September 2022

Four-year Growth Plan (2022–2025)

Bike Share Toronto

Toronto Parking Authority

Acknowledgements

Bike Share Toronto's Four-year Growth Plan represents a collaborative effort from Toronto Parking Authority staff, partners and members of the public and we acknowledge their contribution towards the development of this plan.

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Executive Summary

Introduction

The purpose of this document is to guide station planning for the Bike Share Toronto network as part of the Toronto Parking Authority's (TPA) annual capital expansion from 2022 to 2025. As outlined in the plan, accelerating bike share's growth is a key corporate priority.

Designed to improve mobility options for Torontonians, the program has seen tremendous success and growth since its inception, and that trend continues. Record ridership, growth in annual memberships, and increased popularity of e-bikes demonstrate the high level of service bike share customers have come to expect. Those indicators also affirm that the need for expanding bike share's service area to address key service gaps has never been greater, or more urgent.

Development of The Four-year Growth Plan addresses these needs and directs a course that focuses on providing customers with more connections to higher-order transit and assisting with first/last-mile travel, in other words, getting riders from Point A to Point B seamlessly.

The plan also focuses on how bike sharing relates to, and interconnects with other City programs including the TransformTO Net Zero Climate Action Strategy, city transit projects, cycling infrastructure projects, and multimodal mobility in general.

Information specific to other components of the TPA's strategic plan for the Bike Share Toronto system such as operations, maintenance, and pricing are not included in this document.

Background

Since 2011, Bike Share Toronto has provided a sustainable, convenient, and affordable system of bike sharing to residents and visitors in the City of Toronto. Whether it is part of an everyday routine or a casual trip, Bike Share Toronto is an important part of the city's transportation network that provides a reliable and easy-to-use service.

The **2016 Feasibility Study For The Expansion Of Bike Share Toronto** provided the framework for system expansion to 2020. One of its key objectives centred around building a bike share system, primarily in Toronto's downtown core that could be sustained. The new four-year growth plan addresses the next phases of the system's growth. It accepts and goes far beyond the feasibility of bike sharing, to accessibility, equity, and convenience.

Methodology

Decision-making for the plan was informed by Bike Share Toronto's planning objectives of ridership, equity, first/last-mile transit integration, accessibility, and revenue. These objectives were developed into key inputs for the various phases of the development process.

Spatial Analysis

To lay the foundation for the future growth of Bike Share Toronto, the Toronto Parking Authority carried out an in-depth spatial analysis process using data from Bike Share Toronto, City of Toronto, and other available sources which studied demand, first/last-mile usage, equity, and future alignment. The spatial analysis process was developed to strategically identify and inform where the system should be implemented as part of the growth plan.

Stakeholder Consultation

A key part of the development process involved stakeholder workshops organized for Bike Share Toronto partners including many City of Toronto departments, the Toronto Transit Commission (TTC), Metrolinx, and other public and private institutions.

Three public consultation events were undertaken to inform the public about the plan, collect user feedback and present the proposed system expansion. Bike share users were invited to participate in a survey to capture information on trip behaviour, challenges and barriers, and perspectives on upcoming station expansion.

Building on findings from the survey, two user workshops were held to solicit greater context on key results. Workshop discussion topics included bike share trip purpose, barriers to using bike share, trip length and pass type preferences, and potential use of e-bikes. Workshop outputs helped to validate and inform spatial analysis and stakeholder engagement findings.

Conclusion

The Four-year Growth Plan will see the system expand from 625 stations and 7,165 bikes to over 1,000 stations and 10,000 bikes by 2025. The plan will broaden the system's coverage area into all 25 wards of Toronto, prioritizing neighbourhoods where residents have the greatest need for access to affordable mobility options.

It presents a proposed implementation schedule that will guide the expansion process, aligning implementation to strategically serve neighbourhoods and coordinate with planned projects where bike share stations can be integrated.

The expansion will contribute towards achieving the City's TransformTO Net Zero Climate Action Strategy target of 75% of all work and school trips under 5 km being made by walking, cycling, and transit by 2030.

The system will also be expanded along many of the corridors where new cycling infrastructure is being built as part of the City's Near-Term Implementation of the Cycling Network Plan.

Bike Share Toronto will grow as an integral part of the City's growth, aligned with the stated mission of its owner and operator, the Toronto Parking Authority – "to create a seamless customer experience that delivers on choice, ease, and speed through the city." Its growth will be propelled by the TPA's vision to become the world's best provider of sustainable parking, bike share and last-mile mobility experiences for our customers, our partners, and our city. The Four-Year Growth Plan sets Bike Share Toronto on that path.

The Four-year Growth Plan will see the system expand from 625 stations and 7,165 bikes to over 1,000 stations and 10,000 bikes

1 Background

1.1 TPA Mission and Vision

Bike Share Toronto is owned and operated by the Toronto Parking Authority (TPA), North America's largest municipally-owned operator of parking with over 18,000 on-street and 40,000 off-street parking spaces at 307 locations. The TPA is an agency of the City of Toronto and is fully self-sustained through rate-supported operating and capital budgets. Eighty-five percent of the TPA's annual net operating income is returned to the City and the remaining 15% is used to fund long term, multi-year capital budget plans including the Bike Share Toronto program. TPA's mission and vision are:

Mission

Create a seamless customer experience that delivers on choice, ease, and speed through the city.

