*	*low*	*low-med*	*med*	*high*	*high*	*high*	*med*
Vanier/Rockway	*Kitchener*	*high*	*med*	*high*	*med*	*med*	*high*	*med-high*	*low-med*	*low*	*low*	*high*	*high*	*high*	*med*
Grand River	*Kitchener*	*high*	*low*	*med-low*	*high*	*med*	*high*	*low-med*	*low*	*med*	*low*	*med*	*med-high*	*low-med*	*low*
Country Hills	*Kitchener*	*med-high*	*high*	*low-med*	*high*	*med*	*high*	*low-med*	*low*	*low*	*low*	*med*	*med-high*	*med*	*high*
Downtown	*Kitchener*	*high*	*high*	*med*	*med*	*high*	*med-high*	*high*	*high*	*med*	*high*	*high*	*low*	*low-med*	*low-med*
Lakeshore Village/ Sunnydale	*Waterloo*	*N/A*	*low*	*med*	*high*	*med*	*med-high*	*high*	*med*	*low*	*low*	*high*	*high*	*high*	*N/A*
Central Waterloo	*Waterloo*	*N/A*	*high*	*high*	*high*	*high*	*med*	*high*	*med-high*	*high*	*high*	*high*	*med*	*high*	*N/A*
Westvale	*Waterloo*	*N/A*	*med*	*med*	*high*	*med*	*med-high*	*med*	*med*	*low*	*med*	*low*	*med*	*high*	*N/A*

Table 4 Target neighbourhoods for active transportation hubs. Neighbourhoods marked in red are those that are candidates for a full time hub, all other hubs are recommended for part time hubs.

APPENDIX F:
Potential sources of funding

Cambridge Grants to Groups
- For volunteer and non-profit organizations

Kitchener Love My Hood Matching Grant
- For resident and neighbourhood led projects that make great neighbourhoods
- Matching grants of up to $30K
- Contact: Zachary

Kitchener Community Grants
- For not for profit groups and organizations
- Grants for sports/cultural/community programming and services
- Contact: carrie.kozlowski@kitchener.ca

Kitchener In-Kind Facilities Grant
- For not for profit groups and organizations
- In kind funding for sports/cultural/community events in municipal facilities
- Contact: carrie.kozlowski@kitchener.ca

Waterloo Community Cash Grants
- For non for profit and community organizations
- Support recreation, art, sports, culture, festivals and neighbourhood participation
- Project and operating grants of up to $5K
- Contact: lynn.dicksegley@waterloo.ca

Waterloo Neighbourhood Matching Fund
- For neighbourhood based programs that bring neighbours together
- Contact: neighbourhoods@waterloo.ca

Cowan Foundation
- For charitable organizations that have an impact on the priority areas of children/youth and health/well-being
- Contact: info@cowanfoundation.ca

Lyle S Hallman Foundation
- For charitable organizations in Waterloo Region
- Support health, education and children's initiatives that inspire and grow individual and community potential
- Contact: see website

Kitchener Waterloo Community Foundation
- For community organizations
- Have annual target areas of focus
- Contact: see website Canadian Tire JumpStart Program
- For charities and qualified donees (Cities of Cambridge, Kitchener, Waterloo are qualified donees)
- Support recreational programming for kids 4-18 in financial need
- Currently funds Cycling Into the Future
- Contact: see website

Sources of funding used by other bike hubs:
- United Way
- Ontario Ministry of Health
- City of Toronto Waste Management (big funder of bike hubs)
- TD Friends of the Environment
- Ontario Trillium Foundation
- Environment and Climate Change Canada Grants (large grants available)
- MLSE Foundation
- Metcalf Foundation

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