City of Mississauga

Agenda

MISSISSAUGA

POST-MEETING

General Committee

Date: October 18, 2023

Time: 9:30 AM

Location: Council Chambers, Civic Centre, 2nd Floor
300 City Centre Drive, Mississauga, Ontario, L5B 3C1
and Online Video Conference

Members

Mayor Bonnie Crombie	
Councillor Stephen Dasko	Ward 1
Councillor Alvin Tedjo	Ward 2
Councillor Chris Fonseca	Ward 3
Councillor John Kovac	Ward 4
Councillor Carolyn Parrish	Ward 5
Councillor Joe Horneck	Ward 6
Councillor Dipika Damerla	Ward 7 (Chair)
Councillor Matt Mahoney	Ward 8
Councillor Martin Reid	Ward 9
Councillor Sue McFadden	Ward 10
Councillor Brad Butt	Ward 11

To Request to Speak on Agenda Items - Advance registration is required. To make a Deputation please email Allyson D'Ovidio, Legislative Coordinator at allyson.dovidio@mississauga.ca or call 905-615-3200 ext. 8587 no later than **Monday, October 16, 2023 before 4:00 PM**. **Questions for Public Question Period -** Questions for Public Question Period should be provided to the Legislative Coordinator at least 24 hours in advance of the meeting. Comments submitted will be considered as public information and entered into the public record. **Please note the General Committee meeting will be streamed and a video will be posted afterwards.**

Contact

Allyson D'Ovidio, Legislative Coordinator, Legislative Services
905-615-3200 ext. 8587 | Email:allyson.dovidio@mississauga.ca

Find it Online

http://www.mississauga.ca/portal/cityhall/councilcommittees

An asterisk (*) symbol indicates an Item that has been either Revised or Added

1. CALL TO ORDER

2. INDIGENOUS LAND STATEMENT

3. APPROVAL OF AGENDA

4. DECLARATION OF CONFLICT OF INTEREST

5. MINUTES OF PREVIOUS MEETING

5.1 General Committee Minutes - October 4, 2023

6. PRESENTATIONS - Nil

7. DEPUTATIONS

7.1 John Hobbins, Director of Education and Arti Javeri, Vice President of Partnerships, First Robotics Canada regarding the Ontario Robotics Championship

*REVISED PRESENTATION

7.2 Item 10.1 - Mattea Turco, Transportation Planner and Matthew Sweet, Manager, Active Transportation

*7.3 Item 10.1 - Rahul Mehta, Resident and Founder, Sustainable Mississauga, Co-Founder, Stop Sprawl Peel

*7.4 Item 10.1 - Shoaib Ahmed, CEO, SCOOTY (Scooty Mobility Inc.)

*7.5 Item 10.1 - Deborah Goss, Resident

8. PUBLIC QUESTION PERIOD - 15 Minute Limit

Public Comments: Advance registration is required to participate and/or to make comments in the public meeting. Any member of the public interested in speaking to an item listed on the agenda must register by calling 905-615-3200 ext. 8587 or by emailing allyson.dovidio@mississauga.ca by **Monday, October 16, 2023 before 4:00 PM.**

Pursuant to Section 58 of the Council Procedure By-law 0044-2022, as amended:

General Committee may grant permission to a member of the public to ask a question of General Committee, with the following provisions:

1. Questions may be submitted to the Clerk at least 24 hours prior to the meeting;
2. A person is limited to two (2) questions and must pertain specific item on the current agenda and the speaker will state which item the question is related to;
3. The total speaking time shall be five (5) minutes maximum, per speaker, unless extended by the Mayor or Chair; and

4. Any response not provided at the meeting will be provided in the format of a written response.

9. CONSENT AGENDA

10. MATTERS TO BE CONSIDERED

10.1 Shared Micro-mobility Program

10.2 Proposed Street Names to be assigned to public and private roads within an approved development site in the City of Mississauga (Ward 1)

10.3 Proposed re-naming of Streetsville Kinsmen Senior Citizen Centre located at 327 Queen Street South to ‘Streetsville Heritage Hall’ (Ward 11)

10.4 Single Source Contract Award for Structural Fire Fighting Bunker Gear (PRC004248, PPE Solutions)

11. ADVISORY COMMITTEE REPORTS

11.1 Environmental Action Committee Report 6 - 2023 dated October 3, 2023

11.2 Mississauga Cycling Advisory Committee Report 5 - 2023 dated October 10, 2023

12. CORRESPONDENCE

*12.1 Item 10.1 - A letter dated October 18, 2023 from Bob Blazevski, Vice President, Port Credit West Village Partners Inc. (Brightwater) regarding the Shared Micro-mobility Program Report

*12.2 Item 10.1 - A letter dated October 16, 2023 from Brian Sutherland, Lakeview Community Partners Limited regarding the Shared Micro-mobility Program Report

*12.3 Item 10.1 - An email dated October 16, 2023 from Vicki Tran, Mississauga Cycling Advisory Committee Citizen Member regarding the Shared Micro-mobility Program Report

*12.4 Item 10.1 - An email dated October 16, 2023 from Brandon Wiedemann regarding the Shared Micro-mobility Program Report

*12.5 *Item 10.1 – A letter dated October 17, 2023 from Catherine Soplet, Resident regarding the Shared Micro-mobility Program report.

13. MATTERS PERTAINING TO REGION OF PEEL COUNCIL

14. COUNCILLORS' ENQUIRIES

15. OTHER BUSINESS/ANNOUNCEMENTS

16. NOTICES OF MOTION - Nil

Notices of Motion listed on the General Committee agenda are for information and will be listed on the next Council agenda for Council's consideration. Members of the public may speak to the Notice of Motion at the Council meeting.

17. CLOSED SESSION

(Pursuant to Section 239(2) of the *Municipal Act, 2001*)

17.1 The security of the property of the municipality or local board:

Delegation of Authority - Acquisition, Disposal, Administration and Lease of Land and Property – January 1, 2023 to June 30, 2023

17.2 Information explicitly supplied in confidence to the municipality or local board by Canada, a province or territory:

Update on Peel Transition (Verbal)

18. ADJOURNMENT


Mississauga - Home of *FIRST* since 2002
FIRST Robotics 2024 Ontario Provincial Championship Event
Destination: MISSISSAUGA
FIRST CANADA
FIRST LEGO LEAGUE
FIRST TECH CHALLENGE
FIRST ROBOTICS COMPETITION

Hazel commenting on the FIRST program in local schools 2004 / 2011

"Compliments to the staff of Rick Hansen Secondary School for their inspiring work.

The students, well, they'll be our future engineers and the future of Canada!"




FIRST Robotics Canada in Mississauga

More Than Robots!

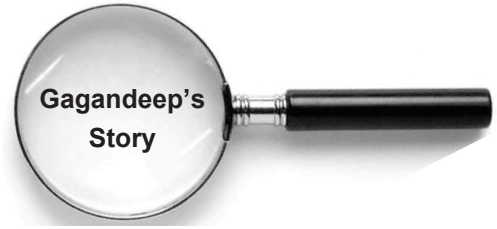
belong
ensuring youth, older adults and new immigrants thrive

- **Robotics in the Community:**
  - Mississauga - in 2012 - Central Library was the 1st Library to bring STEM programming across Ontario
  - Newcomer Programs with Poly Cultural Immigration Services
- **Robotics in Hospitals**
  - Erin Oaks Rehabilitation Centre for children Hospital, Holland Bloorview
- *FIRST* Programs in 9 of the 11 Mississauga wards
- 35 *FIRST* Teams in Mississauga
- 22 years ***FIRST*** events at Paramount Centre Mississauga!
- Partnerships with local companies:
  - Magna, Schneider Electric, Aecon, Lakeside Process Controls, Amdocs

FIRST CANADA

FIRST Alumni SUCCESS - A Talent Pipeline!

- GRAB - **AV Production Co.** / Cassandra - **Criminal Lawyer**
- Hunaid - **Neuro Surgeon** / Simrat - **Medicine** @ Oxford Univ.
- Phecda - **Sr. Engineer Microsoft/Teams**
- Sunjit - **Magna Sr. Engineer Mississauga**
- Thuvishan – **Sr. Eng. Educational Technology**
- 3 local youth winners of the prestigious Global **Dean's List Award**



Parent Community

belong
ensuring youth, older adults and new immigrants thrive

Nurturing Leaders

prosper
cultivating creative and innovative businesses

- ✓ Born, raised, educated & Company owner in Mississauga
- ✓ Team Mechanical lead and World Champion Robot Driver
- ✓ Acquired Advanced Manufacturing skills and "know how"
- ✓ Refined decision-making skills, collaborative problem-solving, and business excellence.
- ✓ ***FIRST*** experience in Mechanical Engineering & Business Management
- ✓ Mentors reinforcing ambition, self-belief, successful career pathways

… FIRST - More than Robots!

GAGANDEEP - STUDENT / Mentor & WINNING WORLD CHAMPIONSHIP IN 2013

2017

120+ VIPs

64 top teams

8,000 attendees

Significant global attention

100% Positive Feedback

2018

175+ VIP's

80 top teams

10,000 attendees

Front and centre of global stage

100% Positive Feedback

2019

250+ VIP's

80 top teams

10,000 attendees

Front and centre of global stage

100% Positive Feedback

2024 Funding Request
NEW Venue! International Center

mississauga tourism

MISSISSAUGA

100 High School Teams across Ontario
(students, parents, teachers, industry partners)

Expected Hotel room nights
1000+

Expected Attendees
10,000

Mississauga
Economic Development at event

FIRST CANADA

City Engagement and Sponsorship

- City of Mississauga logo
- Mayor Welcome Letter
- Mayor welcome at opening ceremonies
- ½ Page Advert in the Program Book
- 30-60 second commercial
- Special Invited Guest Lounge
- An invitation by the City to local companies and special guests
- Alumni engagement
- School Board engagement

Event Information

- 250+ VIP's
- 100 Top Ontario teams
- ~10,000 attendees
- ~24 teams to Worlds in Houston, TX
- Front and centre of global stage
- Webcast broadcast internationally

FIRST CANADA

Next Steps for the future?

- Moving forward the Partnership
- Funding Support
- City of Mississauga invited to all events
- Local schools field trips to event exposing them to STEAM (Science, Technology, Engineering, Arts, Math) and Skilled Trades

global city for creativity and innovation, with vibrant, safe and connected communities.

***FIRST* ROBOTICS COMPETITION**
ONTARIO PROVINCIAL CHAMPIONSHIP
APRIL 3 - 6, 2023
Come Watch Robots in Action!
The International Centre
6900 Airport Rd, Mississauga, ON L4V 1E8
FREE ADMISSION

So much more than Robots

Thank You !

Shared Micro-mobility Program

MISSISSAUGA

Agenda

1. Background
2. Phase 1 Follow-up
3. Implementation Plan
    a) System Overview
    b) Program Launch
    c) Monitoring and Evaluation Framework
    d) Compliance
    e) Budget
    f) Communication and Education

Background: Phase 1 Final Report

- In 2022 General Committee received the corporate report entitled “Micro-mobility Program Development Phase 1 Final Report”
- Recommending a privately owned and operated system that provides both electric pedal-assist bicycles and electric kick-style scooters in a hybrid model permitting docked and dockless parking.

Privately Owned & Privately Operated

Background: Provincial E-scooter Pilot

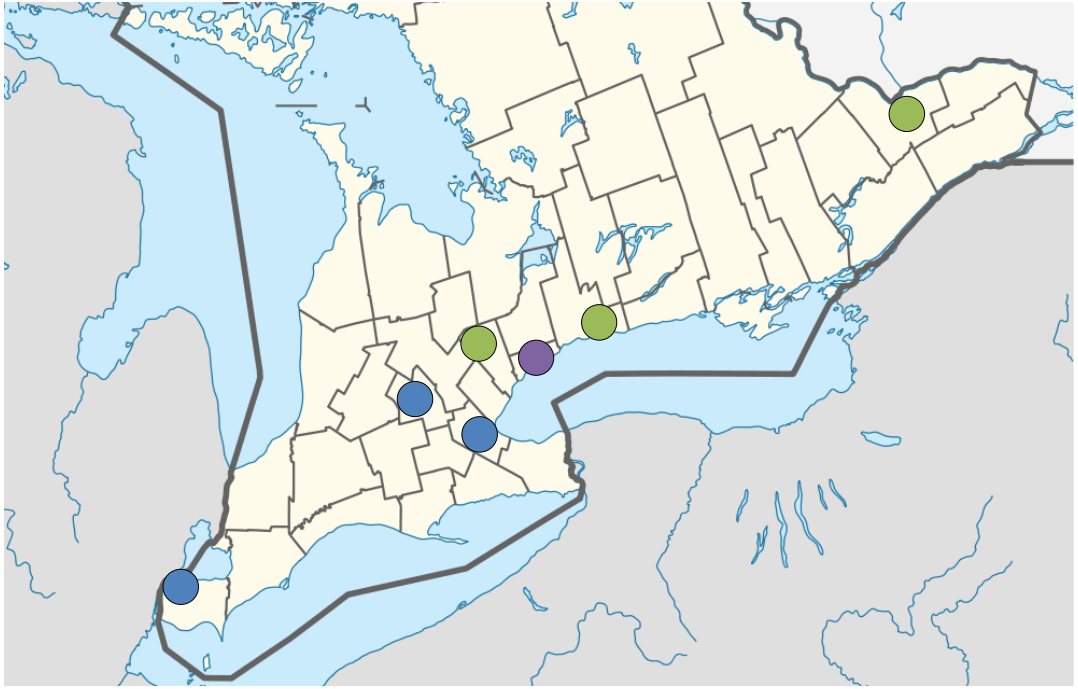
2020
Pilot Launch

2021
Opted into pilot

2025
Initial pilot end

2028
NEW proposed end

Background: Shared Systems in Ontario



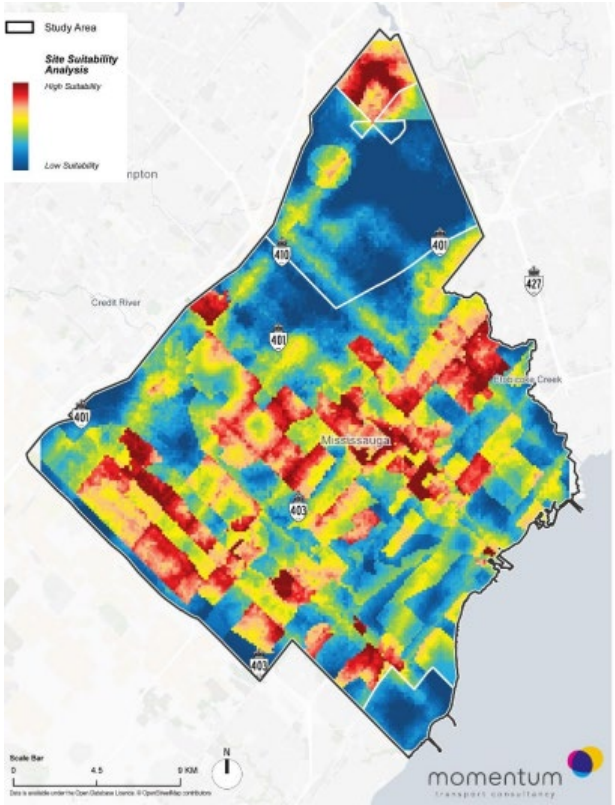
- **Bike and/or e-bikes:** City of Toronto
- **Bike and/or e-bikes and e-scooters:** City of Windsor, City of Hamilton, Region of Waterloo
- **E-scooters:** City of Ottawa, City of Brampton, City of Oshawa

Phase 1 Follow-up

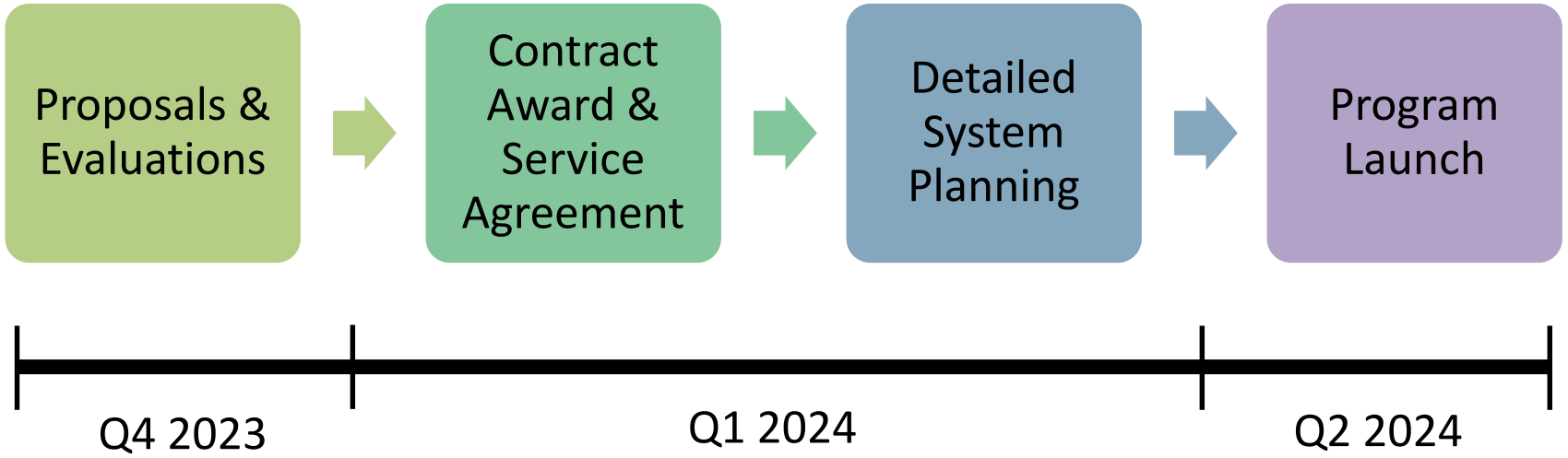
- [x] A review and response to the concerns raised by the AODA Alliance.
- [x] An in depth review of the legal and risk aspects of the program.
- [x] An outline of the concerns regarding safety on multi-use trails and in parks.
- [x] A summary on the City of Toronto's reasons for prohibiting e-scooters.

Implementation Plan: System Overview

- Shared micro-mobility vehicles are to be offered city-wide
- Initial fleet: 900 e-scooters and 300 e-bikes
- The system will provide 400 parking locations (city-wide) and support a hybrid model of docked and dockless parking.
- Estimated 1,500 to 2,000 daily trips.



Implementation Plan: Service Providers and Program Launch



Implementation Plan: Monitoring & Evaluation

Accessibility and Ease of Use

Addressing Climate Change

Building Sense of Community

Education

Leverage and Partner with Business

Mobility as A Service

Safety

Supporting Infrastructure & Policies

Implementation Plan: Service Agreement

- Customer Service
- Communications and Education
- Safety and Compliance
- Maintenance and Repair
- Distribution and Rebalancing
- Mobile Application and Website
- Data Collection and Privacy

Implementation Plan: Level of Service

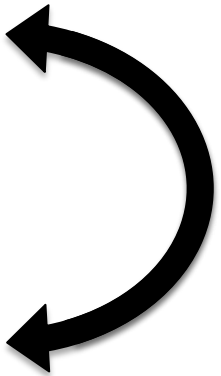
Service Provider

- Compliance with provincial requirements, municipal by-laws, and agreed upon level of service:
  - ☑ Devices properly parked / locked
  - ☑ Sidewalks free and clear
  - ☑ Devices rebalanced and available across the City

City of Mississauga Staff

- Monitor the program
- Charge penalties for non-compliance

Continued relationship



Implementation Plan: Budget

Revenues	Expenses
$5,000 Annual Administration Fee	Internal Staff Chargeback
$10 Annual Fee per E-Bike	Professional Services/Studies
$55 Annual Fee per E-Scooter	
$0.01 per trip for E-Bikes	
$0.05 per trip for E-Scooters	

Cost Neutral

Implementation Plan: Communication & Education

City of Mississauga Staff

- Education Workshops and Events
- Sharing information on various communication channels (website, social media, newsletters, etc.)
- Trail pop-ups

+

Service Provider(s)

- Communication & Education Plan
  - Beginner mode
  - Ongoing in-app education
  - Skills courses
  - Community outreach
  - Website, social media, etc.

In Summary

- Shared micro-mobility will provide additional transportation options supporting several strategic goals.
- Staff recommend that a Shared Micro-mobility Program of a hybrid docked and dockless, privately owned and operated system of e-bikes and e-scooters be implemented in Q2 2024.
- Staff will report to council in 2025 with an update.

City of Mississauga
Corporate Report

MISSISSAUGA

Date: October 3, 2023	Originator's files:
To: Chair and Members of General Committee	
From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works	Meeting date: October 18, 2023

Subject

Shared Micro-mobility Program

Recommendation

1. That a Shared Micro-mobility Program of a hybrid docked and dockless, privately owned and operated system of e-bikes and e-scooters, set for implementation in the second quarter (Q2) of 2024 as detailed in the report titled, "Shared Micro-mobility Program", dated October 3, 2023 from the Commissioner of Transportation and Works, be approved.
2. That cost centre 23729 – Micro Mobility Program be created with a gross budget of $62,285 and net budget of $0 in 2024, as outlined in the report from the Commissioner of Transportation and Works, dated October 03, 2023 entitled "Shared Micro-mobility Program".
3. That the Parks By-law 0197-2020 be amended to permit the use of e-scooters on select park trails, as outlined in the report from the Commissioner of Transportation and Works, dated October 03, 2023 entitled "Shared Micro-mobility Program".
4. That all necessary by-laws be enacted.

Executive Summary

- Staff recommend that a City-wide Shared Micro-mobility Program commence in Q2 2024.
- Staff are satisfied that all stakeholder concerns will be effectively addressed with the full implementation of the recommended program.
- The program will offer 900 e-scooter and 300 e-bikes through a hybrid model of docked and dockless parking.
- There is no financial impact. Full cost recovery.
- Staff will report to General Committee in 2025 on the status of the program.

Background

Phase 1: Program Development

On June 15, 2022, General Committee received the corporate report titled, “Micro-mobility Program Development Phase 1 Final Report” (GC-0409-2022). The goal of this first phase was to identify recommended vehicle types, system and governance models most appropriate for the City. General Committee directed that staff report back on the following:

a) A review and response to the concerns raised by the Accessibility for Ontarians with Disabilities Act Alliance;
b) An in-depth review of the legal and risk aspects of the program;
c) An outline of the concerns raised regarding safety on multi-purpose trails and in parks;
d) A summary on the City of Toronto’s reasons for prohibiting e-scooters; and
e) An implementation plan to for a shared micro-mobility service in Mississauga.

Provincial E-Scooter Pilot

On November 27, 2019, the Province of Ontario announced a five-year pilot program to allow e-scooters on municipal roads in Ontario, beginning on January 1, 2020 (O.Reg.389/19). The pilot is the Province’s primary tool in informing the feasibility of a permanent e-scooter framework. All necessary by-laws to permit and regulate the use of e-scooters in Mississauga were enacted in 2021.

The Province has since proposed to extend the pilot end date to 2028 to align the expiry periods for all provincial micro-mobility pilots in order to collect consistent data and better communicate the rules for each type of vehicle to municipalities and to the public.

Shared Systems in Ontario

Seven Ontario municipalities have shared micro-mobility systems.

- The City of Toronto continues to operate a bike share system that launched in 2011 and introduced e-bikes in 2020.
- The City of Ottawa renewed its shared e-scooter system for a fourth year in 2023;
- The City of Windsor renewed its shared e-bike and e-scooter system for a third year in 2023;
- The City of Hamilton launched a shared e-scooter system in addition to their existing bike share on April 2nd, 2023;
- The City of Brampton launched a shared e-scooter system on April 12, 2023;
- The Region of Waterloo launched a shared e-bike and e-scooter system on April 14, 2023; and,
- The City of Oshawa launched a shared e-scooter system in spring 2023.

Comments

This report is divided into two parts:

- Part 1: General Committee Response: The staff comments and responses to the GC direction as noted in the Background section above.
- Part 2: Implementation Plan: An overview of the recommended implementation plan for a Shared Micro-mobility Program.

PART 1 – GENERAL COMMITTEE RESPONSE

AODA Alliance

In response to the “Micro-mobility Program Development Phase 1” staff report, the AODA Alliance made a deputation to General Committee on June 15, 2022. The AODA Alliance outlined various accessibility and safety-related concerns regarding the potential implementation of a shared micro-mobility program. A detailed response to all of the concerns can be found in Appendix 1.

Staff are satisfied that all areas of the concerns will be effectively addressed throughout the implementation of the program. Further, staff intend to continue to meet regularly with the Accessibility Advisory Committee and external accessibility advocacy organizations, to proactively seek input from experts and community members and continuously evaluate the shared micro-mobility program.

Legal and Risk

The Province of Ontario’s e-scooter pilot program provides guidelines for municipalities who opt into the pilot and are considering a shared e-scooter system. The provincial guidelines for liability state that municipalities should require e-scooter companies to indemnify the municipality and hold appropriate insurance requirements, and determine the appropriate insurance type and coverage amounts.

Staff will require the successful service provider(s) to maintain general liability insurance. Coverage shall consist of a comprehensive policy of public liability and property damage insurance. Staff will require prospective service providers to provide full indemnity against all claims, demands, loss, costs, damages, actions, suits, adjuster fees, or other proceedings.

The request for proposals will clearly outline staff’s expectations of a service provider and the agreements between the City and the successful service provider(s) will ensure the appropriate insurance coverage is provided.

Multi-use Trails and Parks

As the number of device types permitted to use Multi-Use Trails increases, concerns around safety and trail etiquette have emerged. Common concerns include overcrowding, speeding, and poor trail etiquette.

In order to prevent feelings of overcrowding on Multi-Use Trails, devices in the shared micro-mobility system will be limited to major, paved trails that form an important part of the cycling network. They will not be permitted on smaller, local park trails.

Technology in the shared e-bike and e-scooter industry is capable of limiting the access and speed of any device across the City and within certain zones. Staff will work with the successful service provider(s) to identify and establish no-ride and slow-ride zones for e-bikes and e-scooters, which will see the speed of these devices lowered in higher conflict areas such as busy Multi-Use Trails.

City of Toronto

In a report to the Infrastructure and Environment Committee on April 14, 2021, City of Toronto staff concluded that accessibility barriers, safety concerns, and insurance issues remain unresolved for privately owned and rental e-scooters and recommended that the City not opt-in to the e-scooter pilot. A detailed summary of the City of Toronto's position as well as the City of Mississauga staff response to each concern can be found in Appendix 2.

Over two years have passed since the report was presented to City of Toronto Council. In that time, there have been technological advancements in the e-scooter industry as well as lessons learned from other municipalities such as the Cities of Ottawa, Windsor, Hamilton, Brampton, Oshawa, and the Region of Waterloo. City of Mississauga staff believe that the concerns raised in the City of Toronto's report can be effectively addressed through the recommended implementation plan.