Vision

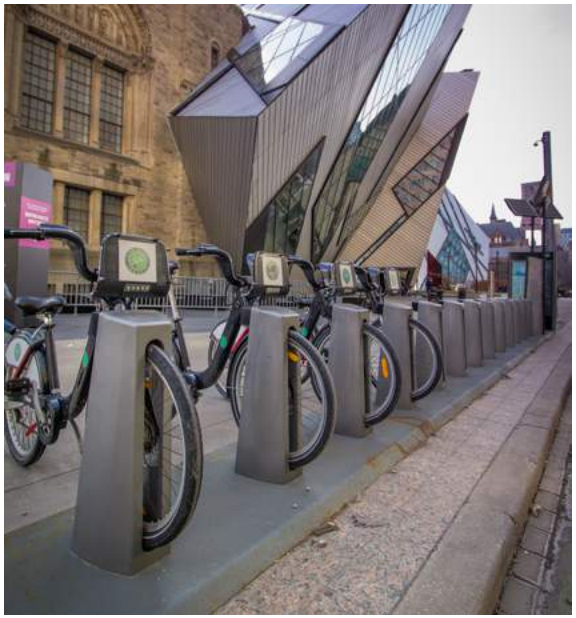
To become the world's best provider of sustainable parking, bike share and last mile mobility experiences for our customers, our partners, and our city.

1.2 What is Bike Share Toronto?

Bike Share Toronto is a public bike share system that operates in the City of Toronto, year-round, 24 hours a day, 7 days a week. The system consists of a fleet of traditional and pedal assist electric bikes (e-bikes) that are available for use on a short-term basis. Bicycles can be rented and returned to any docking station located in the city.

The bike share system launched in May 2011 with a network of 80 stations and 1,000 bicycles located primarily in the downtown core. Management of the system was transferred to the TPA in 2014 and rebranded as Bike Share Toronto. The bike share system serves as an extension of the city's transportation network, providing broader multi-modal connectivity and first/last-mile travel options.

Bike Share Toronto caters to both one-time / casual users as well as regular users who purchase annual memberships. Casual users can also access the system by purchasing a pass at a station kiosk, through the mobile app, or on the Bike Share Toronto website.



Bike Share Toronto's mandate is to be an integral part of Toronto's transportation landscape as a sustainable, affordable, and convenient way for residents to travel and explore the city

1.3 Current State of Bike Share Toronto

Currently, the Bike Share Toronto system is primarily concentrated in and around the downtown and central areas of the city. The system has two satellite service areas in North York and Scarborough. The system has 625 stations and 7,165 bikes, which include 525 pedal-assist e-bikes. The use of the system has grown significantly in recent years, with a 516% increase in customers and 328% increase in trips taken since 2016. In 2021, over 3.5 million trips were taken using the system.

The current system was expanded following completion of the previous growth plan (Feasibility Study for the Expansion of Bike Share Toronto, 2016), which directed the expansion of the system from the initial system size of 80 stations and 1,000 bikes to its current size. The previous plan focused expansion to areas with high ridership potential.

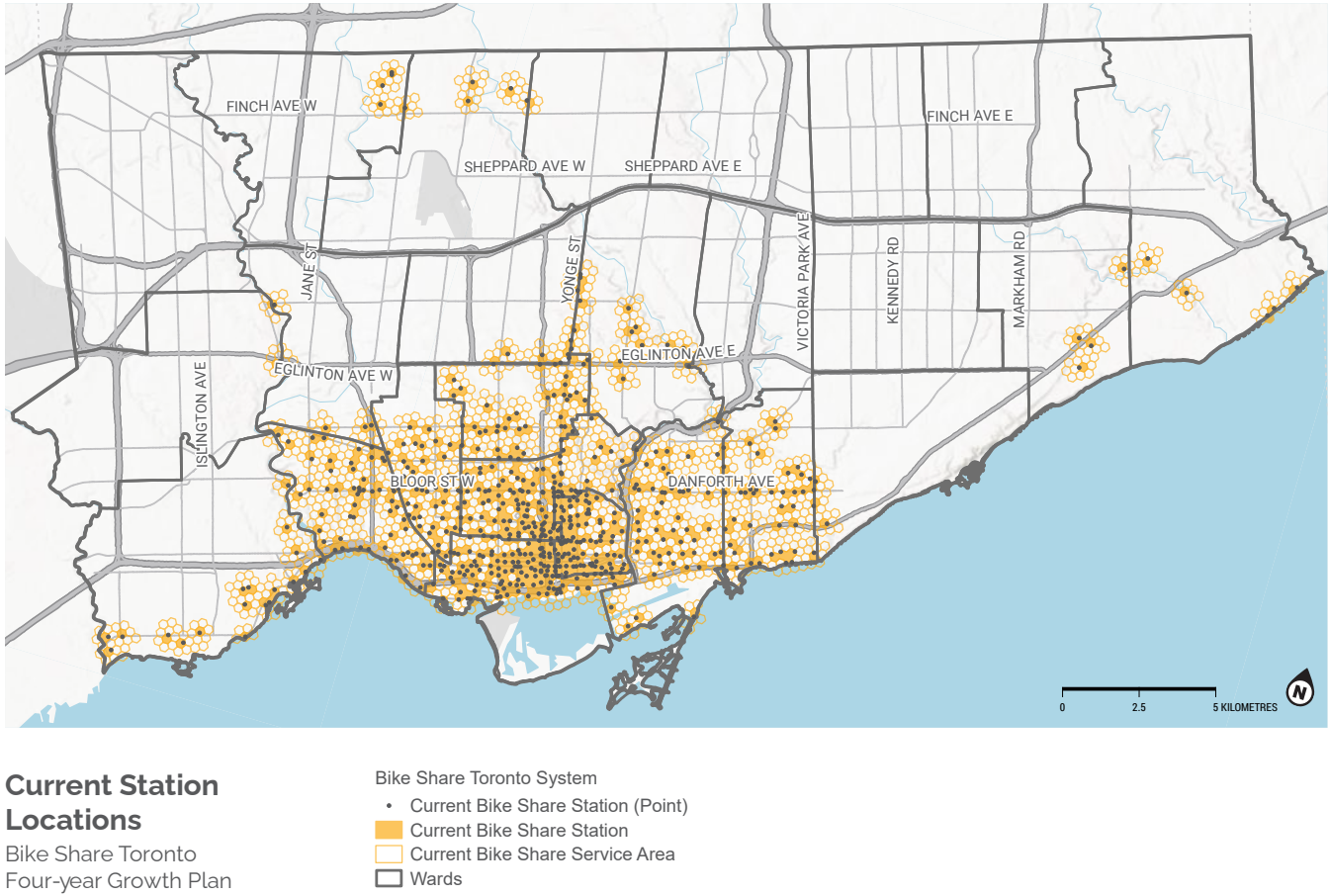


Figure 1. Map of current Bike Share Toronto system stations and service area

1.4 About this Plan

The Four-year Growth Plan outlines Bike Share Toronto's plans for system expansion over the next four years (2022 to 2025). The plan will direct where 375 stations will be added to the system, with an additional 3,150 bikes. Once the plan is fully implemented, the system will have at least 1,000 stations and 10,000 bikes (including 2,000 e-bikes). The development of the plan included spatial analysis as well as public and stakeholder consultation to inform decision-making on where new stations should be located.

Goals and Planning Objectives

The key goal of the Four-year Growth Plan is for **the system to have a station in all of Toronto's 25 wards by 2024**. Bike Share Toronto developed planning objectives to direct how decisions are made in order to provide a great system. The planning objectives are (in no specific order):

Ridership
Enabling the highest number of potential trips

Revenue
Understanding and considering the revenue potential of stations

Accessibility
Minimizing geographic and topographic barriers to use the system

First/Last-mile
Enhancing connectivity with regional and local public transit services

Equity
Providing equitable access to communities across the city

Equity in the Four-year Growth Plan

As a result of the current geographic distribution of the system, there is limited bike share service to areas that have been historically underserved by social infrastructure as well as areas where there are high proportions of vulnerable populations and low access to services. Accessible and affordable transportation options can benefit surrounding communities by reducing geographic and financial barriers to public services and employment opportunities. The Four-year Growth Plan will guide strategic expansion of the bike share system into the City's **Neighbourhood Improvement Areas (NIA)** to ensure there are opportunities for all residents to access bike share across all neighbourhoods.

More details on how equity was assessed and integrated into Four-year Growth Plan are outlined in the **Equity** Priority Input section.

Revenue in the Four Year-Growth Plan

Critical to the success of the bike share program is ensuring future stations are located in areas of the city that generate revenue to support operational expenditures. Attracting new users, both casual and annual, is important to growing ridership and revenue for the system. Network expansions of the system must consider the **local demand and ridership potential** for both of these user groups when proposing new station locations. Since the price per ride of a casual user are higher than annual members, areas that attract casual trips are particularly important for revenue. Historically, areas that attract casual trips are also the most popular areas in the system for ridership. The Four-year Growth Plan considers ridership and revenue as key inputs in the analysis of new station expansion.

E-bikes and E-stations

In recent years, e-bikes have been introduced into many bike share systems across the world. E-bikes have the potential to assist people in travelling further and faster by bike with less effort, particularly when travelling uphill. The maximum speed of an e-bike is 25 km/h and the electric motor within the bike is initiated when a user begins to pedal.

In 2020, Bike Share Toronto launched an e-bike pilot program with 300 e-bikes and 3 e-bike charging stations (e-stations) that are capable of charging e-bikes. Following the popularity of e-bikes among users, the TPA has committed to growing Bike Share Toronto's fleet of e-bikes and installing more e-stations as part of ongoing annual capital expansion. Though the bike share system mostly consists of conventional bikes and solar-powered stations, there are some operational and planning factors to consider as e-bikes and e-stations are added to the fleet.

E-bike Operations in Toronto

- E-bikes and non-electric (conventional) bikes may be docked at any station in the system
- E-bikes can only be charged at e-stations – solar-powered stations do not provide enough power
- Conventional pedal bikes can still be docked at e-stations, similarly, e-bikes can still be docked at solar-powered stations, however, the batteries on e-bikes will not charge
- E-stations must be connected directly to a power source, which requires construction and access to an electrical connection
- Increasing the number and availability of e-bikes does not exclusively depend on installing more e-stations and other e-bike charging strategies may be tested and implemented in the future

E-station Planning

- Best practices from other bike share markets with larger e-bike fleets have shown that an e-bike fleet can be recharged by organic redistribution of bikes when 15-20% of the station network are e-stations
- E-stations do not need to be equally distributed geographically across the network but rather located based on ridership
- E-stations should be installed in locations that have high ridership, which would increase the likelihood of e-bikes circulating through the station and recharging for others to use
- The optimal locations should not be overly popular that bikes are continuously docked and undocked, providing insufficient times for e-bikes to charge at the e-station

The TPA is purchasing new e-stations every year and working with municipal partners to establish power connections to stations, as well as testing operational strategies to optimize battery charging on e-bikes. As part of the next four year of capital expansion, the existing network of solar-powered stations will be evaluated to identify location with optimal ridership to feasibly support e-bikes and e-stations.

Spatial Analysis

A key element of the Four-year Growth Plan was the spatial analysis process. The analysis used data made available by Bike Share Toronto, the City of Toronto, and other available sources. The analysis looked at the existing system and developed the following priority input layers:

Demand

Where bike share trips were taken in 2019 and 2021[1], modelled across Toronto based on land use and destination intensity, and data derived from Toronto's travel demand model to predict where there is high ridership and revenue potential

First/Last-mile

Where bike share could enhance public transit by filling gaps in transit coverage and support transit riders as a time-saving alternative to walking to or from transit nodes

Equity

Where bike share can prioritize access to the system for equity-deserving populations

Future Alignment

Where projected population and employment will be located, as well as new cycling facilities, and transit stations

The priority input layers were based on the planning objectives and used as key inputs to identify where the system should expand. Additional analysis took revenue performance and potential of stations and operational challenges into account by examining patterns of where stations were empty or full.

The **Spatial Analysis** section of the plan provides detailed information on the spatial analysis process and outputs.