PART 2 – IMPLEMENTATION PLAN

System Overview

A suitability analysis for a shared micro-mobility system was undertaken for the City of Mississauga by Momentum Transport Consultancy and can be found in Appendix 3. Staff considered these report findings alongside previous studies and current City Master Plans and recommend that:

- Shared micro-mobility vehicles be offered City-wide;
- The initial fleet consist of 900 e-scooters and 300 e-bikes; and
- The system will provide 400 parking locations (City-wide) and support a hybrid model of docked and dockless parking.

Based on this model and analysis, it is estimated that the system will generate 1,500 to 2,000 daily trips.

Service Providers and Program Launch

The program is recommended to commence in Q2 2024. The following provides a high-level overview of the next steps to acquiring a service provider(s):

Bid Proposal & Evaluation: Pending Council approval, staff will immediately commence the procurement process through a request for proposal. Mandatory technical submission requirements will be evaluated followed by a product demonstration for

select bidders. Following this evaluation, a contract(s) will be awarded for a three (3) year term. For a detailed list of requirements, the draft Statement of Work can be found in Appendix 4.

Contract Award & Service Agreement: Staff recommend seeking up to two (2) service providers to deliver a shared micro-mobility system for an initial term of three (3) years. The term may be extended by the City for an additional two-year term if desired. This would coincide with the conclusion of the Provincial Pilot.

Detailed System Planning: Once a service agreement is reached, the successful service provider(s) will begin work to identify exact locations for parking stations, and secure the necessary resources to successfully run the system.

Program Launch: Immediately following the program launch in Q2 2024, staff will continuously monitor and evaluate the program as detailed below.

Monitoring and Evaluation Framework

The following eight strategic pillars for micro-mobility in the City of Mississauga, endorsed by Council on December 9, 2020, will form the foundation of the program:

- Accessibility and Ease of Use – avoid creating accessibility barriers to the extent possible and ensure systems are available for use to all residents (geographically, temporally, financially, physically);
- Addressing Climate Change – reduce vehicular traffic congestion/move people rather than cars and improve mode share for active transportation;
- Build Sense of Community – nurture community by developing a vested interest in micro-mobility, including public art components;
- Education – improve residents' understanding of the rules of using micro-mobility systems;
- Leverage and Partner with Business – monetize or capitalize on the presence of micro-mobility, including sponsorship and the use of micro-mobility vehicles for goods movement;
- Mobility as a Service – provide a wide variety of ways to move around the City, including combining modes of travel;
- Safety – build complete streets, including separated active transportation corridors; and
- Supporting Infrastructure and Policies – create a robust and sustainable financial model, and address liability and risk.

The Monitoring and Evaluation Framework lays out the goals and objectives of the program, indicators of success, and a list of data staff will need to collect to evaluate the program. It can be found in Appendix 5. Staff will report to General Committee in 2025 with an update on the Shared Micro-mobility Program.

Compliance

Staff acknowledge that the improper use of vehicles in a shared micro-mobility system can create safety and accessibility concerns. To address those concerns, staff have set out clear requirements for the service provider(s) to meet.

Compliance is expected to be handled by the service provider(s). An agreement between the City and the service provider(s) will identify service levels for ensuring the system meets the requirements set out in the agreement. Penalties for different types of non-compliance by the service provider(s) have been developed.

Staff recognize that some intervention may be required if the service provider(s) fails to meet the level of service outlined in the agreement. Should City staff be required to intervene, the cost of that intervention (staff time, resources, etc.) will be charged to the service provider(s).

The shared micro-mobility program requires a continued relationship between staff and the service provider(s) to ensure success. Once the competitive procurement process is complete and the preferred service provider(s) have been chosen, City staff will monitor the roll out closely and meet with the micro-mobility provider(s) regularly to give real-time feedback and ensure corrective action is promptly carried out when needed.

Communication and Education

Staff run an annual Share the Trail Campaign to remind users of the importance of proper trail etiquette and encourage safe riding. The campaign includes sharing information through various communications channels, trail signage, education workshops and events, and pop-ups conducted by the City's Bike Ambassadors throughout the spring and summer months. These initiatives will continue with the shared micro-mobility program.

Leading up to the system launch, staff will work with the successful service provider(s) to develop a Marketing, Communication and Education Plan. The plan will ensure the service provider(s) disseminate clear and effective messaging throughout the program to diverse populations using a variety of communication methods.

Strategic Plan

The Shared Micro-mobility Program is aligned with the City's *Move* Strategic Pillar. It is also aligned with several other City strategic and master plans, including:

- Transportation Master Plan (2019): Action 22 recommends that the City investigate policy options to determine how the City can best work with and regulate micro-mobility technologies and vendors, including but not limited to bike share systems, e-bike systems, and e-scooter systems.
- Climate Change Action Plan (2019): Action 18-1 recommends that the City encourage and enable micro-mobility systems and establish a policy framework for shared micro-mobility systems in Mississauga.
- Economic Development Strategy (2020-2025): Priority 3, "Deliver Durable Infrastructure" recommends three Strategic Themes, including "Human Centred Development";

proactively establishing a regulatory framework for electric bicycles and scooters will help to better connect people to work or other destinations without relying on car travel.

Financial Impact

The recommended governance model for the City of Mississauga's Shared Micro-mobility Program is a privately owned and privately operated system. Under this model, permit fees can be set to offset City expenses.

The service provider will be charged an annual administration fee, an annual fee for each vehicle they have deployed within the City limits, and a portion of the fees they charged users for each trip. These fees are benchmarked based on those collected by peer cities.

Staff will also require a security deposit from the service provider(s). Should City staff be required to intervene, the cost of that intervention (staff time, resources, etc.) will be charged to the service provider and deducted from the security deposit.

The following table outlines the pro-rated 2024 and full year 2025 estimated revenues and expenses.

Shared Micro-Mobility Program – Cost Centre 23729		
Expenses:		
Description	**2024 Budget (Pro-Rated)**	**2025 Budget**
Internal Staff Chargeback	$39,785	$53,050
Professional Services/Studies	$22,500	$30,000
Total Expenses	$62,285	$83,050
Revenues:		
Description	**2024 Budget (Pro-Rated)**	**2025 Budget**
Annual Administration/Vehicle Fees	$43,125	$57,500
Trip Fees – E-Bikes	$1,200	$1,600
Trip Fees – E-Scooters	$17,960	$23,950
Total Revenues	$62,285	$83,050
Net Costs	**$0**	**$0**
Notes:		
The Preliminary Service Area Mapping study by Momentum estimates ~1500-2000 trips per day. Using the midpoint estimate of 1750 trips per day, maintaining the 3:1 ratio of e-scooters to e-bikes would result in 1,312.5 e-scooters trips per day and 437.5 e-bike trips per day.		
$0.01 per trip for e-bikes (x437.5/day)		
$0.05 per trip for e-scooters (x1,312.5/day)		
2024 Budget Pro-rated based on a Q2 2024 start.		

Conclusion

A Shared Micro-mobility Program will provide an additional transportation option for residents of Mississauga, supporting several strategic goals. Staff recommend that a Shared Micro-mobility Program of a hybrid docked and dockless, privately owned and privately operated system of e-bikes and e-scooters be implemented in the second quarter (Q2) of 2024. Staff will report to council in 2025 with an update on the Shared Micro-mobility Program.

Attachments

Appendix 1: Response to AODA Alliance Concerns
Appendix 2: E-scooters in the City of Toronto
Appendix 3: Preliminary Service Area Mapping
Appendix 4: Draft Statement of Work
Appendix 5: Monitoring and Evaluation Framework

Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

Prepared by: Mattéa Turco, Transportation Planner, Active Transportation

Appendix 1 – Response to AODA Alliance Concerns

The City of Mississauga is preparing to introduce a shared micro-mobility program. Active Transportation staff worked with IBI Group in 2022 to complete Phase 1 of the Micro-mobility Program Development project, identifying a recommended vehicle type, system model, and governance model most appropriate for the City. The staff report was considered by General Committee at its meeting on June 15, 2022.

In response to the staff report, the AODA Alliance made a deputation to General Committee outlining various accessibility related concerns regarding the potential implementation of a shared micro-mobility program.

Full List of Concerns Raised by the AODA Alliance

- Report Misses Key Disability Concerns
- City Staff Excessively Dazzled by "Micro-mobility"
- City Staff Didn't Study Harmful Impact of E-Scooters on Vulnerable People with Disabilities
- Safety and Accessibility Not Even Identified as Program Goals
- Report Inaccurately Claims that this Proposal Has No Financial Implications for the City of Mississauga
- Wrong to Claim Strong Public Support for E-Scooters
- Bogus Claim Geo-Fencing is Effective Solution
- Disability Safety Concerns Omitted From Staff Criteria for Evaluating Different Kinds of Vehicles
- City Staff's Hybrid Model for E-Scooter Problem Especially Harmful for Vulnerable People with Disabilities and Others
- Failure to Include Mississauga's Mandatory Duty Not to Create New Disability Barriers In Program Goals
- No Details on Vital Issue of Enforcement
- First Mile, Last Mile Benefit is an Unproven Smokescreen
- Staff Misses the Point on Equity and Accessibility
- Not Enough to Promise People with Disabilities More Consultations

Response to Key Concerns Raised by the AODA Alliance

Report Misses Key Disability Concerns

Accessibility was identified as a strategic pillar in the visioning sessions at the start of the Micro-mobility Program Development project.

Throughout the project, staff have kept safety and accessibility as high priorities when setting requirements for the service provider(s) and developing the program's Monitoring and Evaluation Framework. The framework will allow staff to assess the system as the program progresses so that the project goals and objectives are met.

Both accessibility and safety are key goals identified in the Monitoring and Evaluation Framework. An emphasis on ensuring accessibility in the system and preventing or mitigating

Appendix 1 – Response to AODA Alliance Concerns

the introduction of any barriers into the built environment is highlighted throughout the framework. Following the system launch, staff will work closely with the service provider(s) to continually adjust the program and improve safety and accessibility for all users should any concerns arise.

City Staff Didn't Study Harmful Impact of E-Scooters on Vulnerable People with Disabilities

IBI completed a review of micro-mobility systems in peer cities across North America to determine some of the key implications of different types of shared micro-mobility models. The review considered multiple criteria, including safety and accessibility, to evaluate the pros and cons of each vehicle type, governance model, and system model before recommending a preferred option for the City of Mississauga.

The City also approved the operation of privately owned e-scooters within the municipal boundary on public roadways with a posted speed limit of up to 50 km/h and cycling infrastructure (i.e. multi-use trails along roadways and bike lanes). Staff are monitoring public health data as well as any feedback or complaints related to e-scooters through an online forum and 311.

When setting requirements for the service provider(s) and developing the program's Monitoring and Evaluation Framework, staff have connected with peer cities in Ontario to learn best practices, understand the varied approaches to permitting e-scooters in their municipalities, and ensure the City of Mississauga's Shared Micro-Mobility Program has supporting infrastructure and policies in place to ensure success.

Safety and Accessibility Not Identified as Program Goals

On September 28, 2020, City Staff conducted a cross-departmental visioning session for micro-mobility in Mississauga. The session resulted in eight strategic pillars, intended to guide the micro-mobility project, as follows:

1. *Accessibility and Ease of Use* – avoid creating accessibility barriers to the extent possible and ensure systems are available for use to all residents (geographically, financially, physically);
2. *Addressing Climate Change* – reduce vehicular traffic congestion/move people rather than cars and improve mode share for active transportation;
3. *Build Sense of Community* – nurture community by developing a vested interest in micro-mobility, including public art components;
4. Education – improve residents' understanding of the rules of using micro-mobility systems;
5. *Leverage and Partner with Business* – monetize or capitalize on the presence of micro-mobility, including sponsorship and the use of micro-mobility vehicles for goods movement;
6. *Mobility as a Service* – provide a wide variety of ways to move around the city, including combining modes of travel;

Appendix 1 – Response to AODA Alliance Concerns

7. *Safety* – build complete streets, including separated active transportation corridors; and,
8. *Supporting Infrastructure and Policies* – create a robust and sustainable financial model, and address liability and risk.

A corporate report, including the above-mentioned vision, was considered by General Committee at its meeting on December 2, 2020 and received by Council on December 9, 2020.

The eight strategic pillars listed above form the foundation of the Monitoring and Evaluation Framework for the Shared Micro-mobility Program.

Wrong to Claim Strong Public Support for E-Scooters

Throughout the project, Staff have engaged with the public through various platforms to answer questions, listen to concerns, and ensure the proposed program meets the needs of the population it is intended to serve. Since February 2021, when the City's by-laws were updated to permit and regulate the use of personal e-scooters in the City of Mississauga, a webpage has been available on the City's website to provide residents with information on the provincial pilot and allow them to ask questions and voice concerns. Staff have continued to engage with residents through social media, an open house, online survey, and committee presentations and consultation.

The feedback received through these varying means of engagement has shown strong support for a shared micro-mobility system in Mississauga.

The Monitoring and Evaluation Framework will help staff further gauge support by engaging with a broader population and have voices from across the City provide feedback to ensure the micro-mobility system remains responsive to the needs of Mississauga residents.

Bogus Claim Geo-Fencing is Effective Solution

An important part of Phase 1 of the Micro-mobility Program Development project was a peer review of micro-mobility systems in cities across North America. Geo-fencing has been used by numerous municipalities as one of many tools used to address safety and accessibility concerns.

Geo-fencing is not the only solution to the concerns raised by the AODA Alliance. There is no one solution. Each concern will be evaluated and a suitable tool, or series of tools, found to address that concern. Staff's list of requirements from service providers will see a number of tools employed to help address safety and accessibility concerns around sidewalk riding and misparked devices.

As part of the evaluation process for securing a service provider, Staff will require demonstrations to field-test the proposed technology prior to awarding a contract. Members from the City's Accessibility Advisory Committee have been invited to take part in the demonstrations. The competitive procurement process can ensure that the service provider(s) awarded the contract meet the program's requirements.

Appendix 1 – Response to AODA Alliance Concerns

Disability Safety Concerns Omitted From Staff Criteria for Evaluating Different Kinds of Vehicles

The safety of vulnerable road users has been considered throughout the Micro-mobility Program Development project, from its visioning, to the use of personal e-scooters in the City, and as key evaluation criteria for Phase 1 of the project.

In order to limit conflicts between pedestrians and e-scooter users, the City of Mississauga's existing Traffic By-Law does not allow the use of private e-scooters on sidewalks and City-owned land not designated as public roadways (e.g. Transit terminals). The same by-laws would apply to a public e-scooter share system.

Potential impacts on vulnerable road users were considered when evaluating the vehicle type, governance model, and system model. Those potential impacts were further explored when setting the requirements for a successful service provider(s) and developing a Monitoring and Evaluation Framework to ensure safety and accessibility features and innovations are prioritized and any concerns are continually addressed throughout the program.

City Staff's Hybrid Model for E-Scooter Problem Especially Harmful for Vulnerable People with Disabilities and Others

For the hybrid system model, some challenges relating to improper parking may persist, leading to increased enforcement requirements compared to a dock-based system. Staff have set out a number of requirements for the successful service provider(s) to proactively address these concerns, including a lock-to requirement for devices, and will work closely with the service provider(s) to monitor the system and make adjustments to the program should any concerns persist.

The City of Ottawa is in its fourth year of running a shared e-scooter system and has adjusted its approach to addressing safety and accessibility concerns each year. When setting requirements for the service provider(s) and developing the program's Monitoring and Evaluation Framework, City of Mississauga staff have connected with peer cities in Ontario to learn best practices, understand the varied approaches to permitting e-scooters in their municipalities, and ensure Mississauga's Shared Micro-Mobility System has supporting infrastructure and policies in place to ensure success.

Failure to Include Mississauga's Mandatory Duty Not to Create New Disability Barriers In Program Goals

E-scooters themselves are not barriers to accessibility, but their improper use can create barriers. This is true of almost anything in a City that is not a fixed, immovable object. If trees are not properly maintained, their branches can encroach on the clear path of travel, if a driver does not follow the rules of the road they can cause injury and damage, if a private business puts out an A-frame to advertise specials, they can block the clear path of travel. All City infrastructure, privately or publicly operated vehicles, and businesses require some level of maintenance, enforcement, or oversight to ensure that they remain accessible.

Appendix 1 – Response to AODA Alliance Concerns

The City's by-laws governing the use of e-scooters, any requirements for service provider(s), and the ongoing monitoring and evaluation of a shared system will ensure micro-mobility devices do not become barriers to accessibility but improve access for all.

No Details on Vital Issue of Enforcement

The purpose of the 2022 corporate report was to identify the preferred vehicle type, system model, and governance model for the City of Mississauga. Enforcement was to be addressed through the procurement process.

Staff have set out requirements for the service provider(s) to have the technology and enforcement needed to address safety and accessibility concerns. Penalties for non-compliance have also been developed.

The shared micro-mobility program requires a continued relationship between staff and the service provider(s) to ensure success. Once the competitive procurement process is complete and the preferred service provider(s) have been chosen, City staff will monitor the roll out closely and meet with the micro-mobility provider(s) regularly to give real-time feedback and ensure corrective action is promptly carried out when needed.

Staff Misses the Point on Equity and Accessibility

When the IBI report speaks to accessibility, it refers not only to physical disability related concerns, but also to the concerns of those who are unable to access resources and opportunities necessary for them to succeed.

An equitable transportation system is a network that supports environmental sustainability, health and well-being, and access to resources and opportunities. Each individual interacts with the City's transportation system differently and has a unique set of criteria required to meet their everyday needs. The more transportation options that are available, the more likely it is that everyone's mobility needs can be met.

An equitable transportation system should also meet the needs of a diverse population. There are many different types of disabilities and many people whose disabilities prevent them from driving, who are unable to walk long distances, who cannot ride a bike, and who may not be able to afford transit or rideshare. E-scooters are another mobility option that can meet the needs of those not yet served by the City's existing transportation system.

Not Enough to Promise People with Disabilities More Consultations

Given the scope and scale of the concerns raised by the accessibility community, staff intend to continue to meet regularly with the Accessibility Advisory Committee and external accessibility advocacy organizations, to proactively seek input from experts and community members to help monitor and evaluate the shared micro-mobility program. An emphasis on ensuring accessibility in the system and preventing or mitigating the introduction of barriers to the built environment, have been major strategic pillar when developing the shared micro-mobility program in Mississauga.

Appendix 1 – Response to AODA Alliance Concerns

This is not just a promise for more consultation; City staff will collaborate with experts and community members to ensure the City's transportation system remains accessible. Staff will work closely with the service provider(s) to continually adjust the program and improve safety and accessibility for all users should any concerns arise.

The City of Ottawa has taken this approach and has updated their system requirements each year to address concerns, meeting regularly with the service provider(s) to ensure the requirements set out in their contract are being met. The City of Ottawa's Accessibility Advisory Committee informed council at their meeting in February 2023 that they no longer have concerns with sidewalk riding for the shared micro-mobility program.

When setting requirements for the service provider(s) and developing the program's Monitoring and Evaluation Framework, City of Mississauga staff have connected with peer cities in Ontario to learn best practices, understand the varied approaches to permitting e-scooters in their municipalities, and ensure Mississauga's Shared Micro-Mobility Program has supporting infrastructure and policies in place to ensure success.

City of Mississauga's Accessibility Advisory Committee

Throughout the Micro-mobility Program Development project, Staff have engaged with the City of Mississauga's Accessibility Advisory Committee (AAC) to answer questions, listen to concerns, and ensure the proposed program does not compromise the safety and accessibility of our most vulnerable residents.

At their meeting on March 21, 2022, after considering the report presented by Staff and IBI detailing the preferred vehicle type, governance model, and system model for the City of Mississauga, the Accessibility Advisory Committee clarified their position with regard to the micro-mobility project and approved the following recommendations (GC-0214-2022):

1. That the docking and dockless stations for Micromobility devices be located on the roadway, and/or utilize available parking spaces to ensure accessible access and removed from the sidewalks.
2. That the implementation of the City of Mississauga's Micromobility Project continue further consultation with the Accessibility Advisory Committee and/or its subcommittees to ensure the project does not reduce accessibility or create barriers for people with disabilities and/or older adults.
3. That e-scooters, as defined in the Traffic By-law 0555-2020 as amended, be banned from operating on sidewalks.
4. That licencing be required and that infractions be reported through Road Watch to the Peel Regional Police.

Staff have included the following requirements in the Request for Proposals to ensure the recommendations listed above are met by the successful service provider(s).

1. The service provider(s) will be required to clearly define parking zones outside of the clear path of travel using technology, paint, and/or signage. Existing bicycle parking can also be used to lock devices. A lock will be required for each device to ensure it is secured out of the clear path of travel before a user's trip can be ended. The parking stations, devices, and technology will be evaluated during the demonstrations portion of

Appendix 1 – Response to AODA Alliance Concerns

the procurement process to ensure they meet accessibility requirements and do not create additional accessibility barriers. Members of the City's Accessibility Advisory Committee have been invited to take part in the demonstrations and help evaluate the station design, vehicles, and technology.

2. City staff will continue to consult with the City of Mississauga's Accessibility Advisory Committee. The Monitoring and Evaluation Framework for the Shared Micro-mobility Program sets out clear goals and objectives to ensure a safe and accessible system. Staff will be collecting data and monitoring indicators of success. Reports will be presented to the Accessibility Advisory Committee to assess whether the system is meeting the program goals and objectives. Opportunity for more frequent consultation will be available as needed if concerns arise between updates.
3. In February 2021, Council adopted changes to the City's Traffic, Transit, and Parks By-Laws to regulate the use of personally owned e-scooters in Mississauga. The Traffic By-law (0555-2020) does not permitted the use of e-scooters on sidewalks. This ban will also apply to e-scooters that are part of a Shared Micro-mobility Program. The request for proposals will evaluate what technology and programs the service providers are able to deploy to ensure devices cannot be ridden on the sidewalk.
4. A license to ride e-bikes and e-scooters is not required under the Ontario Highway Traffic Act; however, the service provider will be required to deploy technology and programs to ensure the system users are aware of the rules of the road, proper trail etiquette, and how to safely operate the device. A few examples of this requirement include having a beginner mode that limits speeds and acceleration so riders can get used to operating the device under safer conditions, education videos that will be shown before the rider can unlock a device, and ongoing education and in-app reminders on safety, rules, and etiquette.

   In addition to the City customer service channels and Peel Regional Police's Road Watch, the request for proposals requires that the successful service provider(s) offer a number of avenues for reporting infractions including: the system's app, a website, a phone number, and email. Staff will require that the service provider(s) ensure these reporting channels are easy to located and use.

Appendix 2 – E-Scooters in the City of Toronto

On November 27, 2019, the Province of Ontario announced that it would begin a five-year pilot program to allow electric kick-style scooters (e-scooters) on municipal roads in Ontario, beginning on January 1, 2020. The pilot will be the Province's primary tool in informing the feasibility of a permanent e-scooter framework. It stipulates that local municipalities must amend their existing by-laws in order to opt-in to the pilot.

While minimum safety requirements (speed, operating age, etc.), have been established by the Province, it is the responsibility of participating municipalities to determine all other regulatory requirements.

Many municipalities have chosen to op-in to the pilot, including the City of Mississauga; however, The City of Toronto decline the option to participate and has since banned the use of privately owned and rented e-scooters within their municipal boundary. In a report to the Infrastructure and Environment Committee on April 14, 2021, City of Toronto staff listed the following key concerns with allowing e-scooters to operate within the City:

- Safety, especially for people living with disabilities and seniors, when encountering 1) e-scooters illegally operating on sidewalks and 2) trip hazards or obstructions from poorly parked or numerous rental e-scooters on sidewalks;
- Lack of city resources for enforcement and the major challenges of enforcing moving violations on sidewalks, parking obstructions and vandalism;
- Problems with indemnification agreements with e-scooter rental companies and liability of e-scooter riders if injured or injuring others; and,
- Lack of insurance and medical coverage, and the significant liability exposure to the City when no other party provides compensation, leading to costs associated with claims, litigation, and settlement.

City of Toronto staff concluded that accessibility barriers, safety concerns, and insurance issues remain unresolved for privately owned and rental e-scooters and recommended that the City not opt-in to the e-scooter pilot.

<u>Response to Key Concerns Raised by the City of Toronto</u>

The City of Toronto consulted with e-scooter industry groups from mid 2020 into early 2021 to inform the report brought to Council in April 2021. At that time, City of Toronto staff felt that the accessibility, safety, and insurance concerns listed above remained unresolved.

Approximately two years have passed since the report was presented to City of Toronto Council. In that time, there have been technological advancements in the e-scooter industry, and learned experiences from other municipalities. City of Mississauga staff believe that the concerns raised in the City of Toronto's report can be addressed using a variety of tools available in the industry today.

Appendix 2 – E-Scooters in the City of Toronto

Safety, especially for people living with disabilities and seniors

The City of Mississauga and the City of Toronto have taken different approaches to e-scooters since the introduction of a provincial pilot.

By opting into the provincial pilot, the City of Mississauga has been able to regulate the use of private e-scooters within its municipal boundaries and work to identify any potential conflicts before introducing a shared system. Through online education campaigns, 311, pop-ups on busy trails, and more, staff have engaged with residents to answer questions, listen to concerns, and understand how e-scooters are being used by residents to fill gaps in the City's transportation network.

City staff have also engaged with the Accessibility Advisory Committee (AAC) to ensure the proposed program does not compromise the safety and accessibility of our most vulnerable residents. As a result of that positive engagement, the AAC has provided staff with recommendations for the shared micro-mobility program that have been incorporated into the requirements for a service provider.

Technology in the e-scooter industry continues to evolve. The City of Ottawa has been piloting shared e-scooters for 4 years and has worked closely with their Accessibility Advisory Committee to ensure that safety and accessibility concerns are addressed. The City of Ottawa's Accessibility Advisory Committee reported to Council in February 2023 amending their position to no longer oppose the use of e-scooters. City of Mississauga staff have connected with municipalities that have experience running a shared micro-mobility program to ensure the procurement process incentivise service providers to have the technology and enforcement needed to address any concerns.

Lack of city resources for enforcement

The Shared Micro-mobility Program requires a continued relationship between staff and the service provider(s) to ensure success. The procurement process will incentivise private e-scooter providers to have the technology and enforcement needed to address safety and accessibility concerns. Once the competitive procurement process is complete and the preferred service provider(s) have been chosen, City staff will monitor the roll out closely and meet with the micro-mobility providers regularly to give real-time feedback and ensure corrective action is promptly carried out when needed. The City's Micro-mobility Monitoring and Evaluation Framework will play a key role in ensuring the service provider is meeting the program's goals and objectives.

As seen in municipalities with shared e-scooters, the industry continues to adapt its technology and education campaigns to address safety and accessibility concerns.

A ban on privately owned and rental e-scooters will not lessen the burden of enforcement but place it solely on the City. A privately owned and operated shared micro-mobility system will allow staff to work with providers on the issue of education and enforcement, using technology and shared resources to address any safety and accessibility concerns.