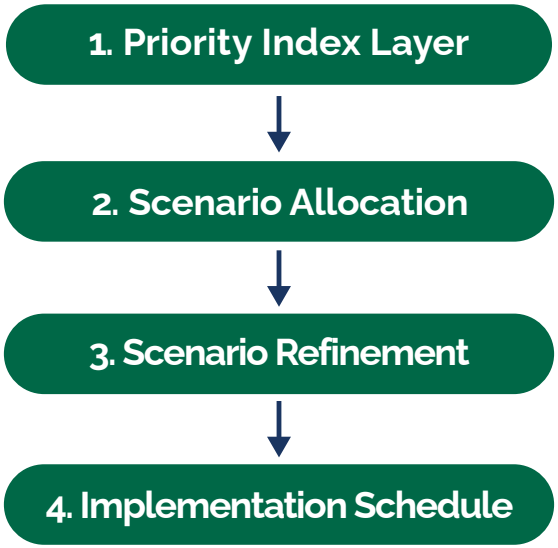


Figure 2. Spatial analysis process

1 Data from 2020 was not included in this analysis as ridership patterns were severely impacted by COVID-19.

Public and Stakeholder Consultation

A key component of the Four-year Growth Plan was to engage with municipal partners, stakeholders and members of the public to better understand how the bike share system could be expanded and enhanced over the next four years. To gather feedback, a number of engagement events were undertaken with stakeholders and the public.

The following is a summary of the consultation and engagement strategy deployed for the Four-year Growth Plan. Additional details are contained in **Appendix A: Engagement Summary Report**.

Stakeholder Workshops

The TPA works closely with many City of Toronto departments, the Toronto Transit Commission (TTC), Metrolinx, and other public and private institutions and stakeholders to implement and maintain the existing system. Strengthening the relationship between the TPA and these stakeholders is paramount to effectively installing the number of new stations planned over the next four years and implementing e-stations. To further build the relationship with stakeholders, focused stakeholder workshops were undertaken during the plan development.

The list of stakeholders on the following page were invited to attend the workshops, however, not all chose to participate in one or both rounds of workshops.

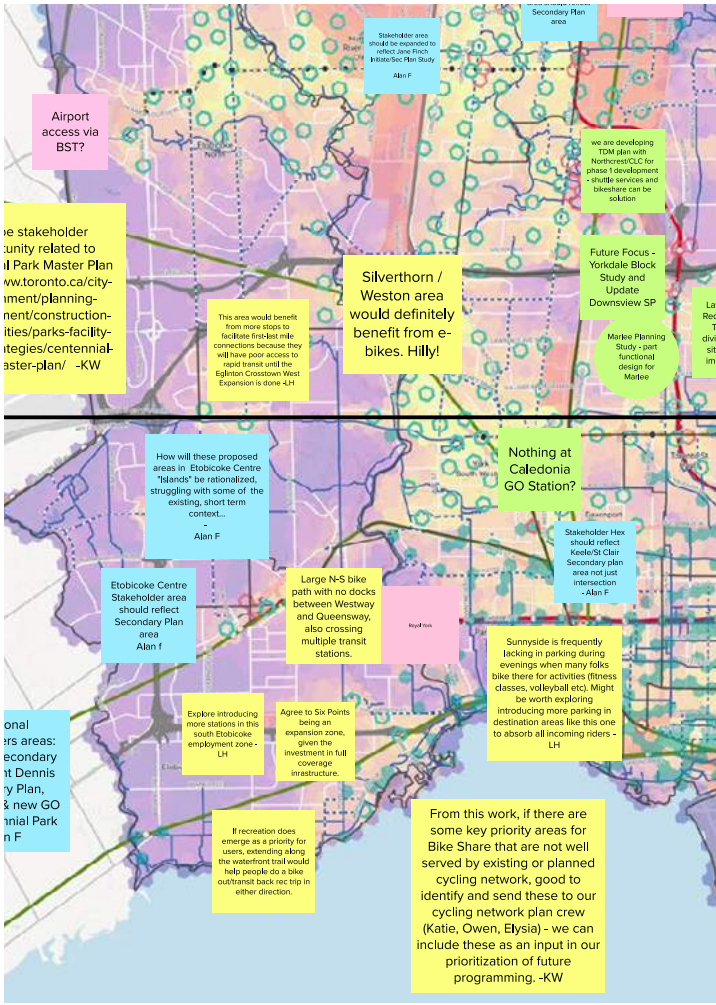


Figure 3. Stakeholder comments on an interactive board

City Departments and Agencies

- City Planning
- Transportation Services
- Parks Forestry and Recreation (PFR)
- Infrastructure and Development Services
- Social Development, Finance & Administration
- Economic Development & Culture
- Corporate Real Estate Management (CREM)
- CreateTO
- WaterfrontTO

Transit Partners

- Metrolinx (Stations Planning)
- Metrolinx (Sponsor Office)
- Metrolinx (Project Planning)
- Metrolinx (Rapid Transit Planning)
- Metrolinx (Transportation Policy)
- TTC (Strategy and Foresight)
- TTC (System Accessibility)
- TTC (Racial Equity Office)
- TTC (Transit Systems Planning

Other Public Institutions (outside of City of Toronto)

- Toronto Catholic District School Board (TCDSB)
- Toronto District School Board (TDSB)
- University of Toronto
- University of Toronto Scarborough
- York University/Glendon Campus
- Centennial College
- Seneca College
- Canada Lands Company
- North York General Hospital
- Toronto and Region Conservation Authority (TRCA)
- Toronto Public Library
- Parks Canada
- Infrastructure Ontario
- Toronto Zoo
- Toronto Community Housing Corporation (TCHC)

Private Partners

- Toronto Association of Business Improvement Areas (TABIA)
- Business Improvement Areas

Other

- Private developers and commercial property owners
- Point A (Smart Commute)
- Toronto Hydro
- Business Associations
- BILD Toronto

The first set of stakeholder workshops was held in April and May 2022. The purpose of these workshops was to introduce the plan to stakeholders and gather feedback on challenges, opportunities and anticipated roles respective stakeholders may have in the implementation of the Four-year Growth Plan.

The second set of stakeholder workshops was held in July 2022. The purpose of these workshops was to present the spatial analysis outputs and a draft station allocated map for the proposed system expansion. Stakeholders were asked to provide feedback on the draft station allocation map and to identify additional opportunities for stations based on their upcoming projects.

A summary of the feedback collected from both rounds of workshops is contained in **Appendix A: Engagement Summary Report**. The feedback from these sessions informed the proposed stations areas and implementation schedule for the Four-year Growth Plan. In addition to identifying recommended areas for system expansion, stakeholders identified site-specific opportunities for future stations, recommendations to support the implementation of this plan, as well as actions to support future growth plans and bike share service improvements.

Public Consultation

Three public consultation events were undertaken to inform the public about the plan, collect user feedback and present the proposed system expansion. These include an online survey, bike share user workshops, and a public information session. A summary of the feedback that was collected from public consultation is included in **Appendix A: Engagement Summary Report**.

Survey

Bike share users were invited to participate in a survey to capture information on trip behaviour, challenges and barriers, and perspectives on upcoming station expansion. The survey contained 21 questions and was promoted through two Bike Share Toronto newsletters on May 10 and June 8. Upon close, the survey received 177 responses.

User Workshops

Building on findings from the survey, two user workshops were held to solicit greater context on key results. Participants were selected from survey respondents who indicated they would be willing to attend a focus group session. The one-hour user workshops were held virtually on July 15 and July 16. Workshop discussion topics included bike share trip purpose, barriers to using bike share, trip length and pass type preferences, and potential use of e-bikes. Workshop outputs helped to validate and inform spatial analysis and stakeholder engagement findings for the Four-year Growth Plan.

Public Information Session

On August 8, a public information session was held virtually to share information about the upcoming expansion. The session was promoted through Bike Share Toronto media channels and had 87 participants. A presentation was given on the study purpose, methodology, and the areas under consideration for expansion. Questions from participants included:

- How is Bike Share considering equity when they plan and install new stations?
- Any plans to integrate with PRESTO?
- Why would bike share not go 100% electric?
- Is the expansion aligned with the City's cycling infrastructure plans?

In addition to understand the opportunities and challenges for bike share expansion, feedback collected through stakeholder and public engagement helped to shape the Four-year Growth Plan, particularly by validating the output of the spatial analysis. It was important that the Four-year Growth Plan be informed by both quantitative and qualitative information to ensure the recommendations for system expansion reflect community needs and how people want to use bike share in their respective areas.

8
stakeholder meetings

80+
public information session attendees

4
stakeholder groups

22
user workshop attendees

50+
stakeholders invited

177
user survey responses

1.5 Informing the Growth Plan

The Four-year Growth Plan builds upon the success of previous expansion to the Bike Share Toronto system. It also strives to identify opportunities for bike share to support and enhance other transportation infrastructure, such as expansions of the cycling and transit networks. To understand upcoming changes to transportation in Toronto, a selection of key documents was reviewed to identify considerations for bike share expansion. The following sections summarize plans, projects, and initiatives that inform or impact bike share system expansion over the next four years.

Feasibility Study for the Expansion of Bike Share Toronto (2016)

The 2016 Feasibility Study guided the expansion of the Bike Share Toronto system from a service area of 12.4 km^2, with 80 stations and 1,000 bikes to an additional 500 stations and 5,000 bikes over a five-year period. The study recommended that approximately 90% of the new stations be located to expand bike share into new areas and 10% of stations allocated to increase station density within the existing service area. The study prioritized expansion in areas with high ridership potential that were identified through a spatial analysis model. The model considered areas that had the “least risk” for expansion, for both a contiguous expansion of the service area as well as locations for new satellite service areas. A density guide of 4.0 to 6.5 stations per km^2 was established to support station siting and system expansion.

Key Considerations for the Four-year Growth Plan

The Feasibility Study guided the expansion of the system from operating primarily in the Toronto’s downtown core to extend beyond the city’s inner-urban neighbourhoods, including satellite service areas in Scarborough and North York. The study provides a strong basis for the benefits of bike share and how to expand the system’s coverage from a ridership-focused objective. Ridership potential remains a priority in the Four-year Growth Plan but it will not be as heavily weighted. Additional variables, such as equity and near-term infrastructure projects, will be incorporated into the Four-year Growth Plan to produce a comprehensive expansion plan that addresses the evolving priorities of the Bike Share Toronto system.

Feasibility Study for the Expansion of Bike Share Toronto (2016)