Appendix 2 – E-Scooters in the City of Toronto

Staff will also require a security deposit from the service provider(s). While monitoring and enforcement is expected to be handled by the service provider, staff recognize that some intervention may be required if the service provider(s) fails to meet the level of service outlined in the agreement. Should staff be required to intervene, the cost of that intervention (staff time, resources, etc.) will be charged to the service provider and deducted from the security deposit.

Problems with indemnification agreements and liability
Lack of insurance and medical coverage

City of Mississauga staff will require the successful service provider(s) to maintain general liability insurance. Coverage shall consist of a comprehensive policy of public liability and property damage insurance. Staff will require prospective service providers to provide full indemnity against all claims, demands, loss, costs, damages, actions, suits, adjuster fees, or other proceedings.

Staff recognize that there are risks associated with a shared micro-mobility program and have outlined strategies and set requirements for the service provider(s) to mitigate that risk. Enforcement, paired with technology, and a strong communications campaign, will be a major part of building a culture of responsible e-bike and e-scooter usage in the City of Mississauga.

momentum
transport consultancy

MICROMOBILITY IN MISSISSAUGA

Suitability analysis for a shared micromobility scheme

24/08/2023

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1. INTRODUCTION

1.1 Context of micromobility in Mississauga

1.1.1 The City of Mississauga is planning to expand low-carbon transportation options by offering a shared micromobility scheme led by one or several private operators.

1.1.2 Micromobility encompasses small vehicles such as bikes, e-bikes and e-scooters. They have been increasingly popular for rent under shared schemes for short point-to-point trips[1].

1.1.3 Shared micromobility can serve a wide range of purposes: people use them to reach their place of work or education, to access shops and services, to visit friends or family, and for recreational purposes. Many people use micromobility to access transit stations, as a 30-minute walking trip can generally be done on an e-scooter or e-bike in under 10 minutes.

1.1.4 Cities across the globe are experiencing a paradigm shift in transportation patterns, driven by a growing emphasis on sustainable, accessible, and efficient mobility solutions.

1.1.5 The City of Mississauga plans to join other Canadian cities in enhancing its urban mobility infrastructure while fostering environmental sustainability with a shared micromobility system. A shared micromobility system could help residents connect to the Hurontario Light Rail Transit, the Mississauga Transitway, and reach destinations like Port Credit, Streetsville and the City's center[2].

1.2 Context of the study

1.2.1 Within the context set out above, the City of Mississauga commissioned Momentum to assess the suitability and profitability of a micromobility scheme scheme.

1.2.2 This report details the construction and findings of an ArcGIS suitability model aimed at identifying the optimal areas to implement a shared micromobility system within the city, and the locations of parking bays. The model used spatial analysis and data on Mississauga's population, employment, transit system and cycle infrastructure to assess the suitability for the micromobility scheme.

[1] National Association of City Transportation Officials, Guidelines for Regulating Shared Micromobility, 2019, consulted on 08/08/2023
NACTO_Shared_Micromobility_Guidelines_Web.pdf
[2] City of Mississauga, Introduction to Shared Micro-mobility Systems, consulted on 08/03/2023
Introduction to Shared MicroMobility Systems – City of Mississauga

1.3 Objectives of the study

1.3.1 This report aims to:

- Provide an in-depth understanding of the methodology used to develop the suitability model and profitability analysis
- Present areas with likely higher demand for micromobility
- Identify the density and location of micromobility parking bays
- Recommend the fleet size and service area that would make the scheme successful in terms of usage and attract private micromobility operators.

1.4 Contents

1.4.1 This section forms the introduction of the report. The next sections include:

- Chapter 2: Methodology
- Chapter 3: Site suitability analysis
- Chapter 4: Revenue and cost considerations
- Chapter 5: Parking locations
- Chapter 6: Summary
- Chapter 7: About the authors
- Appendices

2. METHODOLOGY

2.1 Overview of the methodology

2.1.1 Optimal locations for deploying a shared micromobility scheme within the city were identified thanks to geospatial data on the City's population, employment and infrastructure.

2.1.2 Current suitability for micromobility was estimated based on the most recent available data. The projection for 2031 considers forecast changes in population, employment, and new public transit.

2.1.3 The final output of the ArcGIS model is a suitability map that highlights the potential for deploying the shared micromobility system. The suitability model helped identify potential areas of service, and the number of trips required to make the system economically viable.

2.1.4 Profitability analysis then set out future revenue and costs.

2.1.5 A parking identification model was used to identify parking locations that would maximize user convenience.

2.1 Presentation of the inputs

2.1.1 The model uses the most recent data available provided by the City of Mississauga, at the smallest available geographical unit, to maximize the accuracy of estimates.

2.1.2 Research on the main factors influencing demand for micromobility services was conducted to guide input selection. The research for this section is provided in Appendix A: Literature review, providing rationale for the inputs presented below.

INPUTS CONSIDERED

Population density

2.1.3 Areas with higher residential population density generate more trips and are usually hotspots for a demand in micromobility services[3].

2.1.4 Census 2021 data was used for this input.

Distance from the cycling network, and quality of active travel infrastructure

2.1.5 The closer people are to safe cycling infrastructure, and the more likely they are to choose a micromobility mode for their journey[4]. How far people are willing to cycle to reach the cycling network depends on several factors: how comfortable they are riding a micromobility vehicle, their riding speed, the density, quality and the extent of the network they are accessing, whether they need to make a detour to access it, and the safety of roads and intersections to access the network.

[3] (Hosseinzadeh, Algomaiah, Kluger, & Li, 2021)
[4] (Zou, Younes, Erdogan, & Wu, 2020) (Sorkrou, et al., 2022)

2.1.6 In this model, the catchment of the cycle network was set at 900m. That is because Mississauga's network consists of off-road trails and protected lanes which people are likely to want to access from further away. Electric assistance is also likely to help make longer distances more acceptable. Beyond 900m, cyclists would typically go over several unprotected intersections and heavily trafficked roads, where they would typically feel more vulnerable to road traffic, so it was considered that beyond a 900m distance the impact of the network would fade.

2.1.7 Within the cycling network data, off-road or segregated cycle lanes were given a 6:1 weight – to reflect the fact they generate more micromobility demand than cycle routes which share road space with vehicular traffic. This is based on evidence that people riding micromobility vehicles have a marked preference for segregated cycle lanes.

2.1.8 Distances to the cycle network were calculated from the Open Data available in the Cycle Plan 2018[5].

Employment density

2.1.9 A higher density of jobs creates demand for micromobility modes, from people commuting, and workers making other trips, such as travelling to meetings or accessing services near their place of work[6].

2.1.10 Employment density was calculated through a cluster analysis, which identifies the average number of jobs within a set area. 900m was chosen as a set area based on willingness to walk to access transportation. Willingness to walk to a shared dockless micromobility vehicle depends on the city (people are willing to walk more in larger cities), the person, the journey people are looking to make, whether other modes are available, and the scheme – for example people will be willing to walk further if they can reserve a micromobility vehicle, and if the fees to reserve it are deemed reasonable. We considered that few people would walk over 900m to access an e-bike or an e-scooter and would be much more likely to make that journey by another mode of transportation.

2.1.11 The employment data provides information on the usual place of work but does not capture the demand arising from people working remotely. It is likely that the demand for micromobility in residential areas is higher than forecast as a result of remote working.

2.1.12 The employment data was provided by the City of Mississauga. Areas with a higher average number of employees within them have a higher score.

Student population

2.1.13 Micromobility vehicles are particularly popular among students, as they are less likely to own a car, and they make a higher number of daily trips[7].

2.1.14 Students are often underrepresented in public data since they change their home address frequently.

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[5] City of Mississauga, open data catalogue, consulted on 07/27/2023, Cycling Master Plan – City of Mississauga
[6] See (Raky & Monzon, 2022)
[7] See (Raky & Monzon, 2022) and (Smart & Noland, 2020)

2.1.15 The student data is sourced from the Transportation Tomorrow Survey ('TTS') 2016, downloaded from Data Management Group Website[8].

2.1.16 Students 18 years old and above were included in the model. The student data only includes students who live in Mississauga.

Public Transportation Accessibility Level

2.1.17 Micromobility is a popular mode of transportation to reach public transit, so transit stops generate demand to pick-up and drop-off micromobility vehicles[9].

2.1.18 The Public Transport Accessibility Level is a measure of transit connectivity used in the UK, and increasingly internationally, based on the distance to public transit and the frequency of services available at the nearest stop.

2.1.19 The variable was constructed considering the existing transit network in the city, to assess the distance from each point in the city to transit stations, and the frequency of services at that station.

2.1.20 High scoring areas are within walking distance of a transit stop with fast and frequent transit services.

2.1.21 The calculation assumes that people will walk up to 640m (approximately eight minutes) to a bus service and up to 960m (12 minutes) to a rail service. Services available at a longer distance do not affect the Public Transportation Accessibility Level of a selected location. If there is no public transit available within these distances, the location is rated as "0".

2.1.22 Scoring was adapted to suit the context of public transit in Mississauga.

Car-free households

2.1.23 Shared micromobility can be popular among both car-owning and car-free households, but people who do not have access to a car at home are particularly more likely to use shared micromobility systems, as it provides them with a door-to-door mobility solution. According to micromobility operator Lime, US Lime users are 40% more likely to live in zero-car households than their neighbors[10].

2.1.24 Data on car ownership was sourced from TTS 2016[11].

OTHER INPUTS CONSIDERED

2.1.25 The following inputs have been considered for inclusion but have not been considered necessary – either because they overlap with another input, or because they do not work well with a rating scale.

---

[8] Data Management Group, Transportation Tomorrow Survey, consulted on 07/27/2023, Transportation Tomorrow Survey (utoronto.ca)
[9] See (Hosseinzadeh, Algomaiah, Kluger, & Li, 2021)
[10] Lime, Latest Data Show Lime Attracts New Riders To Active Transportation, Reduces Car Use And More, consulted on 08/10/2023, Latest Data Show Lime Attracts New Riders To Active Transportation, Reduces Car Use And More.
[11] Data Management Group, Transportation Tomorrow Survey, consulted on 07/27/2023, Transportation Tomorrow Survey (utoronto.ca)

Topography

2.1.26 Hilly terrain is much less of a consideration in the demand for e-bikes and e-scooters than their pedal-powered equivalents – and since the City of Mississauga features generally flat or gentle inclines, topography was not deemed useful to determine site suitability.

Household income

2.1.27 Household income data was not included in the site suitability model, for two reasons:

- Using higher income as an input could be misleading: for example, students would have a lower average income but could benefit from parental support for their transportation costs.
- It might also create a deployment bias reinforcing inequalities: the service area would be more likely to exclude people on lower incomes, who are also less likely to have access to a car.

2.1.28 Income data was still considered in the service area recommendation. This was to help ensure that a micromobility scheme would not disadvantage neighborhoods where lower-income households are more likely to reside in.

2.1.29 Income data was sourced from the City of Mississauga's Census 2016 Neighborhood Comparison Dashboard[12].

Propensity to cycle

2.1.30 Propensity to cycle is a composite indicator that was estimated based on 13 criteria that lead to a higher number of cycle trips. These are:

- Residential population density, by traffic zone
- Density of people aged 20-35, by traffic zone
- Proportion of zero car households
- Number of school trips over the age of 16 per traffic zone
- Number of walking and biking trips
- Number of transit trips made from or to the area
- Number of part-time and full-time workers
- Number of trips under 5km
- Meters of bike infrastructure within 1km
- Distance to MiWay Transitway and future Hurontario LRT (within 2km)
- Community centers within a 2km radius
- Post secondary institutions within a 2km radius
- GO stations within a 2km radius

2.1.31 Some of the variables used to calculate the propensity to cycle overlap with other inputs in the suitability model – such as Public Transportation Accessibility Level and the proportion of car-free households.

[12] City of Mississauga, Neighborhood Comparison Dashboard. Income, consulted on 08/24/2023. https://mississauga.maps.arcgis.com/apps/MapSeries/index.html?appid=bff08f8c66d54463a3679aba79927579

2.1.32 The propensity to cycle is also a composite indicator, which offers a useful summary of inputs but dilutes each variable.

2.1.33 The propensity to cycle tool was used to compare and contrast findings with the suitability analysis undertaken.

Trips under 5km

2.1.34 The number of short trips is an excellent indicator of demand for micromobility, as these are more likely to be made on an e-bike or e-scooter.

2.1.35 The number of short trips is highly correlated with other variables above (such as the density of population and employment) and was therefore not included in the demand model.

2.1.36 That said, short trips offer a wealth of information on how residents currently travel. Short trips were mapped to help ensure that the recommended service area would accommodate the short journeys that people are currently making. Short trips are mapped in Figure 7.

2.1.37 The TTS 2016 was used to find out the origins and destinations of trips under 5km are currently made within Mississauga[13].

Walking and cycling mode share

2.1.38 The proportion of walking and cycling trips is a good prediction of trips that could be done with a micromobility mode, but this data was not included in the model as it overlapped with the public transportation accessibility, the population density, the student and the car-free populations.

2.1.39 Moreover, it was felt that this input would not reflect where short car trips were made, which could also be replaced by micromobility.

Age profile

2.1.40 Users of shared micromobility vehicles are more likely to be younger[14], but this was not included in the suitability model since it is highly correlated with the student population.

SUMMARY OF INPUTS

2.1.41 The table below shows the datasets which are included in the suitability model.

2.1.42 A correlation matrix was produced for selected inputs to ensure that inputs are as independent from each other as possible. This minimizes the risk of unintended compounding effects and improves the reliability and accuracy of findings, allowing for more robust conclusions and recommendations.

2.1.43 The Correlation matrix tables are provided in Appendix B: Correlation matrix.

2.1.44 Each input in the table below has been given an equal weight in the suitability analysis.

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[13] Data Management Group, Transportation Tomorrow Survey, consulted on 07/27/2023, Transportation Tomorrow Survey (utoronto.ca)

[14] See (North American Bike Share Association, 2019).

Table 2.1: Data inputs into the site suitability model

Dataset	Unit	Source	Year
Population density	Number of persons per km2 in each Census Tract	Census	2021 and 2031
Student population	Student population per Traffic Zone	Transportation Tomorrow Survey ('TTS')	2016
Employment density	Average number of jobs within a 900m area	Mississauga Business Survey	2021 and 2031
Public Transportation Accessibility Level	Score (based on walking distance to transit)	GTFS	2022 and 2031
Distance from cycle network	Distance from cycling infrastructure (off-road, segregated or shared)	Cycle Plan	2018 and 2031
Car-free households	Proportion of households that do not have access to a car	Transportation Tomorrow Survey ('TTS')	2016

2.2 Weighting

2.2.1 Each input in the table above has been given an equal weight in the suitability analysis.

2.2.2 Within the cycling network data, off-road or segregated cycle lanes were given a 6:1 weight – to reflect the fact they generate more micromobility demand than cycle routes which share road space with vehicular traffic. This is based on evidence that people riding micromobility vehicles have a marked preference for segregated cycle lanes.

2.3 Scoring

2.3.1 The data for each input is classed bands, with high scores indicating high suitability. High scoring areas are more suitable zones for the implementation of a micromobility system, lower scoring areas represent less suitable zones.

2.3.2 The suitability of an area is defined by the sum of the scores of the model inputs. For example, based on the model, a denser zone, with a reduced distance to the cycle network, with a significant proportion of employment and student population will be a highly suitable zone for the scheme.

2.3.3 Bands are defined by natural breaks, whereby similar values are grouped together to highlight significant differences between the areas. For TTS data, scores are applied at the scale of the TTS zones (also called Traffic Zones).

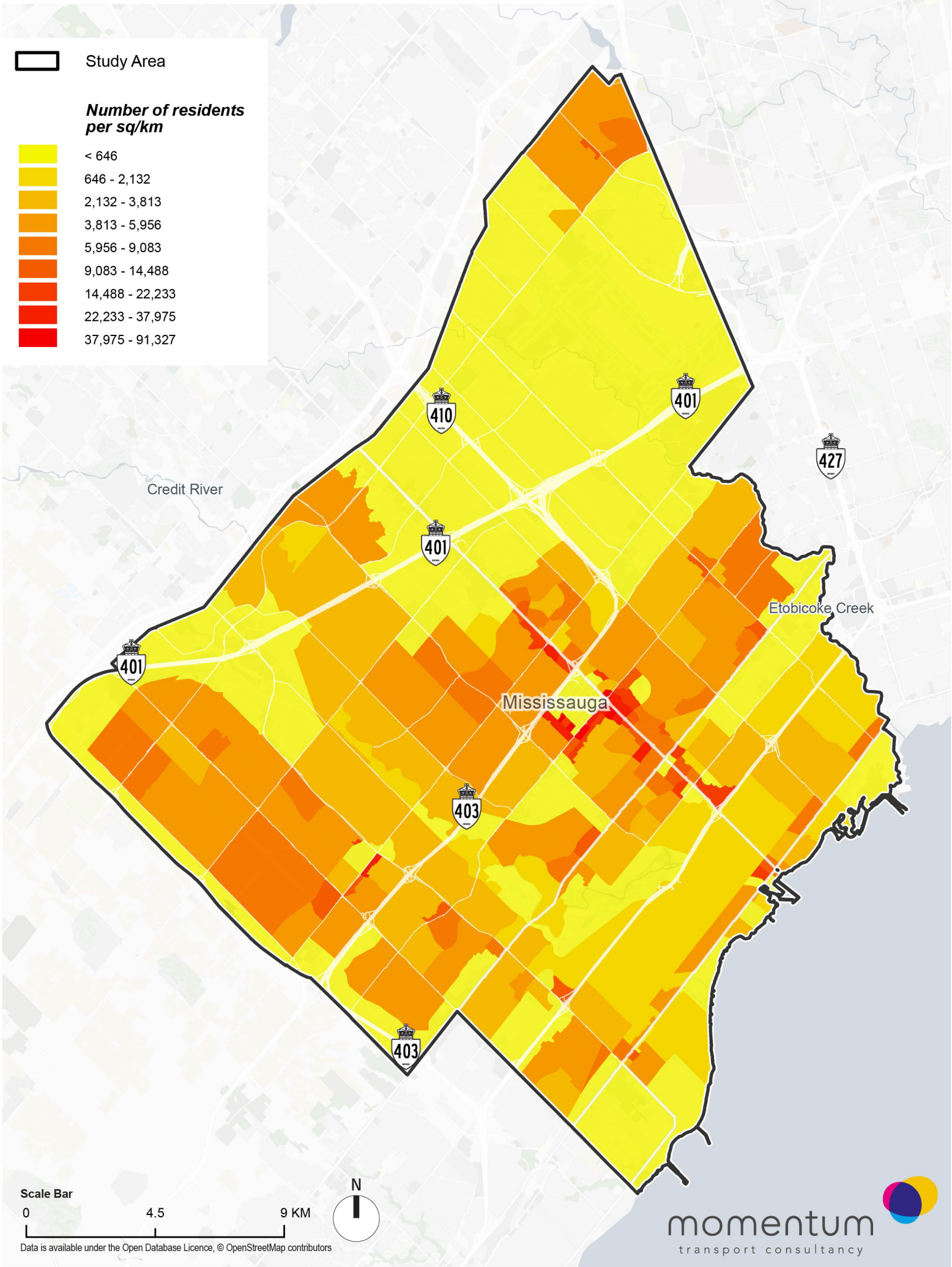
2.3.4 Thresholds for the current and the future models were kept the same to enable comparison.