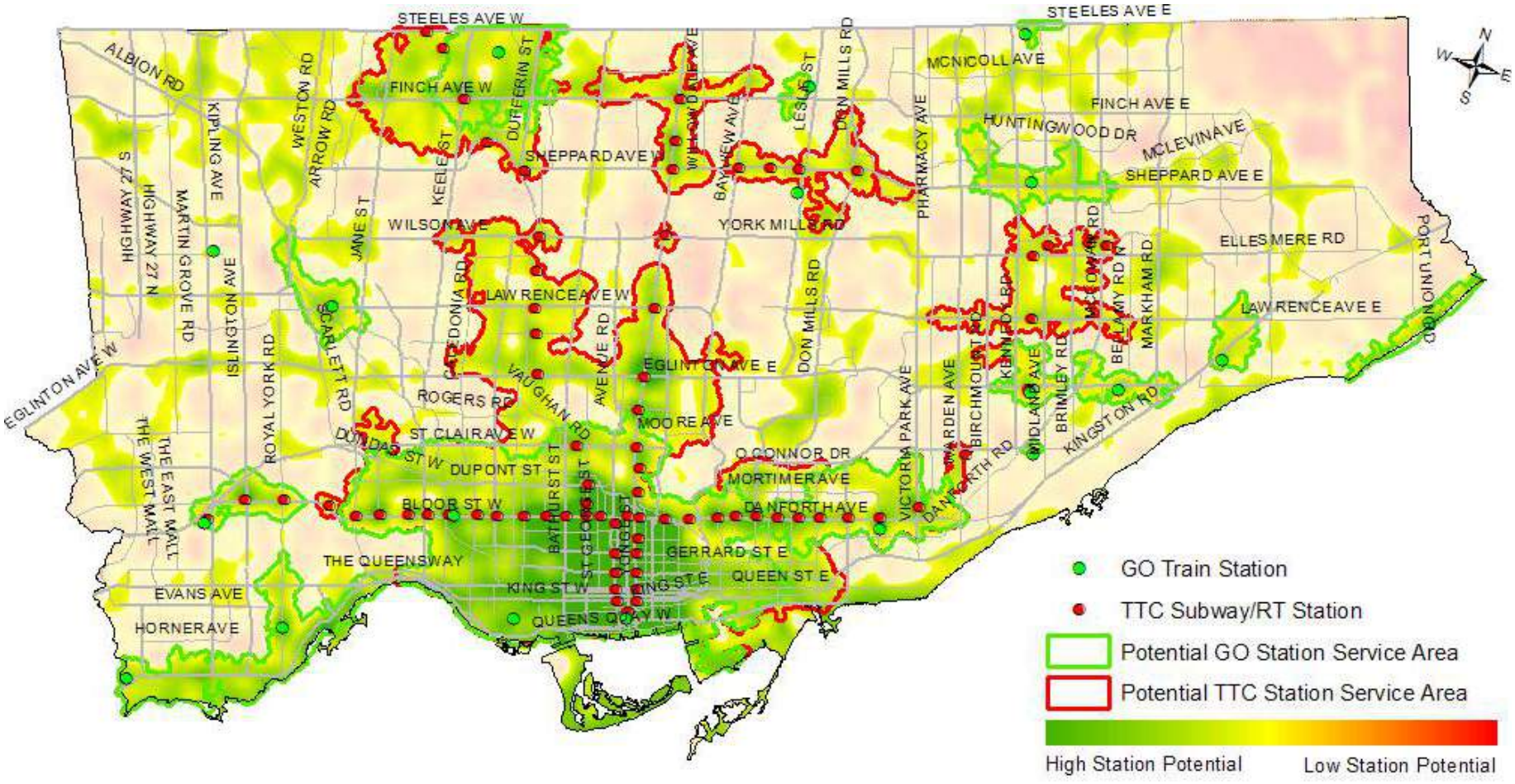


Figure 4. Proposed expansion areas from the Feasibility Study for the Expansion of Bike Share Toronto (2016)

TransformTO

The TransformTO Net Zero Strategy is a City Council approved document that outlines a pathway to achieve net zero greenhouse gas (GHG) emissions community-wide by 2040. Currently 36% of GHG emissions in Toronto are generated by transportation, with the majority of those emissions attributed to personal vehicles. The strategy outlines transportation-related targets for 2030 which include that 75% of school/work trips under 5 km are walked, biked or by transit. Under this target, action 8 includes expanding bike share at or near TTC stations. The strategy identifies that this action would have health, equity, resilience, and prosperity benefits. The strategy mentions the need for bike share stations along roadways and at destinations across the city to improve the access and convenience of cycling, as well as the potential benefits to electrifying station and expanding the e-bike fleet.

Key Considerations for the Four-year Growth Plan

The expansion of Bike Share Toronto system is part of the strategy to reduce GHG emissions in Toronto and to achieve net zero GHG emissions community-wide by 2040. An action item in the strategy is to expand the bike share system at or near TTC subway stations, to improve access to transit and support longer trips. The strategy also notes the importance of electrifying stations to support a fleet of e-bikes in the system.

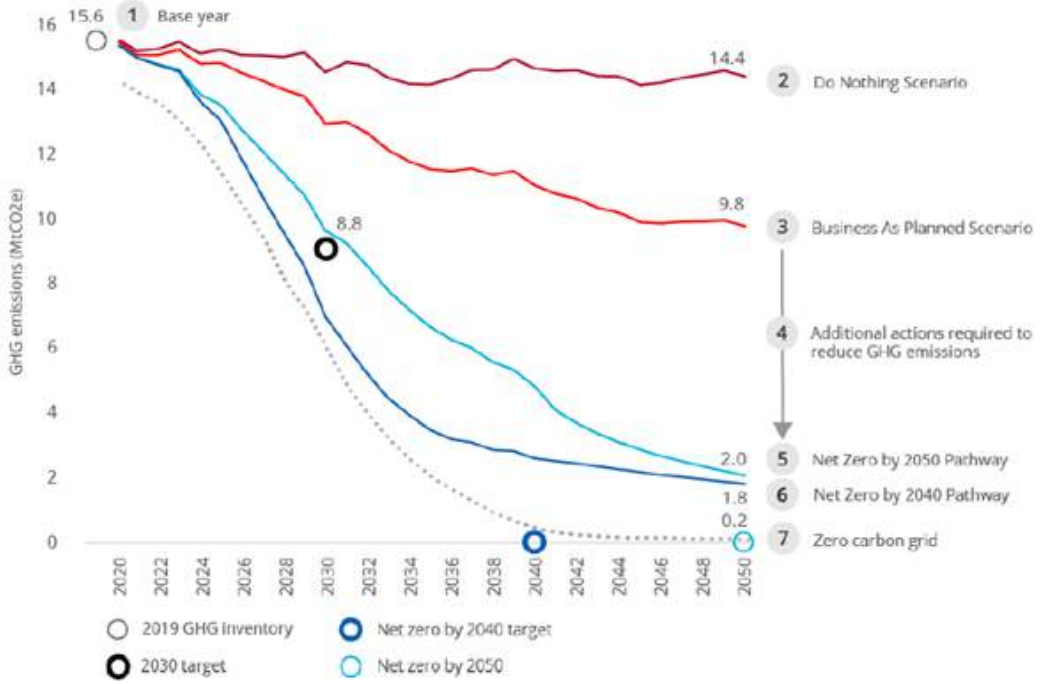


Figure 5. Overview of the net zero modelling process (TransformTO, 2021)

RapidTO: Bus & Streetcar Priority

The City of Toronto and TTC are enhancing bus and streetcar transit across Toronto by studying and implementing transit priority solutions that improve service reliability. The RapidTO: Bus & Streetcar Priority will guide the study, evaluation, and delivery of bus and streetcar improvement projects in Toronto. These projects may include new bike lanes and new space in the boulevard where bike share stations could be located.