SITE SUITABILITY INPUTS

2.3.5 This section presents maps of each input into the suitability model, and the scoring for each input.

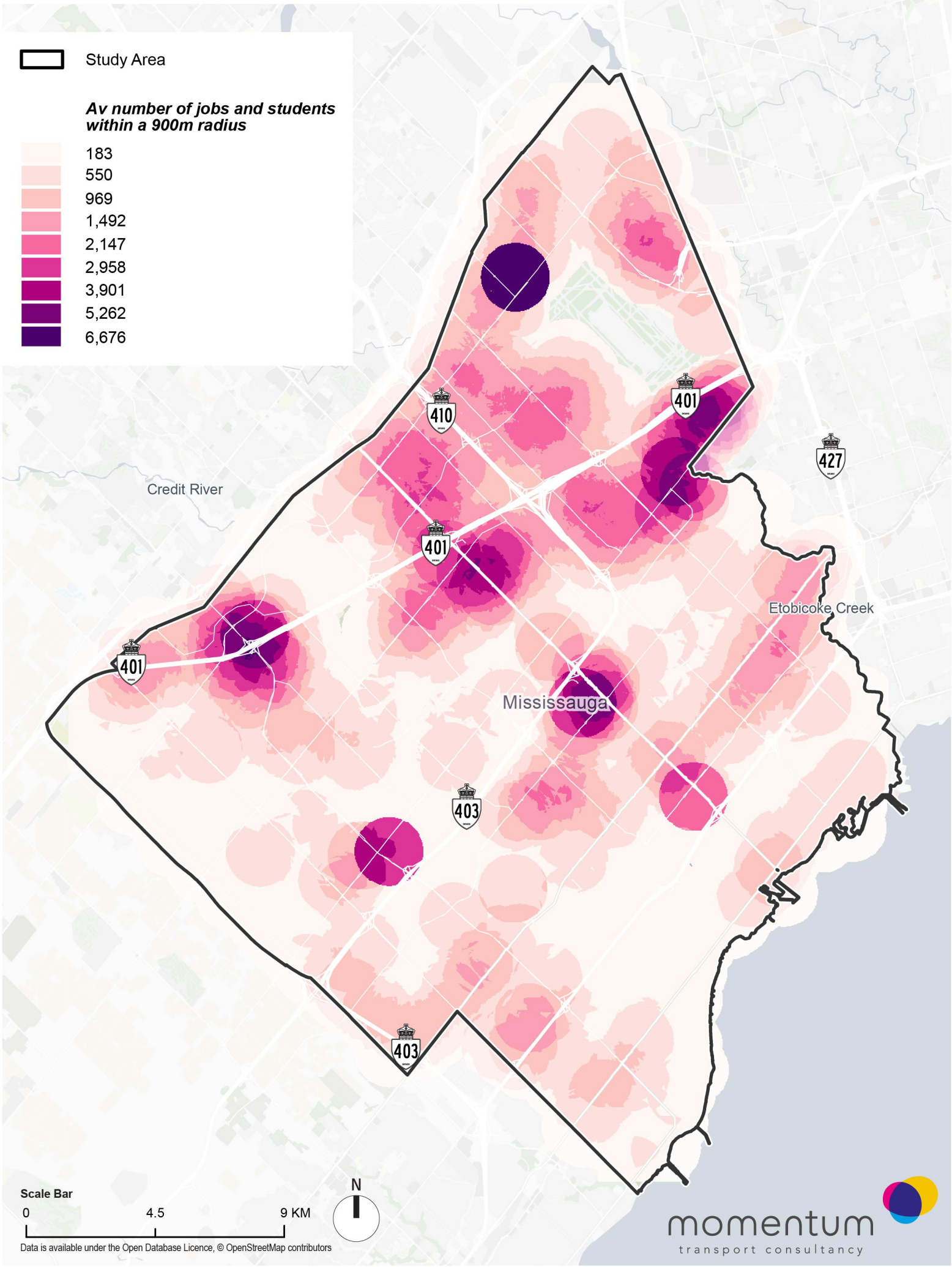
MISSISSAUGA MICROMOBILITY PILOT

FIGURE 1 : RESIDENT POPULATION DENSITY



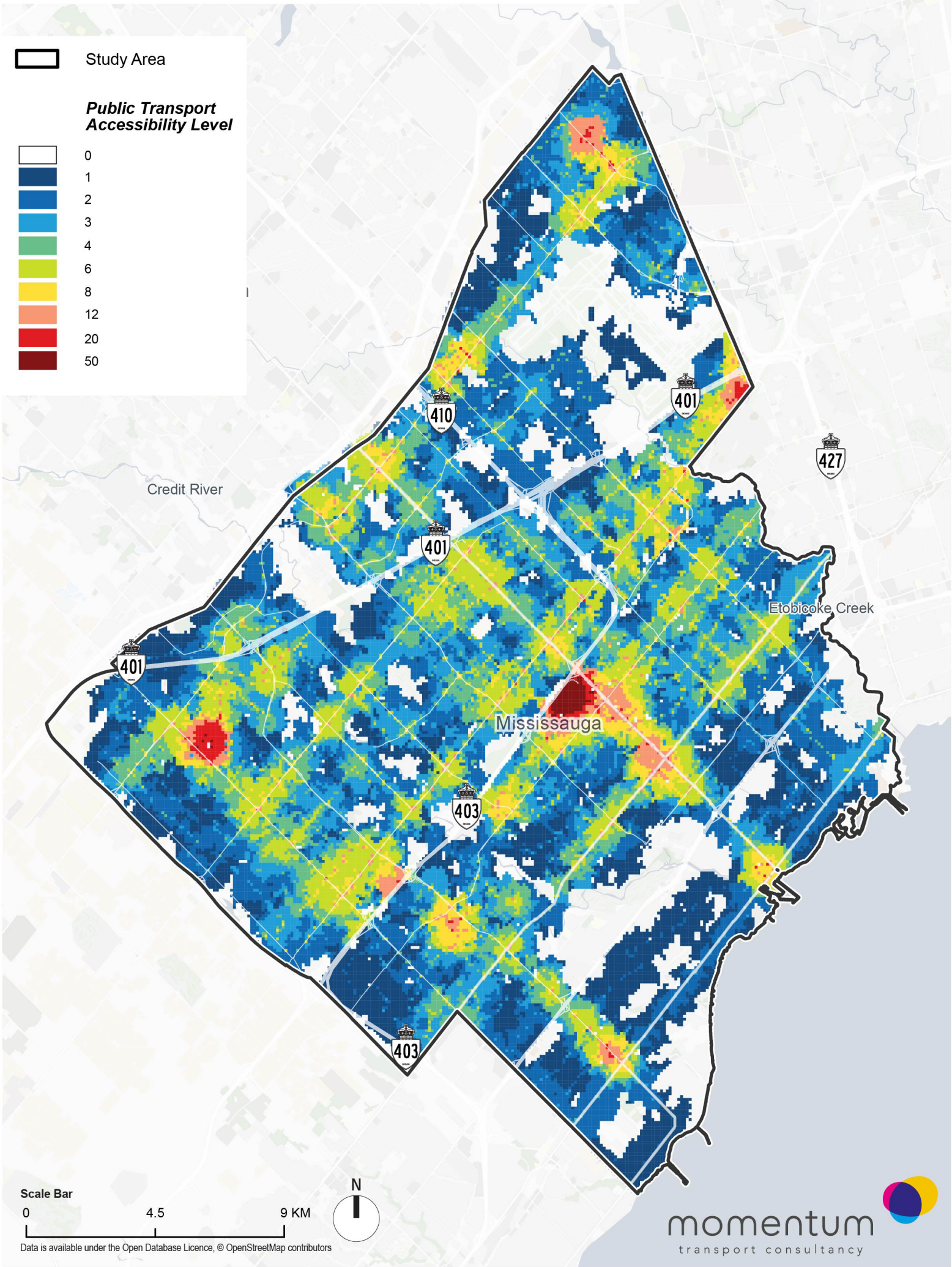
MISSISSAUGA MICROMOBILITY PILOT

FIGURE 2 : EMPLOYMENT DENSITY



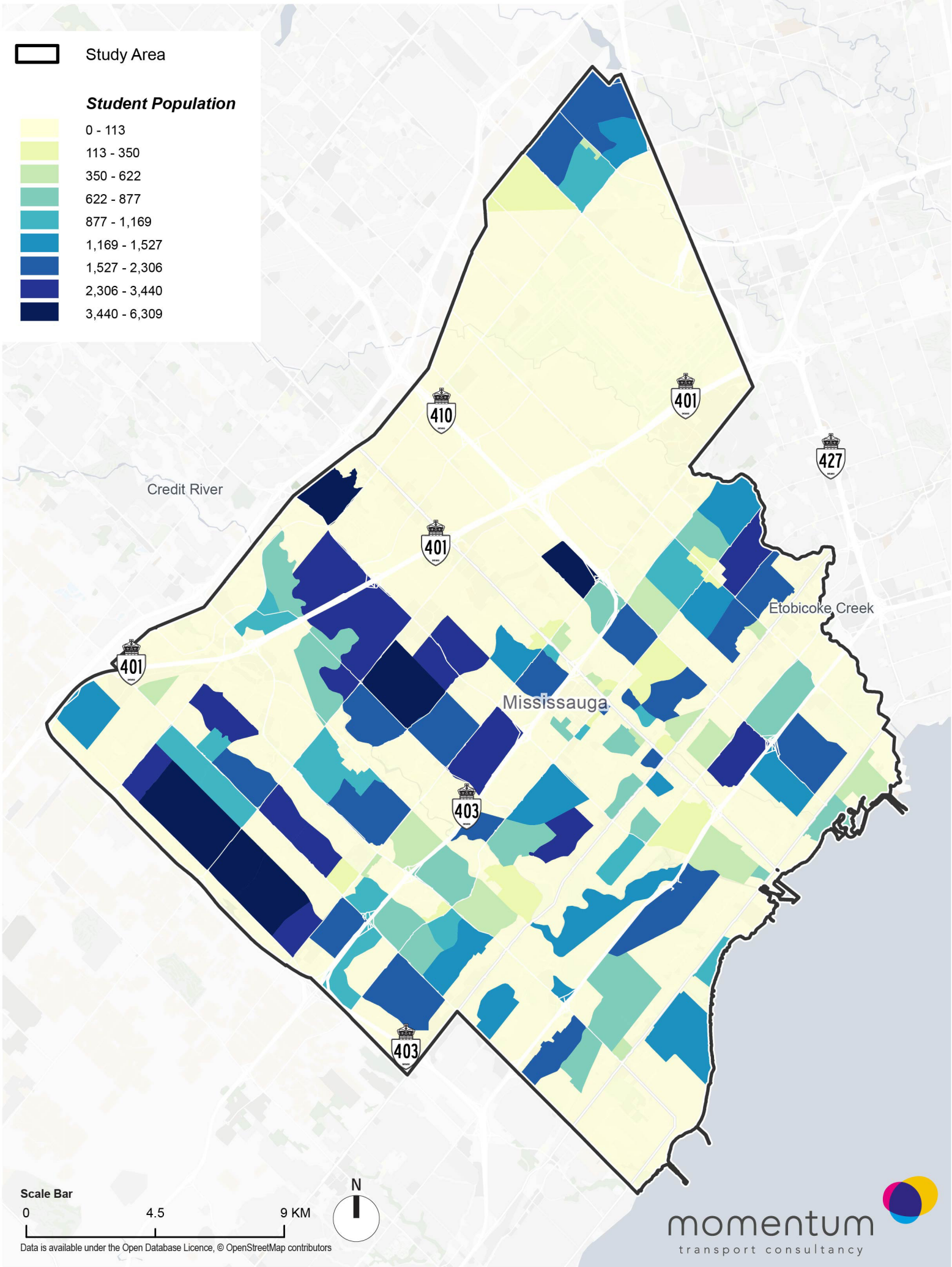
MISSISSAUGA MICROMOBILITY PILOT

FIGURE 3 : PUBLIC TRANSPORT ACCESSIBILITY LEVEL



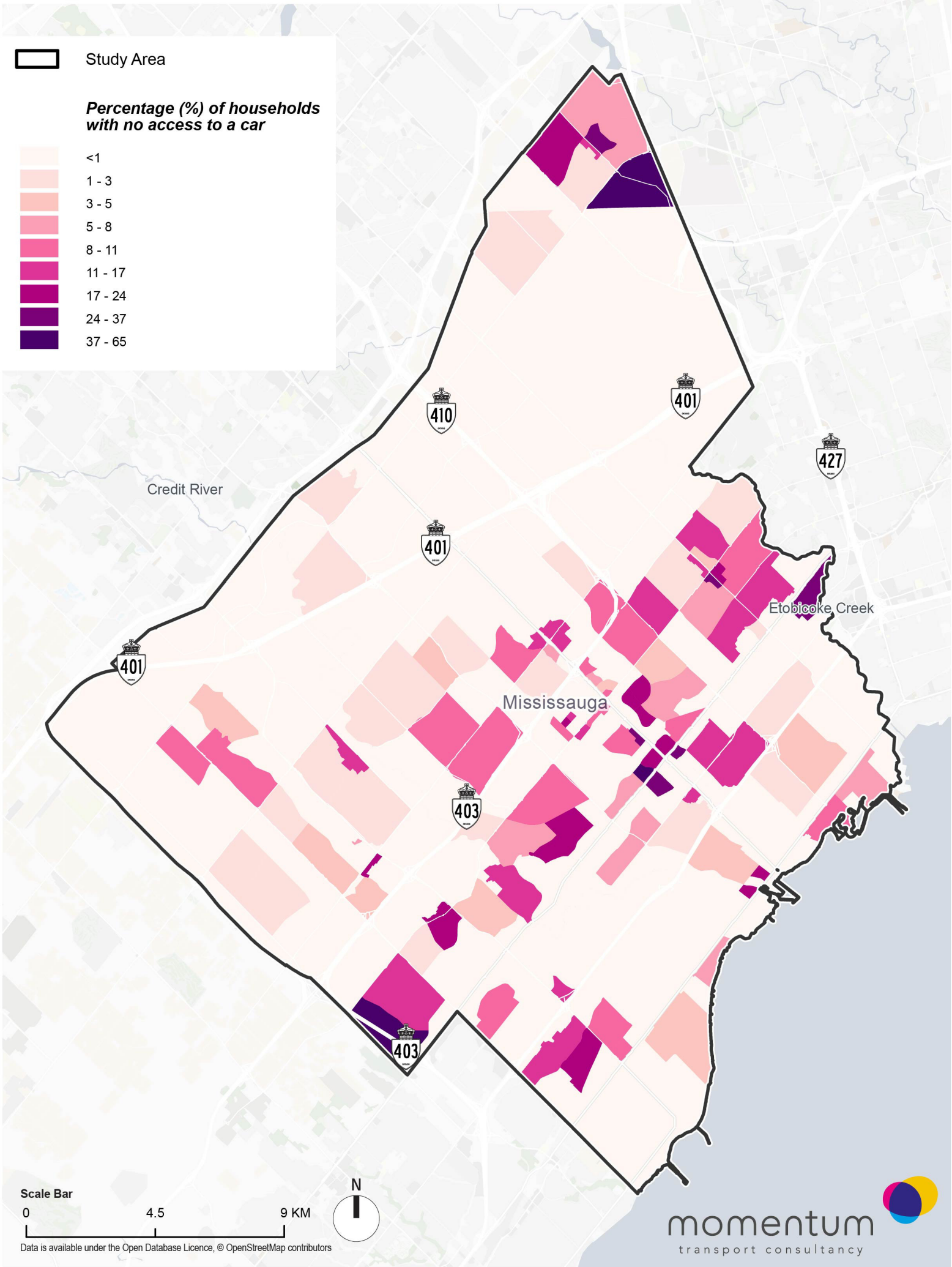
MISSISSAUGA MICROMOBILITY PILOT

FIGURE 4 : STUDENT POPULATION BY TRAFFIC ZONE



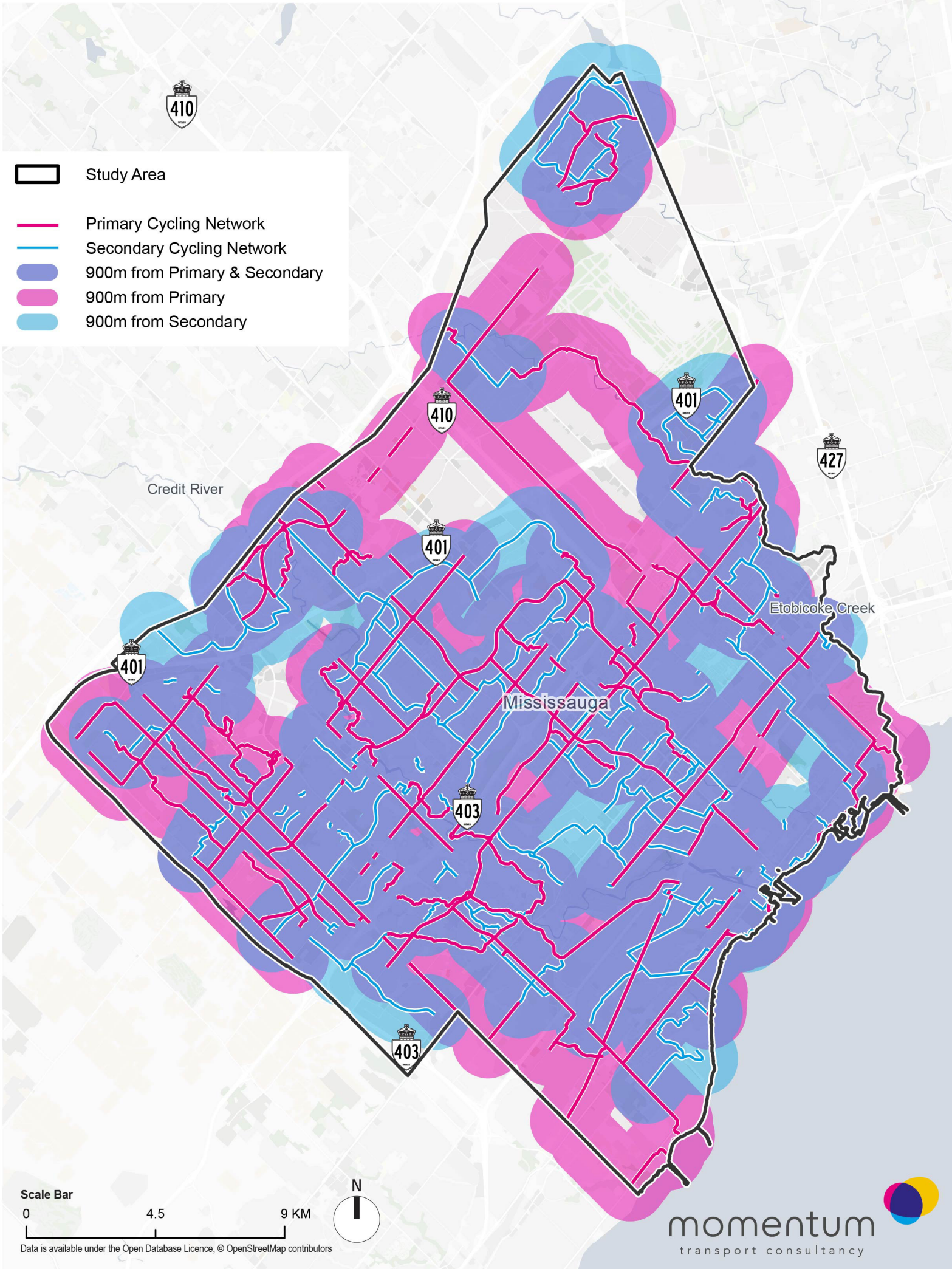
MISSISSAUGA MICROMOBILITY PILOT

FIGURE 5 : PERCENTAGE OF HOUSEHOLDS WITH NO CARS



MISSISSAUGA MICROMOBILITY PILOT

FIGURE 6 : DISTANCE TO THE CYCLING NETWORK



momentum
transport consultancy

OTHER INPUTS

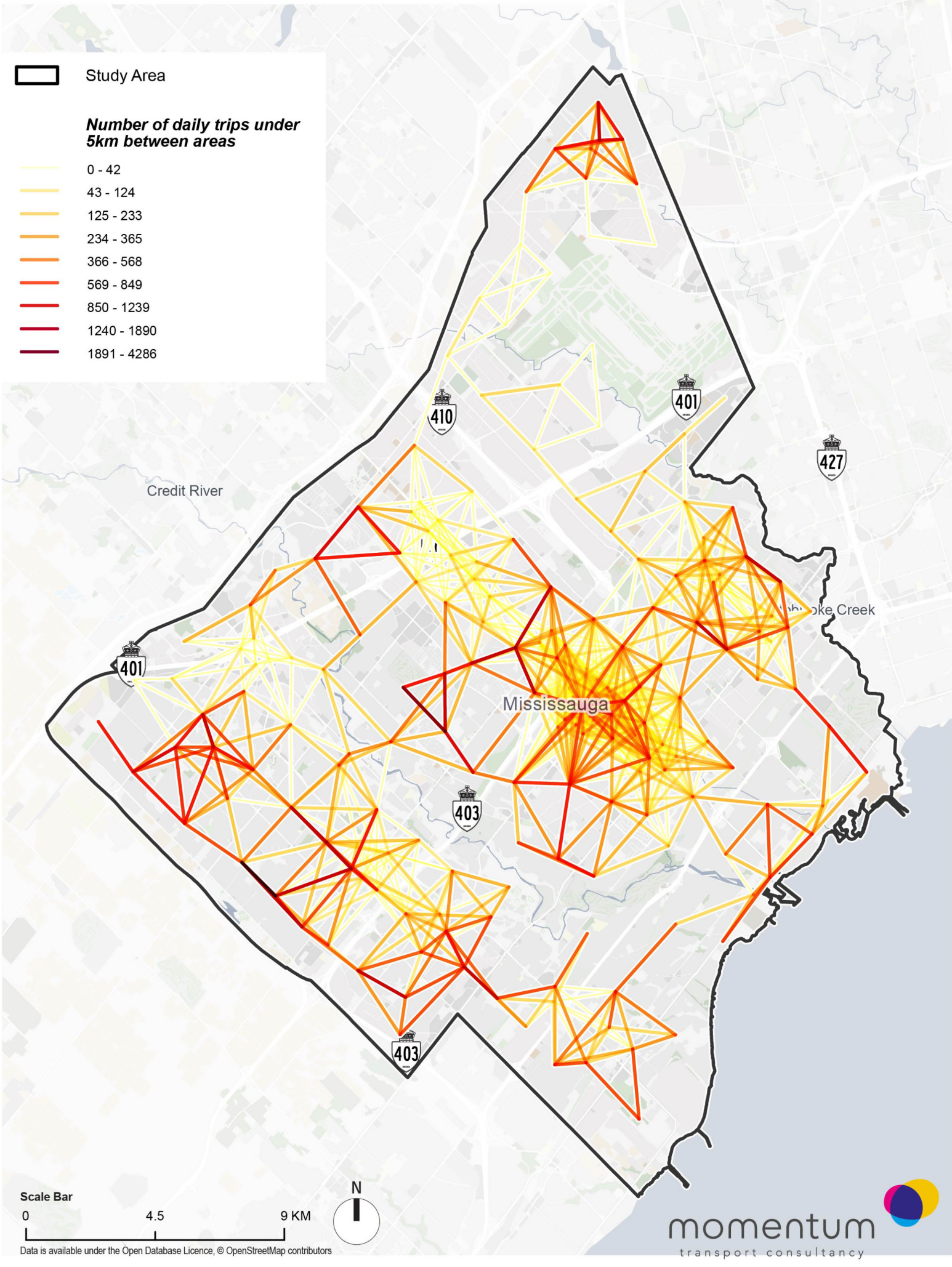
2.3.6 The information on Origin Destination trips and Propensity to cycle was mapped to add complementary information to the analysis in the form of sense check.

2.3.7 The map on Origin and Destination trips informed the boundaries of the service area recommendation by helping ensure that key origins and destinations for short trips are included in the service area.

2.3.8 The same logic was used for the mapping of propensity to cycle. As the variable consists of a composite index taking into account 13 criteria (some of which are highly correlated to the suitability model), it can be used to compare suitability results.

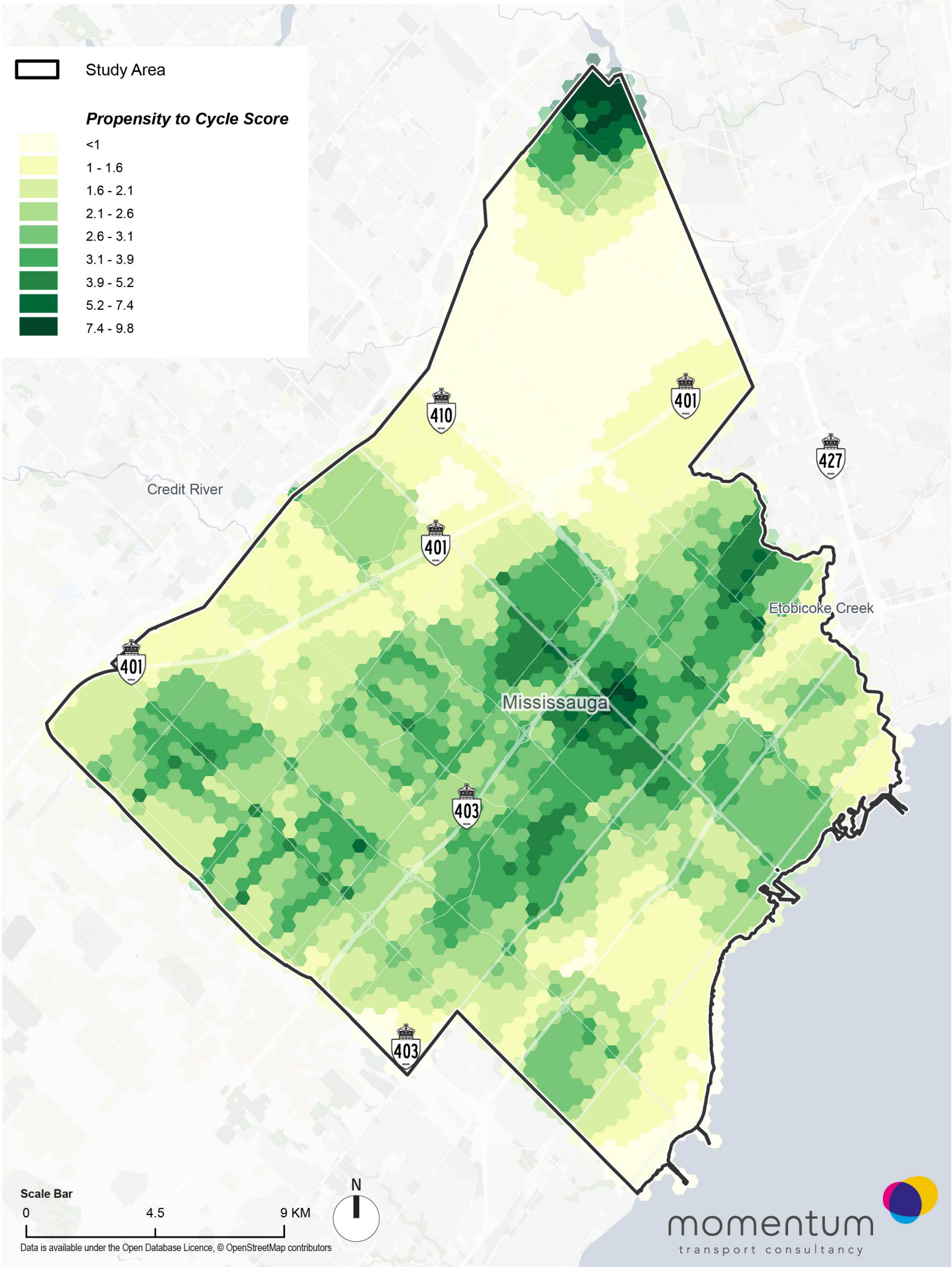
MISSISSAUGA MICROMOBILITY PILOT

FIGURE 7 : NUMBER OF TRIPS UNDER 5km



MISSISSAUGA MICROMOBILITY PILOT

FIGURE 8 : PROPENSITY TO CYCLE



3. SITE SUITABILITY

3.1 Findings

CURRENT CONDITIONS

3.1.1 Figure 9 shows suitability scores across the city, based on existing population and infrastructure. Note that areas with missing inputs have no coloring.

3.1.2 Based on the site suitability model, areas with the highest suitability for micromobility are:

- **The City's central area** – it has the highest suitability for micromobility services, thanks to high population and employment densities.
- **The Hurontario Street transit corridor**, as the corridor connects various amenities and employment centers, making it a strategic axis for a micromobility network.
- **Applewood and Cooksville**, thanks to their mix of residential and commercial zones, along with the access to several transit lines. Their central location also increases their suitability for dockless micromobility.
- **Port Credit**, thanks to its population and employment density, the area's mixed-use environment, cultural attractions, and recreational spaces. Although visitor numbers were not included in the demand model, visitors create demand for micromobility and local businesses, particularly at weekends.
- **Erin Mills** – as well as its residential population, it has several educational institutions, including the University of Toronto Mississauga campus.
- **Meadowvale**, which combines high population density and good public transportation accessibility. On top of this, the density of local amenities means a micromobility system could facilitate short-distance trips and connect residents with essential services.
- **Malton** – the area scored high in the site suitability model, with its accessibility to transit and population density, as well as a cluster of shops and restaurants. As the neighborhood is separated from the rest of the city by Pearson Airport and highways, people in Malton would benefit from micromobility modes to access public transit more quickly.

3.1.3 Other key drivers of demand for micromobility include:

- The International Centre by Pearson Airport
- University of Toronto Mississauga
- Sheridan College Hazel McCallion Campus
- Mohawk College Mississauga Campus

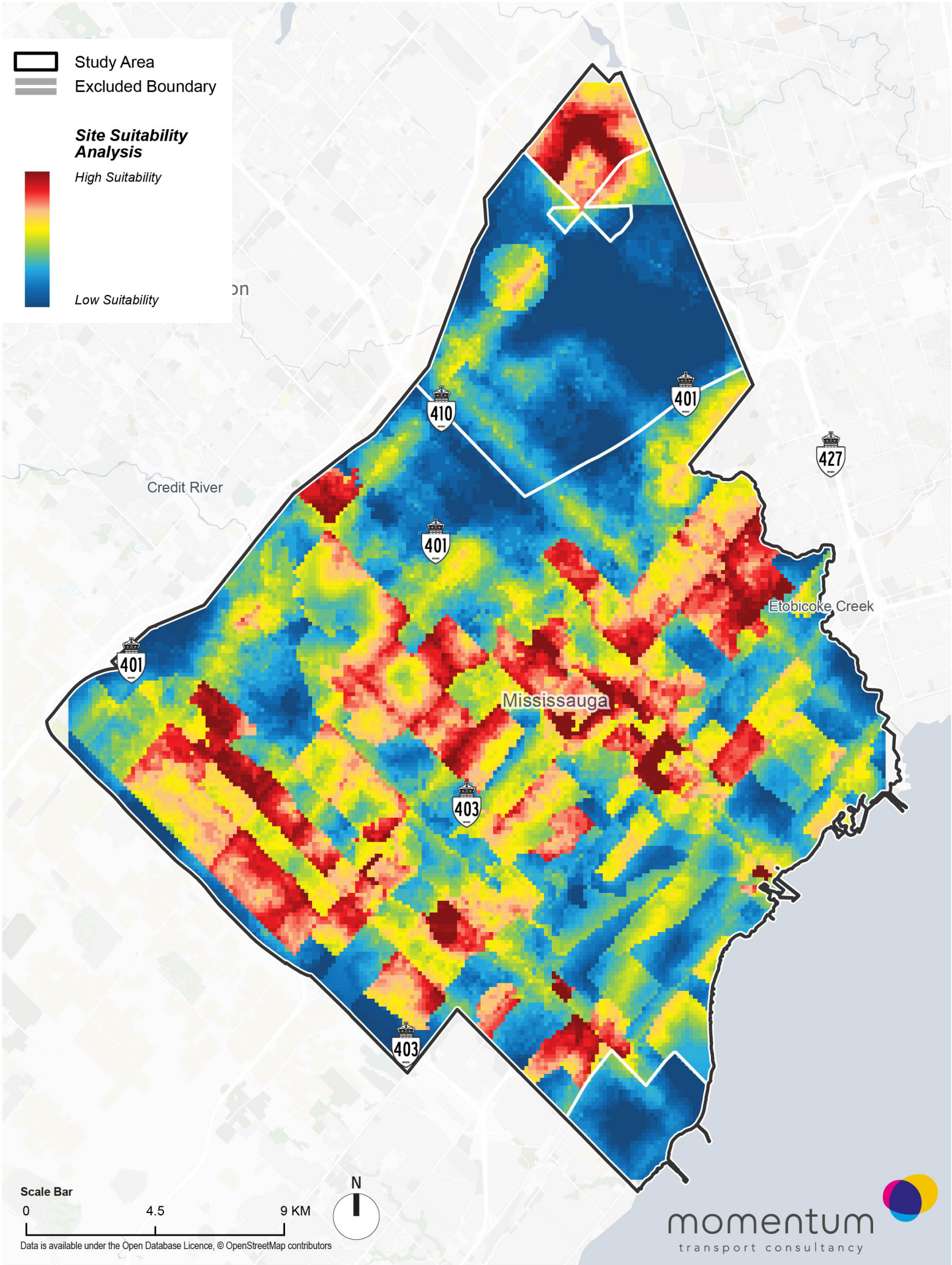
3.1.4 These demand drivers were reflected in the site suitability model as places of employment, but they also generate visitors. It is recommended that micromobility operators consider visitor numbers to these locations, to help ensure the scheme caters to visitor demand.

3.1.5 Areas of low suitability were generally low-density industrial and commercial areas around Pearson Airport and on the Lakeside.

3.1.6 The industrial lakeside state in the southwest corner of the city, the industrial and commercial area south of Malton and west of Pearson International Airport have a very low suitability score.

MISSISSAUGA MICROMOBILITY PILOT

FIGURE 9 : MAP OF SITE SUITABILITY FOR MICROMOBILITY, CURRENT SCENARIO



FUTURE CONDITIONS

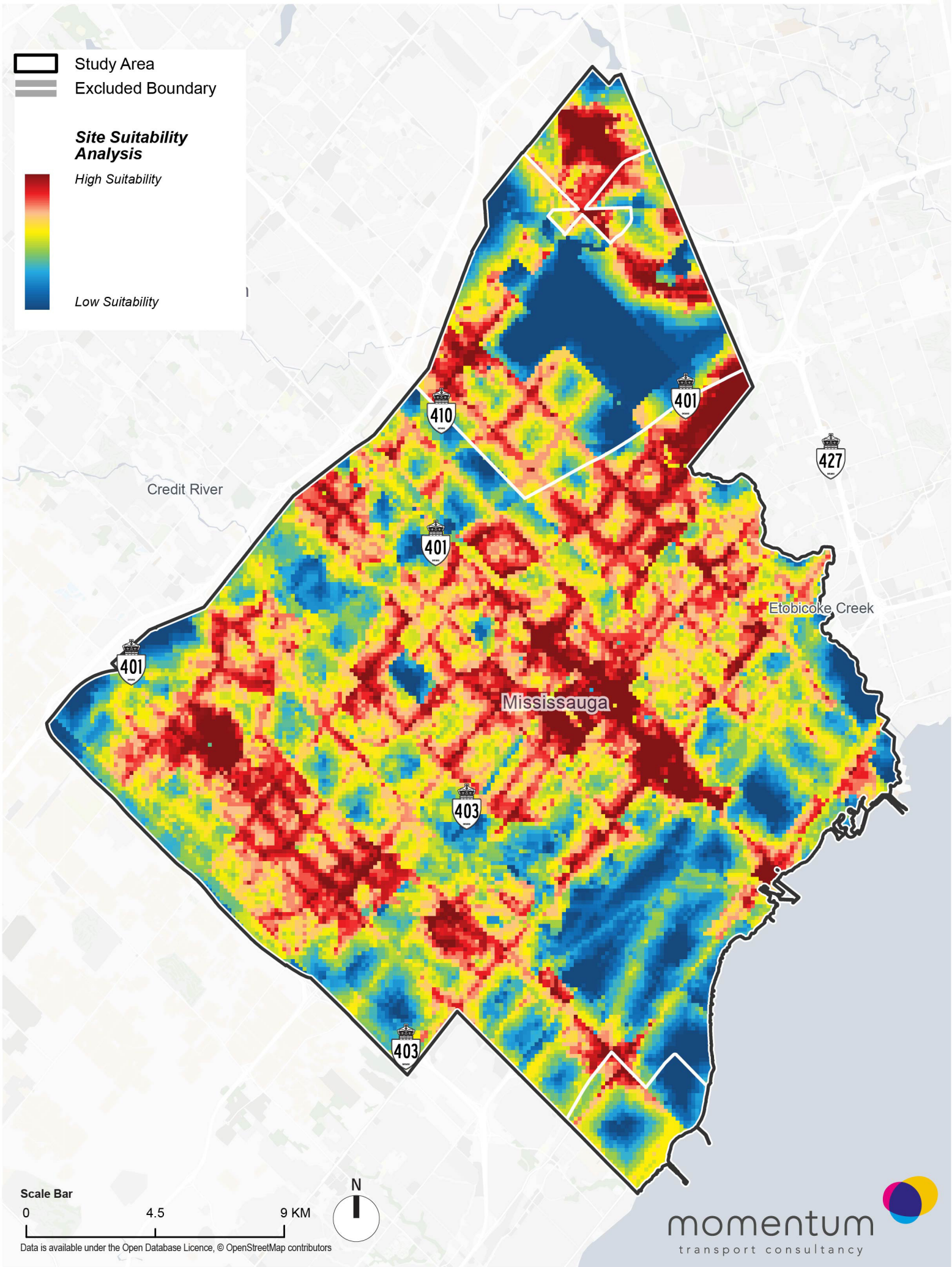
3.1.7 Figure 10 shows the suitability scores across the city for 2031.

3.1.8 The expansion in transit and the cycle networks to 2031 will lead to a marked increase in the number of areas with higher suitability scores.

3.1.9 Increases in population density across the City's central areas, the Hurontario Street corridor, Erin Mills and Cooksville will increase their suitability for micromobility.

MISSISSAUGA MICROMOBILITY PILOT

FIGURE 10 : MAP OF SITE SUITABILITY FOR MICROMOBILITY, FUTURE SCENARIO



3.2 Service area recommendation

PRINCIPLES

3.2.1 Micromobility service areas are shaped by local demand and costs: larger service areas increase ridership but also costs.

3.2.2 The City of Mississauga is considering a shared dockless micromobility scheme; the dockless element allows vehicles to flow to demand hotspots.

3.2.3 According to EValuate's previous experience with micromobility services, service areas with boundaries that are easy to understand are more popular with users. Contiguous service areas also allow for more trips to be made by micromobility, thanks to network effects.

3.2.4 Only trips within the City of Mississauga were in scope for this report – but a continuous service area with neighboring cities, especially Brampton and Toronto, would enhance user convenience, and therefore scheme take up and operator profitability.

RECOMMENDATION - CURRENT SCENARIO

3.2.5 Based on the principles above, the service area recommendation encompasses all medium and high suitability areas within the city, as well as the areas in between them – with two exceptions:

- Commercial and industrial areas between Highway 401, Highway 410 and Malton, which would be ride-through but no parking zones. Parking would be allowed in Malton Old Village and the International Centre. Ride-through zones make it easier and cheaper for operators to deploy vehicles, while offering users the option to ride to and from Malton to elsewhere in the City (though it is expected that most micromobility trips in Malton would be local to this part of the City).
- The lakeside industrial estate southwest of the city, which would be a no-parking, no-riding zone – given its location at the edge of the city, it is unlikely that users would ride through to get to another location on the other side.

3.2.6 The service area recommendation encompasses 246km2 (Mississauga's total area is 292.4 km2).

RECOMMENDATION - FUTURE SCENARIO

3.2.7 The expansion of the transit and cycle networks is expected to boost site suitability across the City.

3.2.8 If the micromobility scheme is successful, micromobility adoption by 2031 could be high, including in areas with lower suitability scores – which could help review and potentially shrink no-park zones.

3.2.9 As in the current suitability analysis, a joined-up scheme with neighboring cities would increase site suitability, especially near the City's limits.

4. REVENUE AND COST CONSIDERATIONS

4.1 Introduction

4.1.1 This section looks at how the City of Mississauga can create an attractive environment for a micromobility operator to provide a successful shared micromobility scheme. This is to help inform the service area recommendation, the size of the fleet that is likely to be needed to ensure the scheme take up and growth, and other characteristics of the micromobility offer, such as the number of operators.

SCHEME BENCHMARKING

4.1.2 Based on the service area set out above, an estimated 1,500- 2,000 daily trips are likely to be made through a shared micromobility scheme in Mississauga in its first year. This estimate is based on a review of scheme take-up in other cities, and the mode shift that these schemes have enabled, which could be replicated in Mississauga.

4.1.3 Over the first year of the scheme, this level of demand would mean that up to 1,760 micromobility vehicles would be needed across the service area in months with the highest ridership levels.

4.1.4 Based on other schemes in Canada, it is anticipated that a scheme in Mississauga would be highly seasonal. Operators would release micromobility vehicles to match expected demand – with the greatest number of vehicles in circulation over the summer months.

4.1.5 Based on other schemes and to support the scheme profitability, a 3:1 e-scooter-to e-bike ratio has been modelled – so the initial fleet would include up to 900 e-scooters and 300 e-bikes. The next section expands on profitability drivers for shared micromobility schemes.

Table 4.1: Trips and mode share comparison

Variable	Unit	Mississauga	Brampton	Ottawa	Edmonton
Population	n/a	717,961	656,480	1,017,449	1,010,899
Trips / person / day	n/a	1.6	1.6	1.6	1.6
Trips (all modes/day)	n/a	1,172,997	1,800,100	2,520,500	3,139,100
e-scooter trips	daily average	1,760	1,905	600	3,389
e-scooter modal share	n/a	0.15%	0.19%	0.02%	0.11%

Table 4.2: Micromobility scheme comparison

Variable	Unit	Mississauga	Brampton	Ottawa	Edmonton
City Area	km2	255	266	521	766
Density	pax / km2	2811	2469	1954	1320
e-bikes	n/a	300	n/a	n/a	400
e-scooters	n/a	900	750	900	1500
All vehicles	n/a	1200	750	900	1900
Fleet density	vehicles / km2	4.7	2.8	1.7	2.5
Trips	annual	n/a	n/a	n/a	610,000
Trips / vehicle / day	n/a	2.0	2.5	2.3	2.3
Number of operators	n/a	1	3	3	2
Operators	n/a	n/a	Neuron, Big Bird, Scooty Mobility	Big Bird, Lime, Neuron	Big Bird, Lime
Scheme start	n/a	n/a	Apr 2023	June 2020	June 2018

PROFITABILITY DRIVERS

4.1.6 The table below sets out key profitability considerations for micromobility operators, based on existing operations in other cities.

Table 4.3: Profitability drivers

Profitability Driver	Profitability Correlation	Rationale
Service Area		
Population	Positive	Cities with fewer than 100k residents typically require subsidy
Average population density	Positive	Encourages micromobility usage
Contiguous borders of service area	Positive	Minimizing virtual restrictions on where vehicles can travel, including within and between service areas, promotes more journeys
Service area size	Positive (for higher density areas)	Larger service areas increase user convenience and allow for more trips to be taken, which helps cover fixed costs, but variable costs also increase – these can

Profitability Driver	Profitability Correlation	Rationale
		make expansion in lower density areas less profitable Larger service areas also reap the benefits of powered micromobility, as people are willing to make longer trips than with human powered vehicles (unless the car is a more convenient option)
Terrain gradient	Negative	Powered micromobility tends to favor cities with steep terrain, due to higher modal shift from walking
Vehicle Composition		
E-scooters	Positive	Novel way to move around. Greater appeal to a wider range of physical abilities
E-bikes	Negative	Larger size means capex and opex costs are higher than for e-scooters – these have a higher manufacturing cost, higher maintenance cost (more moving parts), higher operating cost (can fit less in a van). Typically the rider pays the same rental price
Vehicle density	Positive then negative	Availability is crucial, particularly for first mile (first leg) of multi-modal journeys. But oversupply of vehicles leads to higher operational costs (energy, maintenance, vandalism)
Parking		
Parking density	Positive	In a mandatory parking model, a greater density of bays enables riders to finish close to their final destination.
Parking capacity	Positive	Sufficient capacity at the desired destination parking bay avoids 1) street clutter associated with overflow parking and 2) reduced future demand due to rider inconvenience of searching for another parking bay
Free floating parking model	Positive	Greater user convenience but can negatively impact the public realm
Mandatory parking model	Negative	Lower user convenience but impact can be limited by sufficient density of parking bays
Parking infrastructure	Minimal	Some physical infrastructure can help riders locate parking bays, particularly if they are empty and / or the rider is unfamiliar with the location

5. RECOMMENDED PARKING LOCATIONS

5.1 Types of micromobility parking

5.1.1 There are several parking types available to the City of Mississauga to manage the introduction of micromobility vehicles:

- **Mandatory parking zones**: users must park in a parking bay, which is an area in the public realm dedicated to parking for micromobility vehicles. The size of bays can vary but each should be able to fit peak demand. User compliance is usually enforced by geofencing – this is a virtual boundary set by technology such as GPS. Users are encouraged by rewards and/or fines to only park in these zones.
- **Recommended parking zones**: users are encouraged to park within a certain area and rewarded for doing so.
- **Hybrid free-floating and mandatory parking zones**: users must park in geofenced areas where sidewalks are in high use (such as city centers and main streets), but in neighborhoods where there is more generous pedestrian space or less pressure on sidewalks, vehicles can be parked outside parking zones (free-floating).
- **Free floating**: users do not have to park within certain areas.

5.1.2 This section identifies recommended parking locations for micromobility vehicles, should the City require mandatory parking in bays.

5.2 Methodology

5.2.1 Higher demand areas will need a higher density of parking bays to improve convenience and reliability for users, and each of these bays will need to accommodate more micromobility vehicles.

Parking locations

5.2.2 Recommended parking locations were determined by developing a parking identification model.

5.2.3 The recommended service area was divided in higher suitability, medium suitability, and lower suitability areas, based on the criteria set out in Table 5.1.

5.2.4 Higher suitability areas have twice the density of parking locations as lower density areas. Higher suitability areas were divided in a 500m grid – each square containing one parking location. Medium suitability areas were divided in a 1000m grid – each square containing one parking location.

5.2.5 It is assumed that areas with the lowest suitability scores wouldn't require dedicated parking locations, as they can be served by locations in higher suitability areas. No-park and no-ride zones are excluded from this analysis.

Table 5.1: How parking densities have been determined

	Score (as determined in the demand model presented in 3.1.1)	Parking density	Number of parking locations	Fleet size
Higher	Top 50% of areas by suitability score	1 parking location per 500m	272	886
Medium	Following 30% of areas	1 parking location per 1000m	135	252
Lower	Bottom 20% of areas	No dedicated parking location – served by nearest locations in higher suitability locations	-	-

5.2.6 The recommended parking location within each square of the grid is weighted towards areas of higher suitability within that square. This is to maximize user convenience. As a result, parking locations cluster near the higher suitability areas, and distances between parking locations vary.

5.2.7 The exact location of the parking bay is also influenced by the road type: it is assumed that bays won't be provided on highways, pedestrian-only streets or service roads, but instead on the nearest location that micromobility vehicles can access.

5.2.8 Two additional parking bays were manually added to serve Old Malton and the International Centre – in anticipation of additional demand (respectively from residents and visitors) that would not have been captured in our model, due to proximity of these areas to the airport, which scores as low suitability, and the lack of available public data on visitors. These two locations help connect residents and visitors to Malton's GO station.

Number of vehicles

5.2.9 Some parking bays will naturally see a higher demand than others, which means vehicles will gravitate towards higher demand areas. While this is generally desirable as it means vehicles are located where they are most likely to be used, a cap on the number of micromobility vehicles in each bay, or in different areas of the city, can help manage overcrowding or underprovision of vehicles.

5.2.10 The estimated number of vehicles in each parking location would depend on the suitability score for the surrounding area. Parking bays in higher suitability areas would see 3-5 micromobility vehicles, and medium suitability areas would see 1-2 spaces. These numbers are based on a fleet of 1,200 vehicles. Additional bays in Malton were not given a number of vehicles – this will need operator input based on the number of visitors to the International Center, and expected demand in Old Malton.

5.2.11 Figure 11 shows an estimation of how 1,200 vehicles would be initially distributed to match the anticipated level of demand across different areas of the City.

5.2.12 An operator may wish to provide additional bays, for example to accommodate expected visitor demand.

5.2.13 While neighboring municipalities were not in scope for this piece of work, additional bays or parking capacity would also need to be provided near the City's limits to cater for demand from residents, jobs or for recreational opportunities immediately beyond the City's limits.

Parking capacity

5.2.14 Bays will need to fit a larger number of vehicles than those set out by our parking identification work to accommodate spikes in demand.

5.2.15 Overall parking capacity should be at least four times the number of vehicles in circulation to ensure riders can end trips where they want to.

5.3 Recommended parking locations

Summary

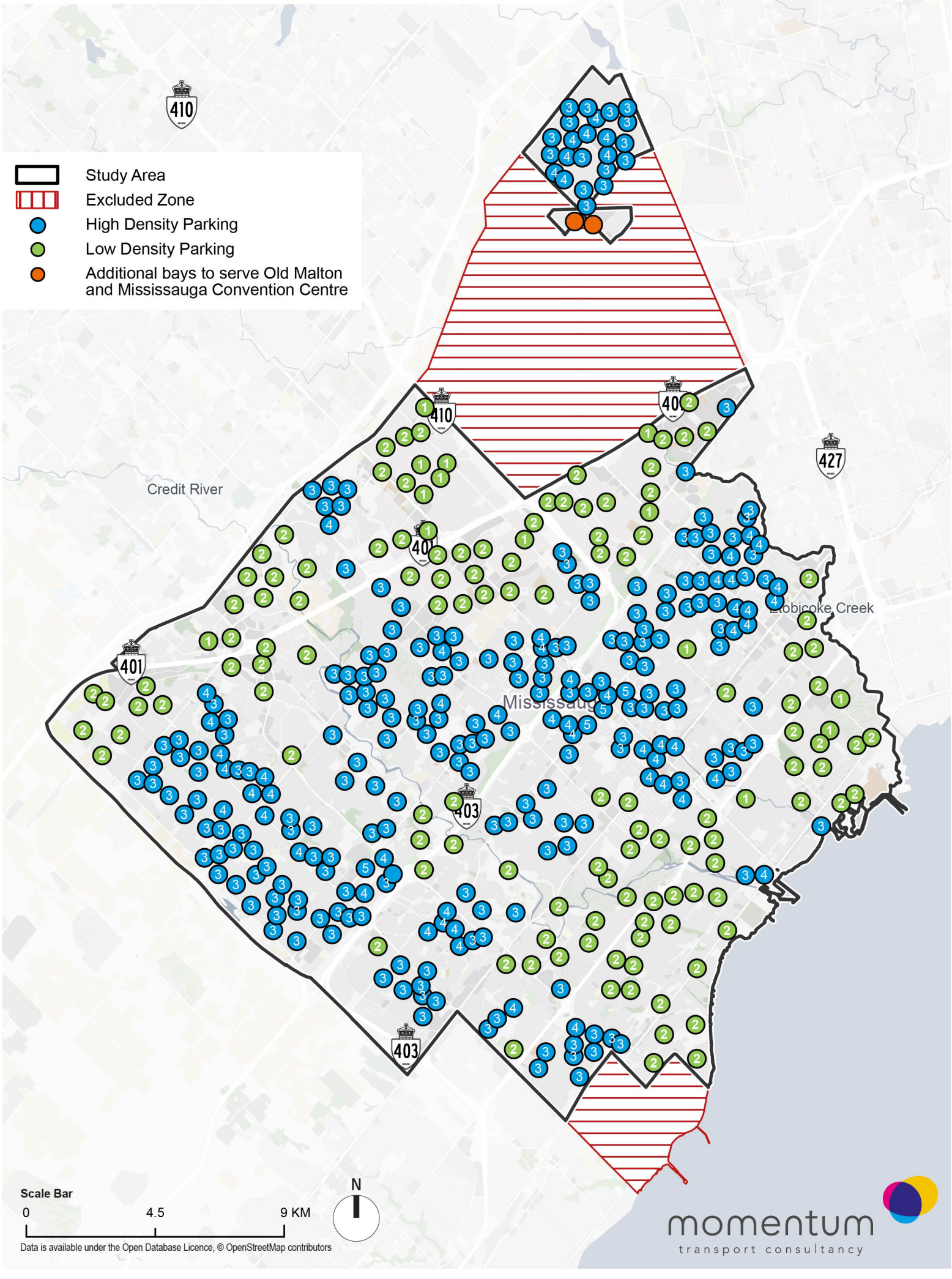
5.3.1 This parking model covers the recommended service area.

5.3.2 409 parking locations are proposed – 407 parking locations were identified through the parking identification model, and together they would include 1,138 micromobility vehicles. This is slightly below the 1,200 average recommended fleet size, to provide flexibility for additional bays or vehicles – for example an additional two bays were identified as required for Old Malton and the International Centre.

5.3.3 The map below shows the recommended location of parking bays and the number of vehicles these bays would include. It is anticipated that this will change based on demand, and vehicle numbers are provided for indicative purposes only.

MISSISSAUGA MICROMOBILITY PILOT

FIGURE 11 : RECOMMENDED PARKING ZONE



6. SUMMARY AND RECOMMENDATIONS

6.1 Key findings

6.1.1 The City of Mississauga can create an attractive environment for users and for a micromobility operator to provide a successful shared micromobility scheme by choosing a single operator and if possible, joining up with neighboring micromobility schemes.

6.1.2 Based on the service area set out below, an estimated 1,500 to 2,000 daily trips are likely to be made through a shared micromobility scheme in Mississauga in its first year. This estimate is based on a review of scheme take-up in other cities, and the mode shift that these schemes have enabled, which could be replicated in Mississauga.

6.1.3 Much of the activity would be concentrated in high demand areas around the city center, Port Credit or Erin Mills.

6.1.4 It is anticipated that the expansion in transit and the cycle infrastructure by 2031 will further increase the number of areas with high suitability.

6.1.5 Figure 12 illustrates the suitability scores across the city, currently and in 2031.

6.2 Recommendations

6.2.1 Following on from the suitability analysis and profitability considerations above, we would recommend that the City of Mississauga:

- Specifies a minimum e-bike deployment – for example that there must be at least one e-bike for three e-scooters – as operators will be encouraged to provide a higher number of e-scooters due to cost considerations[15].
- Agrees with the chosen operator(s) a minimum and a maximum number of vehicles to be available in the city at any one time. These numbers could vary month by month based on the expected seasonal demand and be revised as scheme take up figures become available.
- Commissions a single operator to provide the service, due to the high fixed costs of providing a storage and maintenance warehouse, and operations team, and the micromobility vehicles. This operator value can then be returned to the city through a revenue share, user discounts and passes, or through the provision of e-bikes, which tend to be unprofitable to operate.
- A continuous service area with neighboring cities, especially Brampton and Toronto, would enhance user convenience, scheme take up and operator profitability. Where

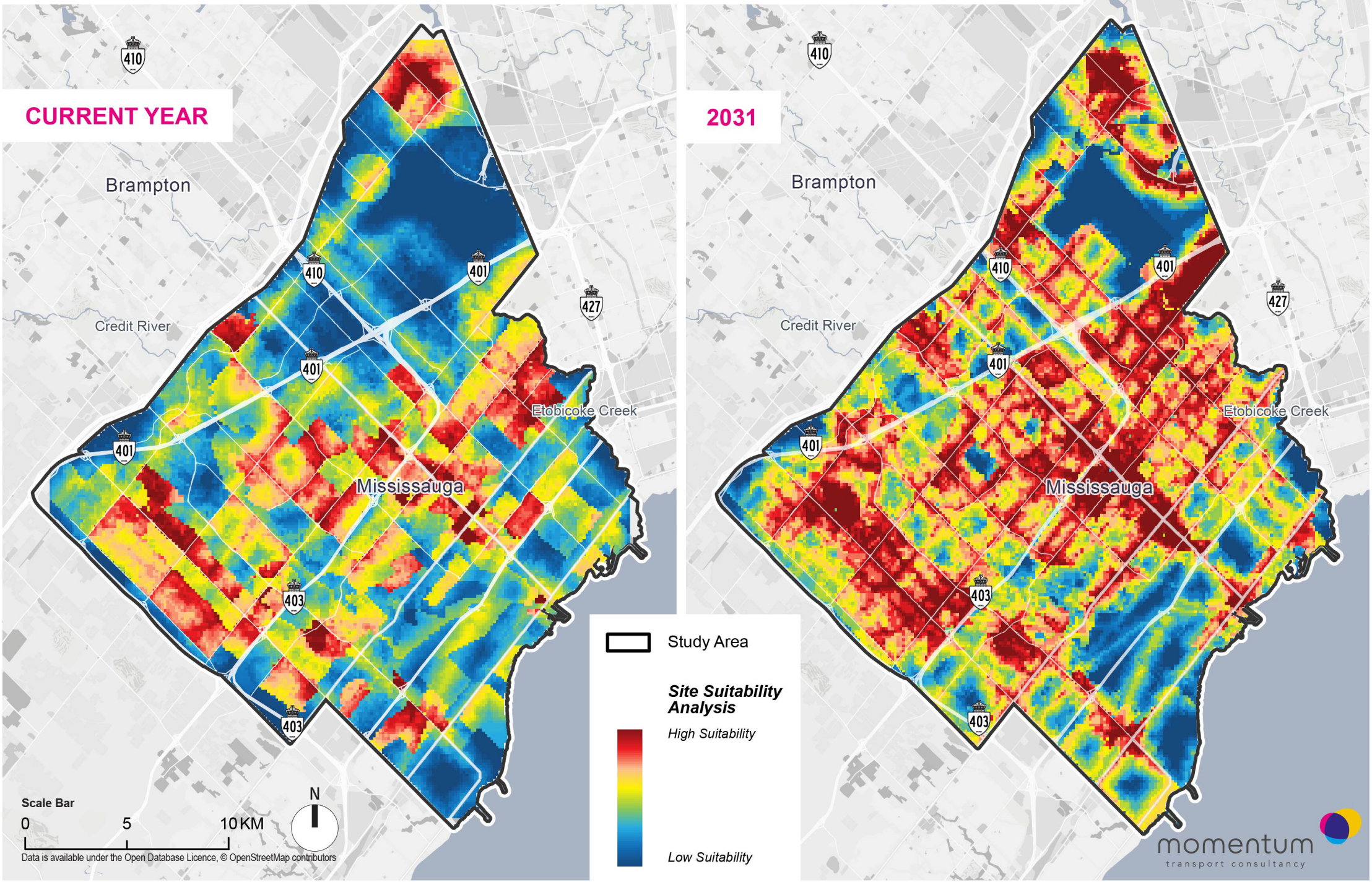
[15] E-bikes are faster and have a longer range than e-scooters, which can make them more attractive for longer or more varied trips. E-Bikes vs Scooters: Pros, Cons, and Which Is Best For You? (micromobilitycoalition.org)

there are shared micromobility schemes in proximity (e.g. Brampton), take-up is likely to be strong due to the network effects.

- The parking solution should reflect the street environment: mandatory parking in bays will mitigate the risk of sidewalk clutter in areas where sidewalk space is at a premium. Arrangements for micromobility can involve a mix of designated bays and free-floating, which can increase user convenience.

MISSISSAUGA MICROMOBILITY PILOT

FIGURE 12 : MAP OF SITE SUITABILITY FOR MICROMOBILITY, CURRENT AND FUTURE MODELS



7. ABOUT THE AUTHORS

7.1 Momentum Transport Consultancy

7.1.1 Momentum is an integrated, people-first transport consultancy specializing in the vision, technical understanding and design for transport and people movement in complex environments. Everything we do is carefully and diligently designed to create transport strategies and solutions that inform, integrate with and are integral to, every aspect of the built environment today and for the future.

7.1.2 As a people-focused consultancy originally based in the UK, Momentum has vast experience in a diverse array of international projects and always prioritizes the use of innovative tools, to gain a deeper understanding of the user experience within the urban context. With a focus on the comfort and safety of active travelers in cities, the tools used by Momentum allow for a seamless integration of active transportation solutions into every environment.

7.1.3 Momentum has previously conducted research to support the deployment of micromobility vehicles several North American and European cities – the largest include Dublin, Bordeaux and Rimini.

7.1.4 Momentum provides a holistic vision to transport planning that integrates engineering, technical understanding and design into the process of planning, with the pedestrian safety and comfort at the heart of everything we do. Helped by our fully integrated approach, our teams use a combination of knowledge of local needs and policy requirements and best practice within the industry internationally to deliver active transportation schemes across a variety of locations and environments.