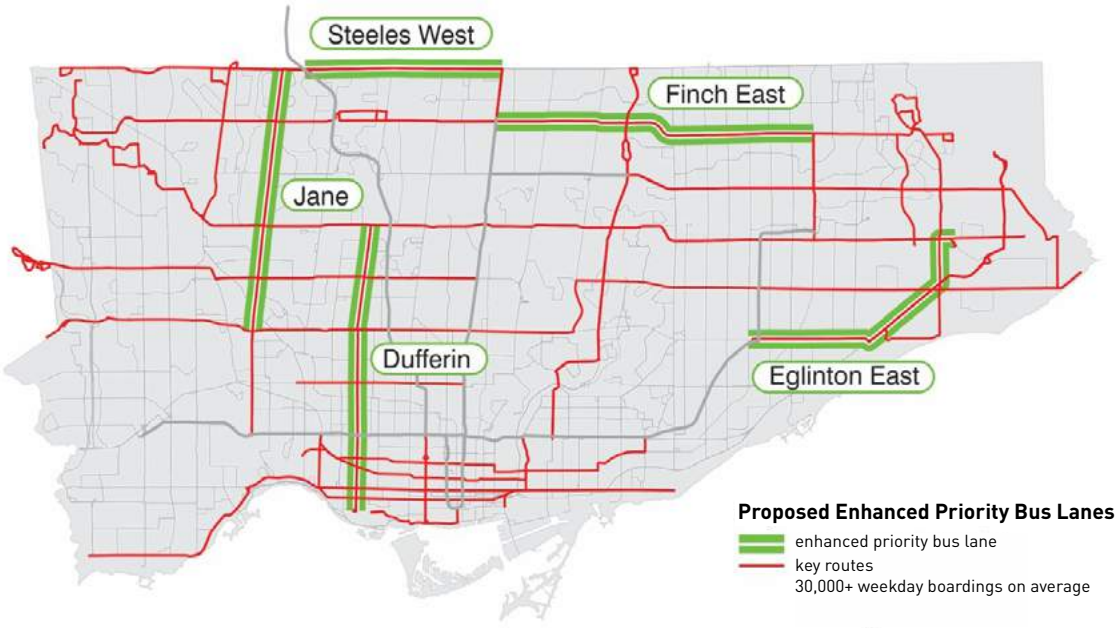


Figure 6. Proposed Enhanced Priority Corridors for RapidTO

Key Considerations for the Four-year Growth Plan

RapidTO bus priority corridors are opportunities for where bike share can provide first/last-mile transit access. They are also present opportunities to coordinate where bike share stations could be implemented through the design process. Key opportunities include Eglinton Avenue East and Jane Street (Eglinton to Steeles, public consultation beginning in 2023).

Cycling Network Plan Update

The Cycling Network Plan (2019) is a City Council adopted plan, which seeks to build on the existing network of cycling routes by connecting existing network gaps, grow the network into new parts of the city, and renew existing routes to improve road safety. The plan consists of three components: Long-Term Cycling Network Vision, Major City-Wide Cycling Routes, and three-year rolling Near-Term Implementation Program. The Cycling Network Plan's components, objectives, and indicators are aligned with many City policies, including the Official Plan, TransformTO, and the Vision Zero Road Safety Plan.

The Cycling Network Plan Update (2021) reports on progress of the 2019-2021 Near-Term Implementation Plan and updates the 2022-2024 Near-Term Implementation Plan, which forecasts the delivery of approximately 100 centreline km of new bikeways.

This includes key projects outside of the city's inner-urban neighbourhoods, which include:

- Bathurst Street (from Steeles Avenue to Bainbridge Avenue)
- Bloor Street West extension (from Runnymede Road to Six Points)
- Centennial Park Boulevard trail (from Eglinton Avenue West to Rathburn Road)
- Danforth Avenue extension and Kingston Road (from Dawes Road to Scarborough Golf Club Road)
- Eglinton Avenue (completing segments between Jane Street and Kennedy Road)
- Finch West (as part of LRT, from Highway 27 to Keele Street)
- Finch Hydro Corridor trail (from Pharmacy Avenue to Birchmount Road)
- Port Union Road (from Sheppard Avenue East to Lawrence Avenue East)
- Scarborough Golf Club Road (from Ellesmere Road to Kingston Road)
- Sheppard Avenue East (from Bonnington Place to Betty Sutherland Trail)
- The Queensway (from Humber River to Burma Drive)
- Willowdale Avenue (Sheppard Avenue East to Empress Avenue and Finch Trail to Steeles Avenue East)

The complete list of projects is available on **the City of Toronto's Cycling Network Plan webpage.**

Cycling Network Plan Update

Key Considerations for the Four-year Growth Plan

These projects present key coordination opportunities to implement new bike share stations along Toronto's evolving cycling network. Many of the network expansion projects are located at the periphery of Bike Share Toronto's existing service area and in wards that the system does not currently serve. The methodology for the prioritization of the new cycling facilities aligns with many of Bike Share Toronto's planning objectives, including demand, equity, and first/last-mile. The presence of safe cycling facilities is a key factor in whether people will choose to bike.