7.2 EValuate

7.2.1 EValuate Strategy Consulting has partnered with Momentum to provide a micromobility offering to cities in the UK, Canada and the Middle East. With a deep understanding of the commercial and operational models of shared micromobility, EValuate has advised central Government and local authorities on a range of topics, from strategy development, to market engagement and procurement.

7.2.2 Beyond micromobility, EValuate has delivered a range of strategy and innovation projects in the transport and infrastructure sectors in the UK and globally. This ranges from electric vehicle charging infrastructure and fleet decarbonization, to identifying innovative applications of emerging transport technologies and new transport modes to help organizations reduce their carbon footprint and improve performance.

APPENDIX A: LITERATURE REVIEW

7.2.3 This section reviews evidence on the type of users and environments that drive demand for micromobility – with a focus on evidence from existing schemes.

Shared Micromobility State of the Industry Report, North American Bike Share Association, 2019

7.2.4 Report on the mobility benefits and profile of micromobility users.

7.2.5 Micromobility services can add first and last-mile connection to transit, complementing the public transport system.

7.2.6 Users of shared micromobility schemes were disproportionately young, male, with higher incomes and higher levels of education.

7.2.7 Larger cities tended to commission a larger number of operators.

Long term assessment of a successful e-bike-sharing system. Key drivers and impact on travel behavior, Julio Raky, Andrés Monzon, 2022

7.2.8 Evaluation of the Madrid Bike Share scheme, combining surveys data with operator statistics.

7.2.9 User profile has evolved over time (2015-2019). It found that “there are more workers and fewer students, and users having higher education used the bike share service more frequently”.

7.2.10 The evidence from Madrid shows a persisting gender gap: 36% of users were women, 64% were men.

7.2.11 Weather factors affected the success of the system – especially heat or cold weather.

7.2.12 Dedicated bike lanes were the most important factor for take up at the early stage. However, it later lost some of its importance, as different types of cycling infrastructure were brought forward, and cyclists became familiar with road traffic interactions.

Spatial associations of dockless shared e-scooter usage, Michael J. Smart, Robert B. Noland, 2020

7.2.13 Analysis of usage of e-scooter data in Austin, Texas to estimate its usage patterns.

7.2.14 The study found that “Usage of e-scooters is associated with areas with high employment rates, and bicycle infrastructure, compatible with the findings of many bike share studies. This implies that more bicycle infrastructure may increase e-scooter usage.”

7.2.15 A high student population significantly increased e-scooter usage.

7.2.16 In the Austin context, e-scooters were widely used for leisure purposes. They were more rarely used for a start to end commute.

7.2.17 Trip origins and destinations were associated with bus stop locations, suggesting that people link e-scooter and bus trips.

E-scooters and sustainability: Investigating the relationship between the density of E-scooter trips and characteristics of sustainable urban development, Aryan Hosseinzadeh, Majeed Algomaiah, Robert Kluger, Zhixia Li, 2021

7.2.18 The study explores how biking and pedestrian infrastructure affect e-scooter usage.

7.2.19 Young individuals (18-29 years old) were more likely to use services.

7.2.20 Commercial land use positively and industrial land use negatively affected E-scooter trip density in both all trips and peak-hours trips.

An Approach to Model the Willingness to Use of E-Scooter Sharing Services in Different Urban Road Environments, Sorkou and al., 2022

7.2.21 Study to identify the factors that influence the willingness of using an e-scooter, with a regression model.

7.2.22 Environmental factors – notably the availability of bike lanes, pavement condition and speed limits - were the most influential in determining e-scooter use.

7.2.23 Pricing policies can be an incentive for attracting users in low density areas.

Exploratory Analysis of Real-Time E-Scooter Trip Data in Washington, D.C., Zhenpeng Zou, Hannah Younes, Segvi Erdogan, Jiahui Wu, 2020

7.2.24 Study to identify travel patterns and behavior related to e-scooter usage.

7.2.25 The correlation coefficients suggest that all bikeway designs were positively correlated with e-scooter trips. Bike lanes and signed bike routes were most conducive to e-scooter usage.

7.2.26 E-scooters were very popular in tourist areas for leisure trips.

APPENDIX B: CORRELATION MATRIX

Figure 13: Correlation matrix, current demand model

```
#              STATISTICS of INDIVIDUAL LAYERS

#    Layer           MIN          MAX         MEAN          STD
#  ------------------------------------------------------------
   CycleSecondary    0.0000       9.0000       3.0409       3.5166
   CyclePrimary      0.0000       9.0000       2.6051       3.2918
   PTAL              0.0000       8.0000       1.2891       0.9541
   Student Pop       0.0000       9.0000       1.0464       2.3972
   PopDensity        0.0000       9.0000       0.7565       1.3875
   PropNoCars        0.0000       9.0000       0.4998       1.3997
   EmploymentDens    0.0000       9.0000       1.4585       1.7948
#  ============================================================

#                  CORRELATION MATRIX

#    Layer       CycleSecondary  CyclePrimary     PTAL       Student Pop    PopDensity    PropNoCars  EmploymentDens
#  ------------------------------------------------------------------------------------------------------------------
   CycleSecondary    1.00000       0.65131       0.26091       0.51993       0.68901       0.41659       0.49477
   CyclePrimary      0.65131       1.00000       0.18803       0.48637       0.67528       0.36166       0.38239
   PTAL              0.26091       0.18803       1.00000       0.16137       0.39677       0.25660       0.34656
   Student Pop       0.51993       0.48637       0.16137       1.00000       0.64133       0.63875       0.17812
   PopDensity        0.68901       0.67528       0.39677       0.64133       1.00000       0.52133       0.28581
   PropNoCars        0.41659       0.36166       0.25660       0.63875       0.52133       1.00000       0.21959
   EmploymentDens    0.49477       0.38239       0.34656       0.17812       0.28581       0.21959       1.00000
#  ==================================================================================================================
```

Figure 14: Correlation matrix, future demand model

```
#              STATISTICS of INDIVIDUAL LAYERS

#    Layer           MIN          MAX         MEAN          STD
#  ------------------------------------------------------------
   CycleSecondary    0.0000       9.0000       3.5501       3.7294
   CyclePrimary      0.0000       9.0000       3.9242       3.8147
   PTAL              0.0000       8.0000       1.6817       1.0163
   PopDensity        0.0000       9.0000       0.7376       1.2917
   EmploymentDens    0.0000       9.0000       1.3610       2.1485
#  ============================================================


#                  CORRELATION MATRIX

#    Layer         CycleSecondary CyclePrimary     PTAL       PopDensity    EmploymentDens
#  ------------------------------------------------------------------------------------------
   CycleSecondary    1.00000       0.76039       0.19287       0.71273       0.43443
   CyclePrimary      0.76039       1.00000       0.24273       0.66019       0.58976
   PTAL              0.19287       0.24273       1.00000       0.39956       0.19629
   PopDensity        0.71273       0.66019       0.39956       1.00000       0.19443
   EmploymentDens    0.43443       0.58976       0.19629       0.19443       1.00000
#  ==========================================================================================
```

APPENDIX 4 – DRAFT STATEMENT OF WORK

1. Introduction

1.1. Project Overview

The City of Mississauga (City) is preparing to introduce a shared micro-mobility program. The City is seeking proposals from shared micro-mobility Service Providers to deliver additional mobility options to residents and visitors in Mississauga.

Phase 1 of the Micro-mobility Program Development project assessed different program models for implementation, with the final report recommending a privately owned and operated system that provides both electric pedal-assist bicycles and electric kick-style scooters in a hybrid model permitting docked and dockless parking. The City is seeking up to two (2) Service Providers to deliver these shared micro-mobility services city-wide.

1.2. Background

The freedom to move is at the heart of the Transportation Master Plan Vision for Mississauga. Everyone and everything will have the freedom to move safely, easily, and efficiently to anywhere at any time.

Quality of life in the city depends on people having reliable access to the people, places, and things they need and enjoy. That access must be available to all people, regardless of their reason for travelling, time of travel, destination, journey length, or personal circumstances. Micro-mobility systems can provide greater access across the City as first and last mile solutions to connect to destinations or compliment higher order transit.

Several key City policy documents support a shared micro-mobility program in the City of Mississauga, including:

- Cycling Master Plan (2018), which recommended exploring the feasibility of a bike sharing system in Mississauga.
- Transportation Master Plan (2019), which called for the creation of a micro-mobility policy framework.
- Smart Cities Master Plan (2019), which has a goal to focus on mobility that provides freedom of movement, active transportation, and future oriented multimodal options with integrated technologies improving access and choice.
- Climate Change Action Plan (2019), which includes an action for Mississauga to encourage and enable micro-mobility systems to help the city achieve GHG emission reduction targets.
- Economic Development Strategy (2020-2025), which includes a priority action to set a regulatory framework for electric bikes and scooters and secure private sector investment to support.

In turn, “Bikes, E-Bikes, and E-Scooters: Expanding Mississauga’s Transportation Options”, a report on micro-mobility systems in Mississauga, was completed by staff in response to the

actions set out by the aforementioned plans and policies and presented to General Committee at its meeting on October 30, 2019 (GC-0577-2019).

Staff were directed to initiate the development of a regulatory framework to encourage and enable a phased introduction of micro-mobility systems in the City of Mississauga.

Shortly after, on November 27, 2019, the Province of Ontario announced a five-year pilot program to allow electric kick-style scooters (e-scooters) on municipal roads in Ontario, beginning on January 1, 2020 (O.Reg.389/19). The pilot will be the Province's primary tool in informing the feasibility of a permanent e-scooter framework. It is stipulated that local municipalities must amend their existing by-laws in order to opt-in to the pilot.

While minimum safety requirements (speed, operating age, etc.), have been established by the Province, it is the responsibility of participating municipalities to determine all other regulatory requirements.

On September 28, 2020, City Staff conducted a cross-departmental visioning session for micro-mobility in Mississauga. The session resulted in the development of eight strategic pillars intended to guide the micro-mobility project.

A corporate report including the above-mentioned vision was considered by General Committee at its meeting on December 2, 2020.

As a result, Council adopted City staff recommendations to enact all necessary by-laws to permit and regulate the use of personal e-scooters in Mississauga (GC-0358-2020), leading to approved amendments to the City Traffic, Transit, and Parks by-laws. The bylaw amendments do not grant authority to shared e-scooter companies to provide services in Mississauga; rather, the details surrounding the implementation of shared micro-mobility services in Mississauga will be determined through subsequent phases of the overall micro-mobility project.

In 2021, the City retained IBI Group to assist staff in completing Phase 1 of the Micro-mobility Program Development project. The goal of this first phase was to identify a recommended vehicle type (or types), system model, and governance model most appropriate for the City. IBI Group's findings and final report were considered by General Committee at its meeting on June 15, 2022 (GC-0409-2022).

1.3. Project Goals and Objectives

The following eight strategic pillars for micro-mobility in the City of Mississauga, endorsed by Council on December 9, 2020, will guide the development of the shared micro-mobility program:

- **Accessibility and Ease of Use** – avoid creating accessibility barriers to the extent possible and ensure systems are available for use to all residents (geographically, financially, physically);
- **Addressing Climate Change** – reduce vehicular traffic congestion/move people rather than cars and improve mode share for active transportation;

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- **Build Sense of Community** – nurture community by developing a vested interest in micro-mobility, including public art components;
- **Education** – improve residents' understanding of the rules of using micro-mobility systems;
- **Leverage and Partner with Business** – monetize or capitalize on the presence of micro-mobility, including sponsorship and the use of micro-mobility vehicles for goods movement;
- **Mobility as a Service** – provide a wide variety of ways to move around the city, including combining modes of travel;
- **Safety** – build complete streets, including separated active transportation corridors; and
- **Supporting Infrastructure and Policies** – create a robust and sustainable financial model, and address liability and risk.

2. Evaluation Process

2.1. Mandatory Submissions Requirements

The Proposal should contain the following information in the order it appears below:

RFP Component	Section	Questions/Requirements
Firm's Experience on Similar Projects	Qualifications	Question(s): #1 **Other Requirements:** References
Project Staff	Staffing and Human Resources	Question(s): #2- #7 **Other Requirements:** Staffing and Human Resources Plan
	Sub-contractors	Question(s): #8 **Other Requirements:** List of Sub-contractors
Project Understanding and Approach	Governance	Question(s): #9
	Project Workplan and Schedule	Question(s): #10 **Other Requirements:** Project Workplan and Schedule
	Equipment Requirements	Question(s): #11 - #18
	System Design	Question(s): #19 - #29

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	Environmental Impact	Question(s): #30- #32 **Other Requirements:** Environmental Impact Plan
	Pricing Structure and Pay Elements	Question(s): #33 - #39 **Other Requirements:** Pricing and Payment Plan
	Equity	Question(s): #40 - #41 **Other Requirements:** Equity Plan
	Monitoring and Evaluation	Question(s): #42
	Data Sharing and Privacy	Question(s): #43 - #46 **Other Requirements:** Data Sharing and Privacy Plan
	Compliance, Security and Enforcement	Question(s): #47 - #53 **Other Requirements:** Compliance, Security and Enforcement Plan
	Rebalancing, Parking, and Right-of-Way	Question(s): #54 - #62 **Other Requirements:** Parking and right-of-way management plan
	Fleet and Station Area Maintenance	Question(s): #63 - #70 **Other Requirements:** Fleet and Station Area Maintenance Plan
	Customer Service	Question(s): #71 - #75 **Other Requirements:** Customer Service Plan
	Marketing, Communication and Education	Question(s): #76 - #86 **Other Requirements:** Marketing, Communication and Education Plan

In your proposal, reference the question numbers you are responding to in order to be awarded full points for your response. In some sections, you will be asked to prepare a plan. Plans should function as standalone documents. For each plan, please respond to the questions within the section and provide any relevant additional information. Refer to

APPENDIX 4 – DRAFT STATEMENT OF WORK

Appendix F: Service Levels for the expected level of service to be provided by the Successful Service Provider(s).

2.2. Evaluation of Technical Submission

The City will review and score all proposals received within the RFP period that meet the minimum proposal requirements. Proposals will be evaluated based on the information delivered by the Service Providers.

See Appendix D: Proposal Requirements Checklist. Applicants must submit the complete checklist as part of their proposal.

2.3. Demonstrations

The City will invite up to three (3) Service Providers to demonstrate their equipment and technology to the evaluation team. Shortlisted Service Providers will be notified by Tuesday, December 5, 2023. Service Providers will be asked to demonstrate the vehicles, stations, and technologies. Demonstrations will occur on Wednesday, December 13, 2023.

2.4. Service Provider Selection

Based on scoring of the technical submissions and demonstrations, the City will select a Service Provider or Service Providers, and enter into negotiations towards an Agreement. The top ranked Service Provider(s) will be notified by Wednesday, December 20, 2023.

3. Qualifications and Experience

The City is looking for a Service Provider or Service Providers with positive working relationship with communities comparable to Mississauga, have a demonstrated sustainable business model, and are able to sustain long-term operations.

Question:

1. Provide details of experience operating systems with similar scope and complexity. Demonstrate the company's financial stability. Include examples of how you have met the requirements listed in this Statement of Work.

3.1. References

Service Providers are required to submit at least three references, preferably for work assignments that are similar in type, scope, size and/or value to the work sought in this RFP and within the last five years. References must include:

- Name and title of reference
- Name of agency/company
- Agency/company contact information (email, phone number, and address)
- Contact information for the individual contact person, not agency/company (email and phone number)

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Other Requirements: List of References

4. Staffing and Human Resources

The Successful Service Provider(s) will have policies in place that promotes diversity and inclusivity in the workplace, building upon the NABSA Workforce Diversity Toolkit.

The Service Providers must provide details on which hiring practices will be utilized to hire local staff to operate the system and are encouraged to adopt hiring practices that provide jobs at a living wage with benefits. Resources for becoming a living wage employer can be found at the Ontario Living Wage Network. A Staffing and Human Resources Plan is required and must include the following information:

2. Describe your proposed organizational structure and anticipated interrelationship with the Project Team, including your plan for number of staff that will be hired to operate and maintain the system. It is expected that the Successful Service Provider(s) will have a manager available to attend in-person meetings with the Project Team and other major stakeholders. Include an organizational chart that indicates staff names and/or titles, including their roles and responsibilities.
3. What hiring practices will be utilized to employ local staff and promote a diverse, inclusive, and equitable workforce?
4. Describe any policies or practices in place to support employee development and retention.
5. Describe any policies or practices in places to help maintain/support staff from historically underrepresented, marginalized, and/or vulnerable communities.
6. Will a living wage with benefits be offered to staff?
7. What materials will be utilized during the training of staff (e.g. educational and communication training materials)?

4.1. Sub-Contractors

Service Providers are required to provide a list of sub-contractors (if any), their qualifications, and the type of work they will be hired to complete.

Question:

8. Describe any work that will be sub-contracted.

Other Requirements: List of Sub-contractors

5. Governance

The City is seeking up to two (2) Service Providers to deliver a shared micro-mobility program within Mississauga. The City's preference would be to work with a single provider; however, the option for two (2) Service Providers is available in case a single provider is unable to meet the program expectations and requirements listed in this document and its appendices.

APPENDIX 4 – DRAFT STATEMENT OF WORK

The Successful Service Provider(s) will work closely with the Shared Micro-mobility Project Team and major stakeholders to ensure the program is a success. It is expected that the Successful Service Provider(s) shall supply, operate, maintain, and own all of the micromobility devices and related equipment deployed in the field.

Question:

9. Are there parts of the program that would vary based on the number of Service Providers?

5.1. Length of Contract

The term of the Agreement shall be for a three (3) year period ("Term One") which will commence upon execution of the Agreement with the Successful Service Provider(s). The term of the Agreement may be extended by the City for a maximum of one (1) additional two-year term ("Term Two") at the sole discretion of the City. There is no obligation on the City to extend the Agreement. Should the City decide to extend the Agreement, such extension shall be on the same terms and conditions of the original Agreement including price, unless otherwise negotiated by the parties.

5.1.1. Schedule

The City is seeking up to two (2) Service Providers that will be able to do a full system launch in April, 2024. The Service Provider(s) will be expected to provide the City with a detailed work plan and schedule that outlines each task and target dates for progress. The Successful Service Provider(s) will be required to highlight any changes/delays in the project schedule, and provide justification for the change.

Question:

10. How will you meet the desired system launch date? Describe the pre-launch planning tasks and expected timeline to complete each one.

Other Requirements: Project Work Plan and Schedule

5.2. Available Funding and Grants

The City will not be providing funding or grants for the system in 2024. The City anticipates the Successful Service Provider(s) will collect user fees and generate other revenue streams to cover the program capital and operating costs.

Funding may be available in future years to support equity initiatives.

6. Safety

In 2018, the City of Mississauga officially committed to Vision Zero through a Council-approved motion meaning City staff and elected officials are working toward a goal of zero fatalities and serious injuries from collisions on city streets. The Vision Zero approach prioritizes safety for all

road users by slowing speeds, educating people, and enforcing laws to support safer behaviour on the roads.

Upon contract award, the Successful Service Provider(s) will be required to submit a Safety Plan highlighting how their system and operations will prioritize safety.

7. System Requirements

7.1. Equipment Requirements

7.1.1. Vehicle Specifications

The City is seeking a system that provides both electric pedal-assist bicycles (e-bikes) and electric kick-style scooters (e-scooters) in a hybrid model permitting docked and dockless parking.

The vehicles are expected to have front and rear automatic lights, a bell, and a locking mechanism that enables them to be locked to bike parking rings/racks, and a company name and unique identification number that is visible from a distance.

All electric pedal-assist bicycles must meet Ontario Highway Traffic Act requirements, Provincial requirements for electric bicycles in Ontario, be equipped with height adjustable, theft-proof seat posts, have front and rear fenders, have a chain guard, have a front basket or rack for cargo, have a step through frame, and have comfortable seats. Provincial regulations require that all e-bike users wear a helmet.

All electric kick-style scooters must comply with the Ministry of Transportation's (MTO) electric kick-style scooter pilot regulations and be capable of emitting an acoustic warning system that can be deactivated upon the Project Team's request. Provincial regulations require that e-scooter users under 18 years of age wear a helmet.

Questions:

11. Provide a detailed description of the vehicles, including manufacturing specifications, with a drawing, brochure, or other form of documentation, showing how they will meet the provincial regulations and any other vehicle requirements listed above. Include any on-vehicle technologies that would improve safety and positively impact the public realm by monitoring and prohibiting sidewalk riding and riding in other restricted areas, or the misparking of vehicles.
12. Will any of the device specifications exceed the required regulations? If yes, describe how.
13. Describe how the devices will:
    a. Accommodate riders of different sizes or abilities, making micro-mobility possible for more people. If you are including any adaptive bicycle types in the fleet (e.g., tricycle, cargo, handcycle, recumbent, etc.), describe how they will be made available.

b. Respond to weather or surface conditions.

14. The Service Provider must ensure that helmets are available for users required to wear a helmet and those who wish to. How will you ensure users have access to clean, safe, properly fitting helmet anytime they rent an e-bike or e-scooter?

7.1.2. Station Specifications

The City's is seeking a system that follows a hybrid-parking model, permitting both docked, and dockless parking for both the e-bikes and e-scooters. The City will work with the Successful Service Provider(s) to determine appropriate locations for parking stations. The preferred station location is on-road in parking spaces. Parking stations may also be located in the boulevard furnishing zones between the roadway and the sidewalk or in public spaces where on-road parking is not feasible. The stations should be a physical asset and have consistent branding and signage

Questions:

15. Describe the typical size and configuration of installations in the public right-of-way. Describe any equipment (e.g. docks, racks, signage, bollards, fencing, paint, etc.) to be installed in the right-of-way to establish parking locations. Provide concepts for the following parking station types:
    a. On-road parking space
    b. In Boulevard
    c. In a constrained furniture zone/boulevard
    d. At a trailhead
16. Describe how parking need and capacity will be determined and how public rights-of-way will be analyzed to determine if existing parking infrastructure will meet demand.
17. Describe how you will work with public and private entities to establish parking areas outside of the public right-of-way; particularly, businesses, local employers, and schools.
18. Stations should have a consistent branding and/or signage to identify them as part of the shared micro-mobility system. Provide images of your branded e-bikes, e-scooters, and stations and describe opportunities, if any, to add customized program branding, such as City specific branding or sponsor logos added to station, vehicle, or app and website elements.

7.2. System Design

7.2.1. Number of Vehicles

As per the City’s Recommended Preliminary Service Areas for Shared Micro-mobility study, (see Appendix E), 300 e-bikes and 900 e-scooters were identified as an appropriate number of vehicles for the service area size and population. The City expects the agreed upon

minimum number of vehicles to be deployed at all times while the system is operational. The vehicles should be distributed across the service area. If more than one Service Provider is selected by the City, the total number of devices will be split between the Successful Service Providers.

Questions:

19. Given the desired fleet sizes identified in the Preliminary Service Area study, how many vehicles would you include in your fleet and why?
20. How many vehicles would you have deployed at minimum during operation and how would you phase these vehicles in?
21. Describe how the fleet will be distributed to provide adequate and equitable access across the service area.

7.2.2. Service Areas

The expected service area for the Shared Micro-Mobility Program would encompass the entire City. The service area in this agreement includes publicly owned land but does not extend to privately owned land. The Successful Service Provider(s) will need to enter into an agreement with third party landowners to permit the operation or parking of micro-mobility devices on land that is not publicly owned.

The Service Provider(s) will be able to reference service area mapping from the Recommended Preliminary Service Areas for Shared Micro-mobility study (Appendix E) which identifies recommended service areas, no parking zones, and station locations.

Questions:

22. Will the Service Provider be able to provide service across the entire City? If not, explain, and identify which areas would be included in the service area.
23. To ensure equitable access to devices, the City is interested in a system that ensures access to a shared micro-mobility device within a maximum walking range of 500m. Describe how parking locations and stations will be spread across the City and how equitable access to devices will be considered.
24. Will the Service Provider be seeking to enter into any agreements with private landowners to permit the use/parking of e-bikes and e-scooters?

7.2.3. Regulated Zones

The City will work with the Successful Service Provider(s) to identify and establish no-ride, slow-ride, and no-parking zones for e-bikes and e-scooters. The Successful Service Provider(s) will be required to show any no-ride, slow-ride or no-parking zones in their app.

The City currently permits the use of e-bikes anywhere a regular bike is permitted. This includes on-road, in bike lanes, on multi-use trails, and on park trails. They are not permitted on sidewalks.

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The City has amended its Traffic, Transit, and Parks by-laws to allow the use of e-scooters on:

- Public roadways in Mississauga with a posted speed limit of up to 50 km/h.
- Cycling infrastructure (i.e. multi-use trails along roadways and bike lanes).

e-scooter are not permitted to operate on:

- Sidewalks, except for the purpose of directly crossing a sidewalk.
- Public roadways with a posted speed limit of more than 50 km/h.
- Trails within City parks.
- City-owned land not designated as public roadways (e.g. Transit terminals).The Mississauga Transitway.

E-bikes and E-scooters should have a maximum speed of 20 km/h with the ability to limit electric speed at 10 km/h in identified slow-ride zones.

Questions:

25. Describe what technologies will be used to implement no-ride, slow-ride, and no-parking zones. Have these technologies been deployed in other Cities, and if yes, how successful is it at preventing riding, speeding, and/or parking in regulated/restricted areas?
26. How will vehicles safely approach the transition between regulated/restricted zones? (i.e. vehicle response, communication with user, etc.)
27. Will any wayfinding or other guidance be offered to help users navigate regulated zones and make it easier for users to plan trips and know where to ride and park?

7.2.4. Transit Integration

The City is interested in integrating micro-mobility and transit systems.

Questions:

28. Describe how you will manage operations to ensure high-quality integration and experience with the City's transit system including transit stations and terminals, transit-oriented communities, transit ways, park and ride facilities, GO train and bus stations, and the future Hurontario LRT system.
29. Describe your plan, if any, for encouraging trips to start or end along key transit lines or at transit hubs, including how you plan to advertise any incentives to users.

7.3. Sponsorships

The Successful Service Provider(s) will be responsible for securing sponsorships for the system, if desired. Sponsorships must be in line with the City's policy "Advertising and Sponsorship with the City" (Policy Number: 03-09-01) and be approved by the Project Team.

7.4. Environmental Impact

The City is interested in a system that can reduce environmental impacts and increase climate resiliency. The Service Provider will be required to submit an Environmental Impact Plan to ensure the operation of the system minimizes environmental impacts.

Questions:

30. How shared e-bikes and e-scooters will contribute to the City's greenhouse gas reduction targets and support the City of Mississauga Climate Change Action Plan (2021)?
31. What business practices will be put in place by the Service Provider to reduce emissions and environmental impacts, including measures related to fleet redistribution and fleet maintenance?
32. Any features or measures that have been taken to reduce the vehicle's environmental impact over its lifecycle.

Other Requirements: Environmental Impact Plan

7.5. Pricing Structure and Payment Elements

The City wants to ensure that micro-mobility is an affordable and accessible transportation option for residents, workers, and visitors. The Service Provider must provide a Pricing and Payment Plan that includes information on memberships, user fees, and payment options.

APPENDIX 4 – DRAFT STATEMENT OF WORK

7.5.1. Memberships

Providing memberships that allow regular riding at a discounted rate is encouraged. Membership categories such as corporate, students, and low-income memberships are recommended.

Questions:

33. Describe any membership types you plan on providing.
34. Are you willing to provide discount membership programs? Provide details and examples of how this could operate.

7.5.2. User Fees and Payment Options

The Successful Service Provider(s) retain(s) the right to set and change the pricing and user fees; however, they must consult with the City before doing so. Charging premium fares based on trip origin/destination will not be permitted.

When determining fee structures, the Successful Service Provider(s) should ensure they do not encourage risk taking. Studies have found that, time based fee structures (e.g. by-the-minute rentals) can be an incentive to speed or to ignore operating rules and etiquette in order to save money. The City recommends that the Successful Service Provider(s) consider other fee structures such as fixed-amount trip charges, distance-based charges, or membership fees.

Questions:

35. Provide details of the proposed fee structure charged to users of the program. To lower barriers to entry, a simple pricing structure (annual, monthly, and per trip) is recommended.
36. Describe your billing and customer service plan for lost or damaged devices and those operated or parked in restricted areas.
37. Are there any additional fees you anticipate charging the user? If yes, how will those fees be communicated to the user?
38. Describe the payment forms that will be accepted (e.g. credit card, cash, debit card, etc.) and options, if any, available to individuals without a phone and/or credit card to access the shared micro-mobility devices.
39. Will you implement equity zone pricing (trips that start and/or end in equity zones are discounted with no proof of income necessary)? Do you have experiencing using that pricing model in other regions or municipalities?

Other Requirements: Pricing and Payment Plan

7.6. Equity

The Service Provider must provide details on how they will remove barriers related to accessibility, language, cost, and technology through an Equity Plan. The plan should consider

service areas, station locations, vehicle types, discounted memberships, payment options, ability to rent devices, and community outreach and partnerships. The Successful Service Provider's Equity Plan will be made publicly available.

The City of Mississauga defines an equitable shared micro-mobility program as one that increases access to affordable mobility options for people regardless or their race, ethnicity, income, gender, age, sexual orientation, primary language, immigration status, or other markers of social identity. An equitable shared micro-mobility program in Mississauga will be planned and operated so that people from marginalized communities have the ability to influence decisions in a way that addresses their needs and concerns.

Question:

40. Describe any experience you have implementing programs to support equity initiatives/objectives and how that experience could be applied to the City of Mississauga.
41. What rental options will be provided to ensure users can rent a device without needing a cellphone or data plan?

Other Requirements: Equity Plan

8. Operations

8.1. Monitoring and Evaluation

The City will be monitoring and evaluating the performance of the Successful Service Provider(s). The following eight strategic pillars for micro-mobility in the City of Mississauga, endorsed by Council on December 9, 2020, will form the foundation of the Monitoring and Evaluation Framework for the Shared Micro-mobility Program.

- Accessibility and Ease of Use
- Addressing Climate Change
- Build Sense of Community
- Education
- Leverage and Partner with Business
- Mobility as a Service
- Safety
- Supporting Infrastructure and Policies

The Monitoring and Evaluation Framework lays out the goals and objectives of the program as well indicators of success and a list of data the City will need to collect to evaluate the program.

Following the system launch, staff will use the monitoring and evaluation framework to work closely with the Successful Service Provider(s) to continually adjust the program and improve safety and accessibility for all users should any concerns arise.

APPENDIX 4 – DRAFT STATEMENT OF WORK

Appendix G: Monitoring and Evaluation Framework, outlines the Goals, Objective, and Indicators the City will be monitoring.

Question:

42. Describe how you will support the City in meeting the program goals and objectives.

8.2. Data Sharing and Privacy

The Successful Service Provider(s) will be required to provide the following information to ensure the program goals and objectives are being met. Detailed data requirements are provided in Appendix H. The Appendix includes data requirements for:

- System Operation
- Customer Service
- Communication
- Safety and Compliance
- Maintenance and Rebalancing
- Equity

The Service Provider must provide a Data Sharing and Privacy plan that answers the questions below, and includes a copy of the privacy policy that users would need to agree to.

Questions:

43. Describe your plan to publish data (e.g. GBFS, MDS) so that third-party applications can utilize the data.
44. Describe how the data requested by the City of Mississauga will be distributed, and what data transfer systems/processes to share the data with partners who will perform analysis on the data be available?
45. Is there additional data you can share with the City of Mississauga that will support the evaluation process and progress made on achieving the goals listed above?
46. How will you ensure user privacy is maintained?

Other Requirements: Data Sharing and Privacy Plan

8.3. Operating Fees and Liquidated Damages

The Successful Service Provider(s) will be charged fees and liquidated damages to offset the administrative and enforcement costs incurred by the City. The fees will be used to invest and program capital and operating improvements

8.3.1. Fee Schedule

The Successful Service Provider(s) will be required to pay the following fees:

- $5,000 Annual Administration Fee;
- $10 Annual Fee per E-Bike

- $55 Annual Fee per E-Scooter
- $0.01 per trip for E-Bikes
- $0.05 per trip for E-Scooters

8.3.2. Security Deposit and Liquidated Damages

The Successful Service Provider(s) will be required to provide a revolving security deposit in the amount of twenty-five thousand dollars ($25,000) following execution of the Agreement.

- The Successful Service Provider(s) will be required to replenish the security deposit should it fall under five thousand dollars ($5,000).
- Liquidated damages will be withdrawn from this security deposit, when required, should the City need to intervene if the Successful Service Provider(s) do/does not address operating issues within the timeframes outlined in the Agreement.
- A list of Liquidated damages can be found in Appendix F.

8.4. Compliance, Security and Enforcement

To ensure public safety, it is expected that the Successful Service Provider(s) will have mechanisms in place to monitor and control the use of vehicles and promote compliance and proper use (e.g., prohibit sidewalk riding, prevent misparking of vehicles, etc.). A Compliance, Security, and Enforcement Plan is required.

Questions:

47. The City reserves the right to remove or re-park devices that are parked in contravention of any City by-laws or this Agreement, or are creating a hazard or threat to public safety. Describe what system access would be provided to the City to manage infractions or hazards as they arise.
48. Describe how you will track emergency and non-emergency non-compliance (from notification to response).
49. The Service Provider will be required to notify the City if any instances of non-compliance are not addressed within the set response time. The notification should be sent to the City as soon as the set response time has elapsed if the non-compliance has not been addressed (applicable liquidated damages will be charged). Describe how the Service Provider will notify the City of any non-compliance not addressed within the set response time.
50. How will you ensure compliance with all City by-laws and other applicable rules and regulations?
51. How will you discourage and reduce the risks of use by intoxicated users?
52. Describe your ability to remotely lock or stop a device and remove riders after repeated violations.
53. How will you reduce the risk of vehicle theft, abandonment, and vandalism?

APPENDIX 4 – DRAFT STATEMENT OF WORK

Other Requirements: Compliance, Security, and Enforcement Plan

8.5. Rebalancing, Parking, and Right-of-Way

It is expected that the Successful Service Provider(s) will conduct rebalancing as part of the everyday operations to provide devices throughout the service area, ensuring access to devices and meeting demand. The City is interested in approaches to rebalancing that utilize low/no carbon technology. The Service Provider must provide a detailed Parking and Right-of-Way Management Plan:

Questions:

54. Lessons learned from experiences in other municipalities and relevance to Mississauga.
55. How frequently will the operator be rebalancing devices to ensure coverage throughout the service area?
56. How will the Service Provider address parking and rebalancing in low density parts of the City were use and turnover is not as frequent?
57. How the Service Provider will ensure that each device is properly parked, up-right, locked, and in a designated zone, whenever it is not being rented and how they will adjust, re-park, or remove any device that is not parked in accordance with this agreement.
58. Ability to undertake proactive parking monitoring across the service area.
59. Response time to addressing misparked devices.
60. Describe any technology or wayfinding that will be used to assist users in finding appropriate parking locations and available devices.
61. Any rider incentives to re-locate devices to less crowded areas.
62. Procedures for responding to an identified problem of consistent over-concentration, or lack, of devices at a specific location.

Other Requirements: Parking and right-of-way management plan

8.6. Fleet and Station Area Maintenance

It is expected that the Successful Service Provider(s) will be able to conduct regular maintenance activities on their vehicles and station areas for users and public safety. The Service Provider will provide a Fleet and Station Area Maintenance Plan.

Questions:

63. How maintenance feedback will be received and addressed, including expected timelines.
64. How repair work and vehicle maintenance requirements will be tracked.
65. How charging of e-bikes and e-scooters will be carried out.

66. Describe your maintenance plans for both regular service intervals as well as emergency repairs to ensure the devices and any equipment are in safe and working condition at all times.
67. What are your procedures and protocols for extreme weather, emergencies, and special events.
68. The Successful Service Provider(s) will be expected o operate e-bikes throughout the year and e-scooters a minimum season from April 1 to November 30, annually. Provide a winter maintenance and fleet winterization plan, including any experience the Service Provider has operating a shared micro-mobility system in a winter climate similar to Mississauga.
69. How the Service Provider will ensure that spaces where devices are parked are kept orderly, clean, and free of litter.
70. The Successful Service Provider(s) will be required to train staff and/or independent contractors on safe and legal parking when retrieving vehicles for recharging, maintenance, or rebalancing. Describe your plan for ensuring safe practices.

Other Requirements: Fleet and Station Area Maintenance Plan

8.7. Customer Service

The Successful Service Provider(s) must be able to receive feedback 24/7 through a variety of channels. The Successful Service Provider(s) will be expected to produce a Customer Service Plan.

Questions:

71. How will the Service Provider accept and handle questions or complaints from the public, City, and others (e.g., phone number, email, web form, app, etc.), including expected response times?
72. How will individuals be notified once the issue they raised is addressed?
73. How will questions and complaints be logged and shared with the City?
74. How will the service provider ensure customer service is available in multiple languages, including English, French, Urdu, Arabic, Mandarin, Polish?
75. How will users and community members report injuries, collisions, infractions, and/or safety concerns?

Other Requirements: Customer Service Plan

8.8. Marketing, Communication, and Education

The Successful Service Provider(s) will be required to develop a Marketing, Communication, and Education Plan prior to launch. Successful communications include the ability to provide clear and effective messaging to diverse populations using a variety of communication methods.

APPENDIX 4 – DRAFT STATEMENT OF WORK

Questions:

76. Describe your plan to publicize and market the program.
77. Describe how you plan to educate potential riders on how to use the system, including how rent a device, payment options and discount programs, how to operate the device, etc.
78. Describe how you plan to educate riders on safe riding behaviours, regulations, and parking, including how you plan to communicate penalties for noncompliance to riders. Will skills courses be offered? Are your devices capable of operating in a "beginner mode" (see Appendix F for definition)?
79. Describe the different communication methods you plan to use (e.g. videos, social media, signage, pop-ups, etc.)
    a. Cultural breadth and accessibility of the Marketing, Communication, and Education Plan.
    b. Describe how you will promote ridership in low-income communities, communities of colour and other equity-seeking groups.
80. Describe how you will form community partnerships and ensure people from marginalized communities have the ability to influence decisions in a way that addresses their needs and concerns.
81. Describe other engagement efforts focused on increasing adoption in the community and creating a sense of community ownership for the system. Have you used paid local ambassadors in other systems to form a better connection with the community?
82. What are proven examples of positive public outreach activities you have done elsewhere?
83. Describe your expectations of support from the City for marketing, education, and community engagement.
84. Describe how you will engage with the public, Council, staff, and Advisory Committees throughout the program term.
85. How will your marketing and education strategies evolve over the course of the program?
86. Describe how you will increase ridership each year.

Other Requirements: Marketing, Communication, and Education Plan

9. List of Appendices:

Appendix D: Proposal Requirements Checklist

Appendix E: Service Areas for Shared Micro-mobility

Appendix F: Service Levels

Appendix G: Monitoring and Evaluation Framework

APPENDIX 4 – DRAFT STATEMENT OF WORK

Appendix H: Data Requirements

Appendix 5 - Monitoring and Evaluation Framework

Introduction:

This document lays out the goals, objectives, and indicators that will be used to monitor and evaluate the City of Mississauga's Shared Micro-mobility Program. Mississauga's micro-mobility program recognized eight strategic pillars, as outlined in the report "Micro-mobility Program Update: Phase 1 - Visioning and Interim E-scooter Strategy" adopted by Council in 2020 (GC-0358-2020). These strategic pillars will form the goals of the program.

Figure 1 Micro-mobility Strategic Pillars, approved by council in 2020.

Objectives were developed under each goal to provide a comprehensive understanding of the desired outcomes for the Shared Micro-mobility Program. Indicators under each objective will be used to evaluate and monitor the program as it progresses. Currently, eight (8) goals and 33 objectives have been identified, along with their corresponding indicators.

Appendix 5 - Monitoring and Evaluation Framework

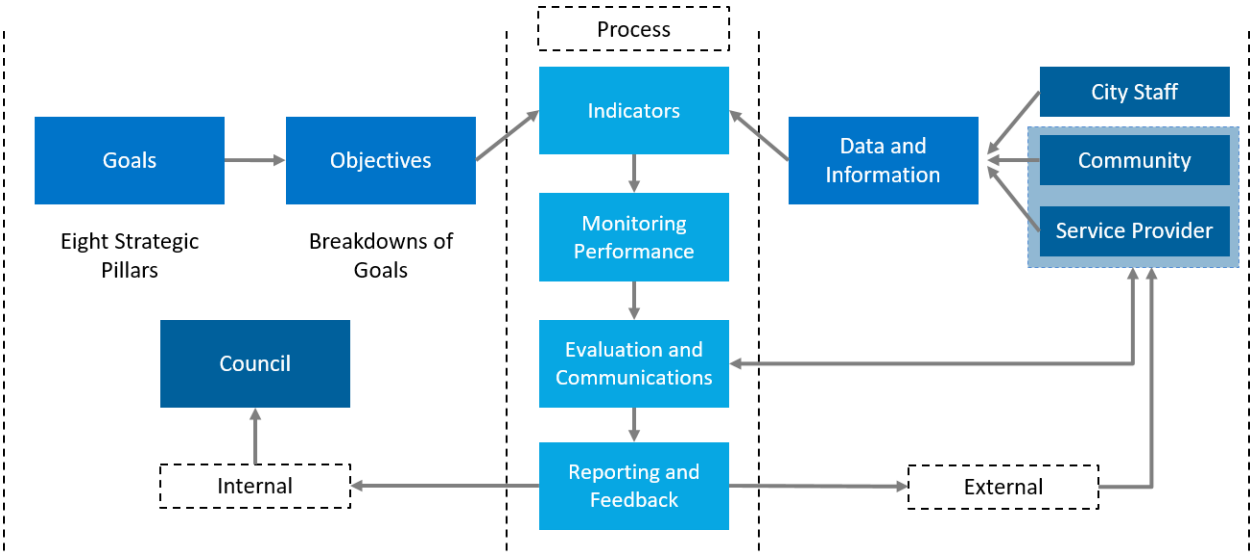

Figure 2. Structure of the Evaluation and Monitoring Framework

Indicators are categorized into three groups: short-term, medium-term, and long-term. When determining the time scale, various factors are taken into consideration, such as timelines for infrastructure construction, the time required to observe substantial behavioral changes, and the time necessary to detect significant shifts in patterns and trends. By carefully selecting indicators and aligning them with the appropriate time scale, a comprehensive evaluation can be conducted to track and measure progress effectively.

Short-term	**Duration :** 1-2 years **Evaluation Frequency:** Monthly, Quarterly, Yearly **Example Indicator:** Micromobility devices have good riding stability and are easy to control.
Medium-term	**Duration :** 3-5 years **Evaluation Frequency:** Yearly **Examples:** Micromobility should foster vibrant and active public spaces by increasing foot traffic and micromobility activities.
Long-term	**Duration :** 5-10 years **Evaluation Frequency:** Yearly **Examples:** More types of micromobility devices are provided for the purposes of goods movement in the future.

Figure 3. Time Scale of the Indicators

Appendix 5 - Monitoring and Evaluation Framework

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Goals, Objectives and Indicators

Goal 1. Accessibility and Ease of Use

Definition[1]:

Avoid creating accessibility barriers to the extent possible and ensure systems are available for use to all residents (geographically, financially, temporally, and physically).

Objectives and Indicators:

Objective 1.1: Micro-mobility provides equitable access to devices across Mississauga.

- *Indicator 1.1.1:* People in all neighbourhoods have access to a shared micro-mobility device within a walking range of 500m.
- *Indicator 1.1.2:* The minimum service level for the system boundary and the number of vehicles distributed throughout that boundary has been met.
- *Indicator 1.1.3:* The parking stations meet user demand.

Objective 1.2: Micro-mobility serves people of different ages and abilities.

- *Indicator 1.2.1:* A variety of micro-mobility devices are available.
- *Indicator 1.2.2:* Adaptive and inclusive micro-mobility devices are available and accessible to those who wish to use them.
- *Indicator 1.2.3:* Micro-mobility devices have good riding stability and are easy to control.
- *Indicator 1.3.4:* Those looking to use the system can easily understand how it works and what steps need to be taken to rent a device
- *Indicator 1.2.5:* The interface / mobile application is user friendly and accessible.

Objective 1.3: Micro-mobility is affordable to any user.

- *Indicator 1.3.1:* Discounted/subsidised fares are available.
- *Indicator 1.3.2:* Users with discounted fares / subsidies have used the system as frequently as, or more frequently than, non-subsidised users.
- *Indicator 1.3.3:* The number of trips per capita is not significantly lower in neighbourhoods with lower average incomes.

Objective 1.4: Micro-mobility does not create additional accessibility barriers.

- *Indicator 1.4.1:* Micro-mobility devices can be rented using a variety of payment methods.
- *Indicator 1.4.2:* The number of complaints regarding accessibility decrease over time.
- *Indicator 1.4.3:* Major micro-mobility traffic corridors are proactively patrolled to minimize the number of violations.
- *Indicator 1.4.4:* Up-to-date technologies are used to avoid creating additional accessibility barriers.
- *Indicator 1.4.5:* The location of parking stations and zones are carefully selected to ensure accessibility.

[1] Definition refers to the definitions of strategic pillars used in *Micro-mobility Program Update: Phase 1 – Visioning and E-scooter Strategy.*

- *Indicator 1.4.6:* Consultation with AAC and other accessibility advocacy groups continues throughout the program to ensure the system does not reduce accessibility.
- *Indicator 1.4.7:* Suggestions and concerns from AAC and other accessibility advocacy groups are actively addressed.

- **Objectives 1.5** Micro-mobility is available any time of the day and throughout the year.
  - *Indicator 1.5.1:* Micro-mobility devices are available 24 hours a day, 7 days a week.
  - *Indicator 1.5.2:* The micro-mobility system is available year round.
  - *Indicator 1.5.3:* Micro-mobility services maintain consistent pricing even during periods of high demand

Goal 2. Addressing Climate Change

Definition:

Reduce vehicular traffic congestion/move people rather than cars and improve mode share for active transportation.

Objectives and Indicators:

Objective 2.1: Micro-mobility decreases carbon emissions by moving people rather than cars.

- *Indicator 2.1.1:* Micro-mobility trips continue to replace short-distance car trips over time.
- *Indicator 2.1.2:* The number of micro-mobility trips increases over time.
- *Indicator 2.1.3:* A systematic modelling to compute the carbon emission reduction from Micro-mobility is established.

Objective 2.2: The lifecycle carbon footprint of micro-mobility devices is minimized.

- *Indicator 2.2.1:* Environmentally friendly transportation options (including EVs, cargo e-bikes, etc.) are used to distribute/rebalance devices.
- *Indicator 2.2.2:* Clean energy is used to charge devices.
- *Indicator 2.2.3:* Maximising the lifespan of devices is prioritized.
- *Indicator 2.2.4:* Proper reuse/recycling/disposal procedures are used when devices or parts are replaced.

Objective 2.3: Micro-mobility system utilises low carbon materials

- *Indicator 2.3.1:* Low-carbon building materials are used to construct micro-mobility infrastructure.
- *Indicator 2.3.2:* Sustainability is integrated into the procurement process for micro-mobility.

Appendix 5 - Monitoring and Evaluation Framework

Goal 3. Building Sense of Community

Definition:

Nurture community by developing a vested interest in micro-mobility, including public art components.

Objectives and Indicators

Objective 3.1: Micro-mobility connects people to parks, services, and amenities, as well as members of their community.

- *Indicator 3.1.1:* Micro-mobility enables users to connect with their community.
- *Indicator 3.1.2:* Users have access to new amenities and services with the help of micro-mobility.

Objective 3.2: Micro-mobility improves the health of community members.

- *Indicator 3.2.1:* Micro-mobility encourages community members to be physically active on a daily basis and reduce sedentary time.
- *Indicator 3.2.2:* Micro-mobility increases the feeling of social connectedness among community members.

Objective 3.3: Micro-mobility contributes to the liveliness of the public realm.

- *Indicator 3.3.1:* Micro-mobility provides opportunities for public art installations, cultural expressions, and creative place making.
- *Indicator 3.3.2:* Micro-mobility fosters vibrant and active public spaces by encouraging increased foot traffic and micro-mobility activities.
- *Indicator 3.3.3:* Micro-mobility supports the organization of community events, activities, and programming within the public realm.

Objective 3.4: Micro-mobility is generally accepted and welcomed by community members.

- *Indicator 3.4.1:* Community members have a sense of community ownership and responsibility towards the system.
- *Indicator 3.4.2:* Community members report acts of vandalism, theft, or abandonment.
- *Indicator 3.4.3:* Community members have opportunities for meaningful engagement and participate in the implementation and improvement of micro-mobility initiatives.
- *Indicator 3.4.4:* Community members illustrate positive attitude towards the presence of shared micro-mobility.

Appendix 5 - Monitoring and Evaluation Framework

Goal 4. Education

Definition:

Improve residents' understanding of the rules of using micro-mobility systems.

Objectives and Indicators:

Objective 4.1: Micro-mobility users understand the rules of the road and proper trail etiquette.

- *Indicator 4.1.1:* Micro-mobility users demonstrate respect for other trail and road users.
- *Indicator 4.1.2:* Micro-mobility users avoid prohibited behaviours like misparking or sidewalk riding.
- *Indicator 4.1.3:* Education material is shared through multiple channels.

Objective 4.2: Micro-mobility users are aware of how to operate the different devices.

- *Indicator 4.2.1:* Renting - All users are introduced to the renting processes, including using the mobile app, adding a payment, unlocking devices, conducting safety inspections, and understanding beginner tutorials.
- *Indicator 4.2.2:* Operating - All users are equipped with the skills to operate the vehicles, including acceleration, deceleration, braking, turning, and signalling.
- *Indicator 4.2.3:* Returning - All users are introduced to the returning processes, including finding parking zones, locking the vehicles, parking the vehicles, and ending their trips.

Objective 4.3: Both users and non-users are encouraged to submit inquiries and complaints.

- *Indicator 4.3.1:* Multiple reporting channels are provided to the public.
- *Indicator 4.3.2:* All reporting channels are easy to locate.

Objective 4.4: Other road users know how to safely interact with micro-mobility users.

- *Indicator 4.4.1:* Messaging includes information on how other road users should safely interact and share the road with micro-mobility users.
- *Indicator 4.4.2:* Proactive education and engagement is employed to ensure other road users know how to safely interact with micro-mobility users.

Objectives 4.5: Micro-mobility users understand key risks (e.g., inexperience, riding at night, lack of helmet use, alcohol use) and know what protective measures are available to avoid them.

- *Indicator 4.5.1:* Helmet requirements meet or exceed Provincial regulations.
- *Indicator 4.5.2:* Helmet use for all riders is encouraged.
- *Indicator 4.5.3:* All micro-mobility-related education materials depict riders wearing helmets while operating the vehicles.
- *Indicator 4.5.4:* All devices have lighting and reflectivity that meet or exceed Provincial requirements.
- *Indicator 4.5.5:* Micro-mobility education materials raise awareness about the risks of riding under the influence.
- *Indicator 4.5.6:* Technology is used to prevent riding under the influence.
- *Indicator 4.5.7:* Micro-mobility mobile applications and devices provide a beginner mode for new users.

Appendix 5 - Monitoring and Evaluation Framework

Goal 5. Leverage and Partner with Business

Definition:

Monetize or capitalize on the presence of micro-mobility, including sponsorship and the use of micro-mobility vehicles for goods movement.

Objectives and Indicators:

Objective 5.1: Micro-mobility drives growth and innovation for the local economy.

- *Indicator 5.1.1:* Micro-mobility encourages people to visit local businesses.
- *Indicator 5.1.2:* Micro-mobility users spend as much or more money than those arriving by other modes at local businesses.
- *Indicator 5.1.3:* Micro-mobility is seen as an attracting feature for investors and businesses looking to locate in Mississauga.
- *Indicator 5.1.4:* Micro-mobility is utilized by tourists and visitors to enhance their local experiences.
- *Indicator 5.1.5:* Micro-mobility is part of Mississauga's smart city initiatives that support creating vibrant, inclusive communities with a high quality of life.

Objective 5.2: Micro-mobility creates business opportunities for the City.

- *Indicator 5.2.1:* Sponsorship opportunities are explored.

Objective 5.3: Micro-mobility enhances labour force mobility and goods movement in the city.

- *Indicator 5.3.1:* Micro-mobility improves access to employment opportunities.
- *Indicator 5.3.2:* Corporate memberships or discounts are provided.
- *Indicator 5.3.3:* Corporate memberships or discounts are utilized by companies in Mississauga, and company employees use micro-mobility devices at higher frequencies.
- *Indicator 5.3.4:* Different types of micro-mobility devices are provided to support goods movement.

Goal 6. Mobility as a Service

Definition:

Provide a wide variety of ways to move around the city, including combining modes of travel.

Objectives and Indicators:

Objective 6.1: Micro-mobility provides a positive user experience.

- *Indicator 6.1.1:* Micro-mobility devices are charged and ready to use.
- *Indicator 6.1.2:* Micro-mobility users are comfortable using the devices.
- *Indicator 6.1.3:* Micro-mobility devices and mobile applications are easy to use.

Objective 6.2: Micro-mobility inquiries and complaints are responded to promptly.

- *Indicator 6.2.1:* Inquiries are responded to within the set time limit.
- *Indicator 6.2.2:* Complaints and safety concerns are addressed within the set time limit.
- *Indicator 6.2.3:* A high customer satisfaction rate for addressing inquiries is maintained.

- *Indicator 6.2.4:* Frequently repeating issues or reports are proactively addressed.

Objective 6.3: Micro-mobility integrates with transit systems and encourage multimodal trips.

- *Indicator 6.3.1:* Micro-mobility parking facilities are located near transit stops and stations.
- *Indicator 6.3.2:* Micro-mobility devices facilitate access to public transit.
- *Indicator 6.3.3:* There is an increased number of multimodal trips over time.
- *Indicator 6.3.4:* Micro-mobility fares are integrated with transit fares.

Objective 6.4: Micro-mobility provides people with freedom to move.

- *Indicator 6.4.1:* People make trips that would not have been made without access to micro-mobility.
- *Indicator 6.4.2:* There are more trips made in neighbourhoods previously underserved by transit and with higher no-vehicle households.

Goal 7. Safety

Definition:

Build complete streets, including separated active transportation corridors.

Objectives and Indicators:

Objective 7.1: Micro-mobility infrastructure contributes to safe and orderly system operations.

- *Indicator 7.1.1:* Number of Complaints regarding micro-mobility decreases over time.
- *Indicator 7.1.2:* Micro-mobility infrastructure is well maintained and does not lead to injuries or fatal crashes.
- *Indicator 7.1.3:* Seasonal maintenance and essential operational adjustments are made to ensure the system's suitability for winter conditions.

Objective 7.2: Micro-mobility devices meet provincial and municipal standards.

- *Indicator 7.2.1:* Emergency repairs are complete within the set time limit.
- *Indicator 7.2.2:* Devices are regularly maintained and equipped with the necessary features mandated by provincial regulations.
- *Indicator 7.2.3:* Micro-mobility devices are remotely locked and stay out of service when there is a possibility of technical failure.
- *Indicator 7.2.4:* Micro-mobility devices are equipped with the features and technology agreed to in the contract.

Objective 7.3: Micro-mobility users have access to safe infrastructure in line with the goals of Vision Zero.

- *Indicator 7.3.1:* Supporting infrastructure meets demand along major micro-mobility traffic corridors.
- *Indicator 7.3.2:* Micro-mobility supports the expansion of active transportation networks.

Appendix 5 - Monitoring and Evaluation Framework

Objective 7.4: There are 0 fatalities and 0 serious injuries related to the use of micro-mobility devices.

Appendix 5 - Monitoring and Evaluation Framework

Goal 8. Supporting Infrastructure and Policies

Definition:

Create a robust and sustainable financial model, address liability and risk.

Objectives and Indicators:

Objective 8.1: Micro-mobility regulations contribute to safe and orderly system operations.

- *Indicator 8.1.1:* Micro-mobility devices are properly parked in parking stations and parking zones.
- *Indicator 8.1.2:* Misparking behaviours are properly enforced.
- *Indicator 8.1.3:* Up to date safety-related technology is used.

Objective 8.2: Micro-mobility fees and pricing allow the City and service providers to maintain sustainable financial models.

- *Indicator 8.2.1:* The City recovers its costs for the micro-mobility program.
- *Indicator 8.2.2:* The service provider(s) can make profits under their pricing scheme and the market conditions.

Objective 8.3: Micro-mobility addresses liability and risk by establishing a comprehensive legal framework.

- *Indicator 8.3.1:* The appropriate insurance coverage is provided.
- *Indicator 8.3.2:* Monitoring and evaluation is ongoing to proactively address risk.

Objective 8.4: Micro-mobility provides insightful data for public sector improvement.

- *Indicator 8.4.1:* Data to monitor and evaluate the system is collected and available to the City and partners for analysis.
- *Indicator 8.4.2:* Select data is made publicly available to facilitate the integration of micro-mobility information with third-party trip planning applications.
- *Indicator 8.4.3:* The data provides information on the future planning of micro-mobility-related infrastructure.

Objective 8.5: Micro-mobility follows Equity Diversity & Inclusion practices.

- *Indicator 8.5.1:* Equitable hiring processes are integrated into micro-mobility operations.
- *Indicator 8.5.2:* Micro-mobility system demonstrate diversity in its leadership, workforce, and decision-making roles.
- *Indicator 8.5.3:* Micro-mobility system prioritises hiring from local communities.
- *Indicator 8.5.4:* Living wages and benefits are provided to micro-mobility operational staff.
- *Indicator 8.5.5:* Cultural norms and preferences of different communities are considered in the service design and marketing of micro-mobility.

Data Requirements

Data will be collected throughout the program to monitor the system's progress and ensure the goals and objectives are being met. The data will be collected from a number of sources including the service provider(s), system users, the public, city staff, Peel Public Health, Peel Regional Police, and other external entities as required.

Each of the indicators listed above will have a number of data points used to evaluate its success. That data includes information on system operations, customer service, communication, safety and compliance, maintenance, and equity. Each data point will be collected and evaluated at different frequencies throughout the program. This will allow staff to be proactive and identify issues before they arise by working with the service provider(s) to make ongoing changes to the program as indicators are evaluated.

Reporting

The service provider(s) will be required to provide data to staff on a monthly basis with quarterly reports summarizing the status of each indicator.

Staff will monitor, review, and update the Shared Micro-mobility Program on a regular basis to ensure continued progress towards achieving the program's goals and objectives. Staff will produce an annual report on the indicators of success identified as part of this Monitoring and Evaluation Framework.

City of Mississauga
Corporate Report

MISSISSAUGA

Date: September 29, 2023 To: Chair and Members of General Committee From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works	Originator's files: RT.23.STR Meeting date: October 18, 2023

Subject

Proposed Street Names to be assigned to public and private roads within an approved development site in the City of Mississauga (Ward 1).

Recommendation

That the following street names be approved to name new public and private roads within a new mixed-use development at 1082 Lakeshore Road East and 800 and 985 Hydro Road, Ward 1 (Lakeview Village): **Sailaway, Marina Vista, South Shore, Aerodrome, Living Waters, Illumination, Leading Sea**.

Background

The owner of Lakeview Village is working to satisfy its conditions of Draft Plan Approval, dated November 22, 2021, which includes assigning names to the new public roads within the development prior to the registration of the subdivision.

In January 2022, Council endorsed the recommendations in a report titled, "A Review of the City's Asset Naming Policies Through an Equity, Diversity and Inclusion Lens", which included a moratorium on adding new street names to the Street Name Reserve List until a revised naming policy is approved. However, the report also recognized that there is an occasional need to approve new street names to address immediate development requirements.

An Interim Working Group (IWG) for the Review of Street/Asset Names was convened to address those immediate needs, and to review any proposed names through an equity, diversity and inclusion interim review process. The IWG is comprised of staff from the City Manager's Office, Corporate Services, Transportation and Works, and the City's Employee Equity Advisory Committee.

Street names proposed within the City of Mississauga are also reviewed from a regional perspective by the Region's Street Names Committee (RSNC), which includes staff from the Transportation and Works Department and Fire and Emergency Services.

Comments

Lakeview Village is advancing towards subdivision registration and the owner has proposed seven (7) new names for use within its development, including: Sailaway, Marina Vista, South Shore, Aerodrome, Living Waters, Illumination, and Leading Sea.

The City's IWG for the Review of Street/Asset Names and the RSNC have reviewed all of the names proposed and have no objection to their use.

Previously approved names will also be used in Lakeview Village, including: Jim Tovey, Shoreview, Dragonboat, Sailor, Shorepoint, and Coveview.

The cost of the signs and installation are to be borne by the owner of Lakeview Village. The standard City of Mississauga street name signs (blue letters on a white background for private roads, and white letters on a blue background for public roads) will be erected at the appropriate locations within the development.

Financial Impact

There are no financial impacts to the City associated with the approval of this report.

Conclusion

Seven (7) proposed street names have been reviewed by the IWG for the Review of Street/Asset Names and the RSNC for use in the City of Mississauga. These names will be used to name new public and private roads within a new mixed-use development at 1082 Lakeshore Road East and 800 and 985 Hydro Road, Ward 1 (Lakeview Village).

Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

Prepared by: Stephen Davis, Coordinator, Development Engineering and Construction

City of Mississauga
Corporate Report

MISSISSAUGA

Date: September 26, 2023	Originator's files:
To: Chair and Members of General Committee	
From: Jodi Robillos, Commissioner of Community Services	Meeting date: October 18, 2023

Subject

Proposed re-naming of Streetsville Kinsmen Senior Citizen Centre located at 327 Queen Street South to 'Streetsville Heritage Hall' (Ward 11)

Recommendation

1. That General Committee consider, for a period of 30 days, the re-naming of the Streetsville Kinsmen Senior Citizen Centre located at 327 Queen Street South as the "Streetsville Heritage Hall" as outlined in the Corporate Report dated September 26, 2023 from the Commissioner of Community Services entitled "Proposed re-naming of Streetsville Kinsmen Senior Citizen Centre located at 327 Queen Street South to 'Streetsville Heritage Hall' (Ward 11)".
2. That Community Services staff be directed to provide notice as set out in the City's 'Facility Naming' Policy 05-02-02 of the proposed re-naming of the multi-purpose heritage facility as "Streetsville Heritage Hall".

Executive Summary

- The subject report outlines the recommended re-naming of the recently rehabilitated heritage facility located at 327 Queen Street South as "Streetsville Heritage Hall".
- The City's interim Equity, Diversity and Inclusion (EDI) Asset Naming Review Committee has been consulted on the proposed name and have no concerns with the recommendation.
- The City's Heritage Advisory Committee has been consulted on the proposed name and supports the recommendation.
- The requested naming "Streetsville Heritage Hall" is in accordance with the City's "Facility Naming" Corporate Policy 05-02-02.

Background

In accordance with the City's "Facility Naming" Corporate Policy 05-02-02, the Community Services Department is directed to present names for the General Committee and Council's consideration for the purposes of naming parks, trails, and facilities in the City of Mississauga. Following the policy, General Committee is requested to consider the recommended name presented by the Community Services Department for a period of 30 days, after which the Committee is asked to make a final recommendation to Council.

The subject report outlines the re-naming request for the newly rehabilitated heritage facility located at 327 Queen Street South as "Streetsville Heritage Hall".

The rehabilitation of the facility includes updates & improvements to the property stationary road signage that would reflect the proposed new name.

Comments

The building, located at 327 Queen Street South, had been operated by the Streetsville Kinsmen Senior Citizen Centre Inc. group until February 2018 when the group opted not to renew the Management & Operations Agreement with the City.

The hall is multi-functional and is home to the Streetsville Seniors club as well as many family events, celebrations and meetings. The facility underwent various renovations this past year and will include additional rehabilitation improvements to be completed by spring 2024. This includes a replacement of the road signage and due to the timing of the project, there is a need to proceed with this re-naming in advance of the lifting of the current moratorium.

The facility was temporarily re-branded internally as "Kinsmen Hall". Exterior street signage still indicate ***"***Streetsville Kinsmen Senior Citizen Centre". The intention is to align the naming of the building with our other heritage halls as close as possible (ie. Meadowvale Village Hall, Malton Victory Hall). Although, Streetsville Village Hall is an existing name for the facility at 280 Queen Street South, currently home to the Streetsville BIA.

Engagement and Consultation

Preliminary consultation solicited of diverse Streetsville community stakeholders of potential new names included the suggestion of the proposed name "Streetsville Heritage Hall".

The City's interim Equity, Diversity and Inclusion (EDI) Asset Naming Review Committee & Heritage Advisory Committee was consulted on the proposed name and have no concerns with the recommendation. Additionally, the City's Heritage Advisory Committee has been consulted on the proposed name and supports the recommendation.

Financial Impact

The cost for updating facility road signage will be absorbed through an existing capital budget of the redevelopment project, CN21740-Kinsmen Hall Rehabilitation.

Conclusion

The proposed re-naming of the heritage hall located at 327 Queen Street South as “Streetsville Heritage Hall” is in accordance with the City’s “Facility Naming” corporate policy and should be considered by General Committee for 30 days as per policy.

Jodi Robillos, Commissioner of Community Services

Prepared by: Steve Wilson, Manager, North District

City of Mississauga
Corporate Report

MISSISSAUGA

Date: September 27, 2023	Originator's files:
To: Chair and Members of General Committee	
From: Shari Lichterman, CPA, CMA, City Manager and Chief Administrative Officer	Meeting date: October 18, 2023

Subject

Single Source Contract Award for Structural Fire Fighting Bunker Gear (PRC004248, PPE Solutions)

Recommendation

That the Chief Procurement Officer or Designate be authorized to award and execute a contract with PPE Solutions for the replacement of firefighter bunker gear for a one-year period, in the amount of $396,125.00 exclusive of taxes as outlined in the corporate report entitled "Single Source Contract Award for the Structural Fire Fighting Bunker Gear (PRC004248, PPE Solutions)" dated September 27, 2023 from the City Manager and Chief Administrative Officer.

Executive Summary

- The current contract for the purchase of bunker gear is expiring Dec 31, 2023, with no further extensions available
- Mississauga Fire & Emergency Services (MFES) is seeking approval to proceed with the purchase of replacement firefighter bunker gear from PPE Solutions for a one year term to address the immediate gear replacement needs
- All National Fire Protection Association (NFPA) compliant bunker gear manufactured today contain per- and polyfluoroalkyl substances (PFAS). PFAS are a category of chemicals linked to cancer and other diseases
- A new NFPA standard is anticipated to be released in mid 2024 that may address PFAS
- In the interim, MFES requires the ability to continue to purchase new and replacement bunker gear from the existing supplier until a new NFPA standard is established
- The ability to continue purchasing from the existing supplier will avoid MFES entering into a long term contract with a vendor and/or product that will be non-compliant with the release of the new NFPA standard
- MFES will require the purchase of 125 sets of bunker gear in 2024 at a cost of $396,125
- There are no financial impacts resulting from the recommendations in this report

Background

Mississauga Fire & Emergency Services (MFES) employs over 650 fire suppression personnel. Each firefighter is issued two sets of bunker gear. The lifecycle of bunker gear is 10 years, as prescribed by the National Fire Protection Association (NFPA).

Firefighter bunker gear is an essential component of ensuring the life safety of MFES employees while they carry out their duties as first responders. MFES maintains a complement of approximately 1400 sets of firefighter bunker gear. NFPA establishes standards and provides recommendations on the process and materials used in the manufacturing of personal protective ensembles including firefighter bunker gear. NFPA standards go through periodic reviews where updates and changes are made.

NFPA 1970 is the current standard applied to bunker gear, which will see significant changes that may include addressing per- and poly-fluoroalkyl substances (PFAS), also commonly known as 'forever chemicals'. PFAS are a category of chemicals linked to cancer and other diseases. It has been established that all NFPA compliant bunker gear manufactured today contains PFAS. A new standard is anticipated to be released in the 1st half of 2024.

In 2024, MFES will have 125 sets of bunker gear that will need to be purchased. MFES is recommending that the gear be replaced with the current make and model currently in use by the division, Globe Flame Fighter provided by PPE Solutions.

This contract to PPE Solutions is considered a single source procurement as defined in the Procurement By-Law #0013-2022 which states under Schedule A (1) (h): for additional Goods and/or Services from the original Supplier that were not included in the original Procurement, if the change of Supplier for such additional Goods and/or Services cannot be made for (ii) would cause significant inconvenience or substantial duplication of costs for the City.

Comments

MFES' current contract for the purchase of bunker gear is expiring Dec 31, 2023. To maintain the required bunker gear levels, MFES requires the ability to continue to purchase new and replacement bunker gear from the existing supplier until a new NFPA standard is established. It would not be prudent to go to market with a new NFPA standard imminent, as any product purchased now may be non-compliant to the new standard. Upon the release of the new NFPA standard, MFES will begin a competitive bid process to establish a 10-year contract with a supplier to supply and deliver bunker gear that meets or exceeds the new standard.

MFES is seeking approval to proceed with the purchase of replacement firefighter bunker gear from PPE Solutions, for a one-year term to address the immediate gear replacement needs of the Division.

In accordance with Procurement By-law 0013-2022, Schedule B further requires Council authority to award single source contracts having a value of more than $100,000.

Financial Impact

There are no additional financial impacts resulting from the recommendations in this report. Bunker gear requirements, both replacement and new, have been anticipated and sufficiently budgeted. The estimated cost of $396,125.00 is available in PN's 21253 and 22253 Personal Protective Equipment Replacement, which has sufficient funding.

Conclusion

The safety and well-being of our employees are a top priority, and replacing their bunker gear promptly is crucial to their effectiveness in safeguarding our community. The ability to safely respond to emergency events in the City requires the availability of PPE that includes bunker gear to support emergency response efforts.

MFES requires the ability to continue to purchase new and replacement bunker gear in the interim from the existing supplier until a new NFPA standard is established, this will avoid MFES entering into a long term contract with a vendor and/or product that will be non-compliant with the release of a new standard.

Attachments

Appendix 1: Statement of Work

Shari Lichterman, CPA, CMA, City Manager and Chief Administrative Officer

Prepared by: David Tran, Division Chief, Capital Assets, Fire & Emergency Services

Fire Fighter Bunker Gear

Scope: Fire Fighter bunker gear that meets or exceeds NFPA 1970. Firefighter bunker gear is an essential component of ensuring the life safety of MFES employees while they carry out their duties as first responders

MFES' current contract for the purchase of bunker gear is expiring Dec 31, 2023. To maintain the required bunker gear levels, MFES requires the ability to continue to purchase new and replacement bunker gear from the existing supplier until a new NFPA standard is established. It would not be prudent to go to market with a new NFPA standard imminent, as any product purchased now may be non-compliant to the new standard. Upon the release of the new NFPA standard, MFES will begin a competitive bid process to establish a 10-year contract with a supplier to supply and deliver bunker gear that meets or exceeds the new standard.

In 2024, MFES will have 125 sets of bunker gear that will need to be purchased. MFES is recommending that the gear be replaced with the current make and model currently in use by the division, Globe Flame Fighter provided by PPE Solutions.

Procurement By-Law Reference: This contract to PPE Solutions is considered a single source procurement as defined in the Procurement By-Law #0013-2022 which states under Schedule A (1) (h): for additional Goods and/or Services from the original Supplier that were not included in the original Procurement, if the change of Supplier for such additional Goods and/or Services cannot be made for (ii) would cause significant inconvenience or substantial duplication of costs for the City.

REPORT 6 - 2023

To: CHAIR AND MEMBERS OF GENERAL COMMITTEE

The Environmental Committee presents its sixth report for 2023 and recommends:

EAC-0024-2023
That the deputation and the associated presentation from Edward Nicolucci, Urban Designer regarding the Mississauga Green Development Standards (GDS) Update, be received.
(EAC-0024-2023)

EAC-0025-2023
That the deputation and the associated presentation from Gaby Kalapos, Executive Director, Clean Air Partnership regarding Green Development Standards: Value Proposition and Driving the Net Zero Market, be received.
(EAC-0025-2023)

EAC-0026-2023
That the 2023 Environmental Action Committee Work Plan be approved as discussed at the October 3, 2023 Environmental Action Committee meeting.
(EAC-0026-2023)

REPORT 5 - 2023

To: CHAIR AND MEMBERS OF GENERAL COMMITTEE

The Mississauga Cycling Advisory Committee presents its fifth report for 2023 and recommends:

MCAC-0032-2023
That the deputation and associated presentation from Matthew Sweet, Manager, Active Transporation regarding the 2024 Cycling Program, be received.
(MCAC-0032-2023)

MCAC-0033-2023
That the deptutation and associated presentation from Matthew Sweet, Manager, Active Transportation regarding the Cycling Master Plan Update – Project Overview, be received.
(MCAC-0033-2023)

MCAC-0034-2023
That the deputation from Rahul Mehta, Founder, Sustainable Mississauga, Co-Founder, Stop Sprawl Peel regarding Building an Inclusive and Sustainable Cycling Culture in Mississauga, be received.
(MCAC-0034-2023)

MCAC-0035-2023
That the following item(s) were approved on the consent agenda:

- 9.1 Mississauga Cycling Advisory Committee 2023 Action Item List

(MCAC-0035-2023)

October 18, 2023

BRIGHTWATER

Chris Fonseca
Acting Mayor, City of Mississauga
Office of the Mayor

And to City Council

300 City Centre Drive
Mississauga, ON L5B 3C1

RE: Support for Shared Micromobility in Mississauga

Dear Acting Mayor Fonseca,

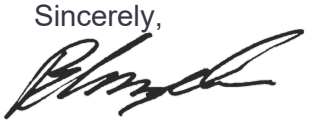
Mississauga is taking many initiatives to create sustainable communities, and Port Credit will be the host for many of these exciting projects. Aligned with our own vision for an active and vibrant community, the Port Credit West Village Partners Inc. is hopeful that Brightwater will be at the heart of these transformative changes.

Mississauga's and Port Credit's newest neighbourhood, Brightwater, recently welcomed its first residents and will shortly welcome its first commercial tenants. Over the next few years, a community will begin to take shape as residents, businesses and visitors interact and experience an urban village built on health, wellness, and sustainability.

We are committed to strong mobility connections for residents and visitors through Mississauga Transit, GO Transit, the Hazel McCallion LRT Line, and the community's trail system. As a demonstration of our commitment, we have provided space at Brightwater for a future MiWay bus terminal, as well as invested in a shuttle bus connection to the Port Credit GO Station, which will be available to our residents in 2024. We are also exploring micromobility as a solution to help people move locally without the need for private vehicles.

Port Credit West Village Partners Inc. is pleased to support staff recommendations to move forward with the City's micromobility strategy, including a pilot for shared micromobility in Mississauga beginning in 2024. We know that Brightwater will be an exciting destination and that the community will welcome micromobility and more ways to move.

Sincerely,



Bob Blazevski
Vice President, Port Credit West Village Partners Inc. (Brightwater)

LAKEVIEW VILLAGE

October 16th, 2023

Chris Fonseca
Acting Mayor, City of Mississauga
Office of the Mayor
300 City Centre Drive
Mississauga, ON L5B 3C1

RE: Support for Mississauga Shared Micro-Mobility Program

Dear Acting Mayor and Councillors

Lakeview Community Partners are building Mississauga's most exciting and transformative new community, Lakeview Village. Lakeview Village will be a destination for work & play that will support community development, job creation and economic prosperity. Lakeview Community Partners are pleased to support the staff recommendations to move forward with a pilot program for Shared Micro-mobility in Mississauga in 2024. We ask that you vote in favour of the recommendations.

Mississauga is taking the lead in building smart and connected cities as part of its commitment to reaching provincial housing targets. Lakeview Community Partners foresees high value in strong mobility connections for residents, visitors and people who work at Lakeview. Local micro-mobility will provide the crucial first and last mile connections that will get people to and from transit, including the Lakeshore Bus-Rapid Transit (BRT) corridor, Hazel McCallion LRT and Long Branch and Port Credit GO stations.

Micro-mobility supports our vision for Lakeview Village, which prioritizes people and emphasizes pedestrians, active transport, and transit. Intelligent planning and development, innovation and building for the future are the hallmarks of a Smart City. Mississauga and Lakeview Community Partners are doing their part to make this happen, and we are happy to give our support to Mississauga’s vision for micro-mobility.

Sincerely,

Brian Sutherland

Brian Sutherland
Lakeview Community Partners Limited

From: Vicki Tran
To: Allyson D"Ovidio
Subject: General Committee Public Comment - Oct 17
Date: Monday, October 16, 2023 3:48:28 PM

Hi Allyson,

My name is Vicki and I am a Mississauga resident (Ward 8) who is involved in MCAC this term. I won't be able to attend tomorrow's meeting, but I would like to submit my comments to you regarding micro-mobility.

I support the shared micro-mobility program the Active Transportation team has set out. We need more alternatives for people to get around this large city. I use my bike, ebike, and car to commute and would love for more people to find joy in the active transportation modes.

The main concern I have is to educate everyone including drivers, cyclists, scooter users, and pedestrians on how to safely travel through our city. We need drivers to watch out for vulnerable users at intersections! Having recently been hit by a driver not looking while turning, I can't emphasize this enough.

It is mentioned in the plan, but I would like to see even further importance placed on the education provided to new and current users of the road.
On another note, I would like to see the micro-mobility vendors create strict parking measures to reduce the amount of people parking in places that restrict the flow of alternative transportation. For example, earlier in the summer I found e-scooters in Brampton parked on the multi-use path and it made more sense for me to remove them from the path rather than contacting the company to do it. I hope the vendors do better in Mississauga to avoid blocking others.

Thank you!
Vicki

Allyson D'Ovidio

Subject: RE: Support for micromobility

From: Brandon Wiedeman
Sent: Monday, October 16, 2023 4:07 PM
To: Allyson D'Ovidio <allyson.dovidio@mississauga.ca>
Subject: Support for micromobility

Allyson D'Ovidio
I am happy to see that staff has recommended a shared micromobility program. My family and friends will undoubtedly utilize this service, and it will benefit the community.
Staff will need to ensure that vehicles remain off of the sidewalks.
I know that improved access to safe electric vehicles will coax council to create safe MUT spaces for the community.

Thank you!
Brandon Wiedemann
[redacted]

Catherine Soplet
Mississauga, Ontario L5J 3H6
[redacted]

October 17, 2023

Via e-mail to: allyson.dovidio@mississauga.ca

City of Mississauga
General Committee
100 City Centre Drive
Mississauga, Ontario L5B 2C9

Re: Item 10.1 Shared Micro-mobility Program

As a resident of Mississauga Ward 2 I am pleased to see the staff report for the Shared Micro-mobility program.

I encourage you to vote in favour of the program.

It is nice to see the City of Mississauga being ambitious and investing in a program that will help many Mississauga residents and visitors.

As a young senior with impaired mobility, since 2021 I have been interested to learn how the Mississauga Accessibility Advisory Committee (AAC) and external AODA Alliance network have engaged with City staff to explore both opportune solutions and hazards of Micro-mobility. As delegated by them in 2022, personal safety and barrier-free accessibility were not originally visioned by staff as program goals..

Insights from AAC and AODA Alliance from people with Living Experience of Disability (PWLE) has helped to reveal, identify and hopefully shaped the Program to allay concerns for personal safety and the impact of barriers within the built environment, as well as adhere to the core value for inclusive accessibility.

As a future suggestion for Staff who are monitoring personal safety impacts via public health data, online forum and 311 calls from residents, please directly provide your report to AAC at each regular meeting, so the AAC can close the loop to flag any corresponding feedback from PWLE residents.

AAC and AODA Alliance drew attention to affordability as a potential barrier to those most in need to use the Micro-mobility Program. As a Member of Peel Poverty Action Group, I can see from the Preliminary Services Area Mapping that many of Mississauga's residential areas of higher need – which coincide with environmental heat islands - can be prioritized for Program service.

For residents not qualified for a credit card, perhaps a prepaid balance on a Mississauga Library Card could be used to pay for service.

A local Shared Micro-mobility service, ideally run by a local company that understands Mississauga past and present, will send a message that Mississauga is innovative and creative. E-bikes and e-Scooters can bring people to and from transit, can be carried on transit, and can be used by people of all ages, background and abilities.

Best regards,

Catherine Soplet
Member – Peel Poverty Action Group
Resident – Mississauga Ward 2