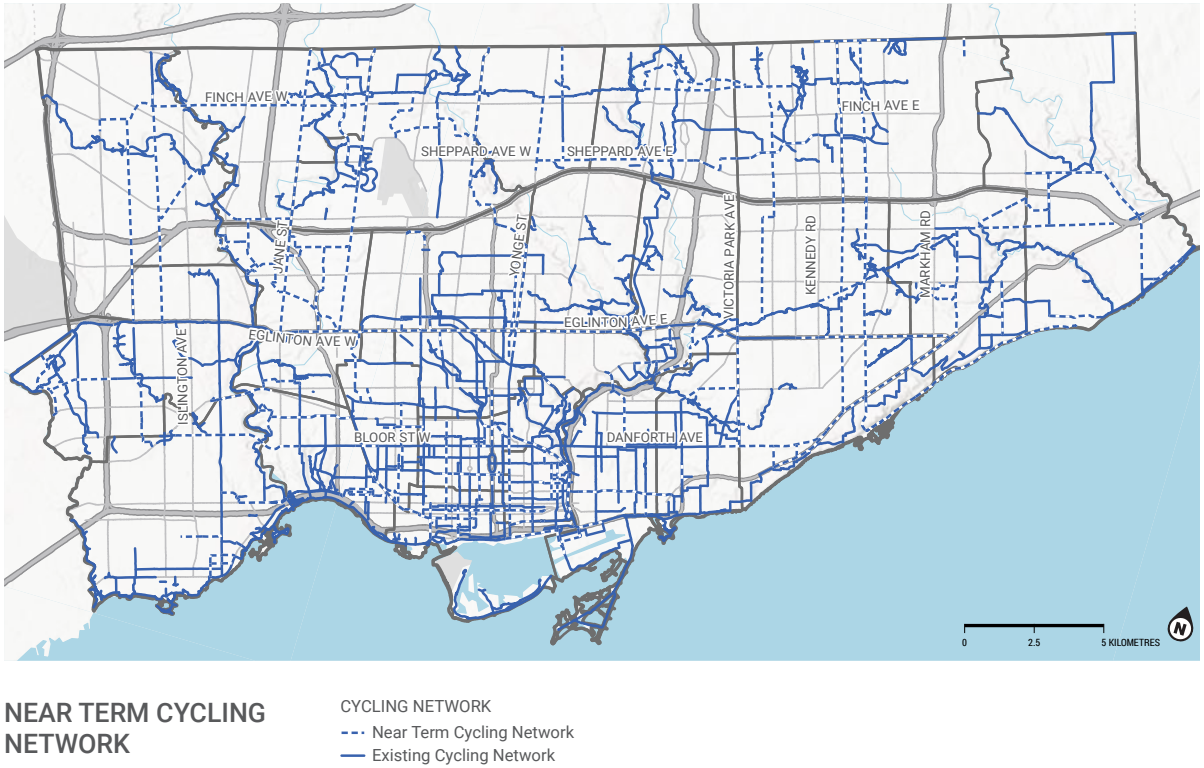


Figure 7. Near Term Cycling Network

The dashed lines indicate routes that will be implemented and studied as part of the 2022-2024 Near-Term Implementation Plan

Transit Projects

The following are major transit expansion projects that are planned to be completed within the timeframe of the Four-year Growth Plan. Other transit projects occurring around Toronto, such as the Ontario Line, GO Transit Expansion, Eglinton Crosstown West Extension, and East Waterfront LRT that are not included as they have completion dates beyond the timeframe of the plan.

Eglinton Crosstown LRT (Line 5)

The Eglinton Crosstown LRT project will midtown connection between east and west Toronto, travelling along Eglinton Avenue. The 19 km project includes 25 stations along a dedicated route from Weston Road (Mount Dennis) in the west to Kennedy Road in the east. The project is being coordinated with the implementation of cycling facilities along Eglinton Avenue. The project is planned to be substantially complete by September 2022, but a service date has yet to be set.

Finch West LRT (Line 6)

The Finch West LRT project is an 11 km route in a dedicated right-of-way in northwest Toronto. The project includes 18 stations from Humber College in the west to Keele Street in the east (Finch West Station on Line 1). The project is currently in construction and is planned to be completed in 2023. In coordination with the construction of the project, cycling facilities are being implemented on Finch Avenue West from Highway 27 to Keele Street.

Key Considerations for the Four-year Growth Plan

The Eglinton Crosstown and Finch West LRT projects and related cycling facility implementation represent significant corridors for integration with the Bike Share Toronto system expansion. The bike share system currently has stations on or near Eglinton Avenue clustered around Yonge Street and around Finch West station. Expansion of the system along the project corridors and in areas within a bikeable distance of the projects would support first/last-mile connections as well as local trips through the various communities. There is an opportunity to coordinate the expansion of the system by locating new bike share stations at or near new LRT stations once they open.

Figure 8. Eglinton Crosstown corridor (Metrolinx, 2022)

Figure 9. Finch West LRT corridor (Metrolinx, 2022)

Scarborough Rapid Transit Decommissioning

The Scarborough Rapid Transit (Line 3) is being closed in 2023 and replaced with bus service until the Scarborough Subway Extension project is completed in 2029-2030. The subway extension project will extend the Bloor-Danforth (Line 2) subway with a route along Danforth Road and McCowan Road to Scarborough Town Centre and terminating at Sheppard Avenue East.

Key Considerations for the Four-year Growth Plan

The Bike Share Toronto system has expanded into Scarborough in recent years. As part of the decommissioning of the existing rapid transit line and implementation of interim bus service, there is an opportunity for Bike Share Toronto to provide targeted expansion along the corridor to support people travelling in Scarborough with additional mobility options.

SmartTrack Stations Program

The SmartTrack Stations program is a collaboration between the Province of Ontario, City of Toronto, and Metrolinx. Toronto will see five new stations along existing GO rail corridors and bring more frequent rapid transit service for the people of Toronto. All five stations are anticipated to be open and operational in 2026.

Key Considerations for the Four-year Growth Plan

SmartTrack stations will provide a greater choice of reliable and convenient route options to shorten commutes and increase quality of life for people traveling in the city. New or moved bike share stations at and around SmartTrack stations will help to provide first/last-mile connections.

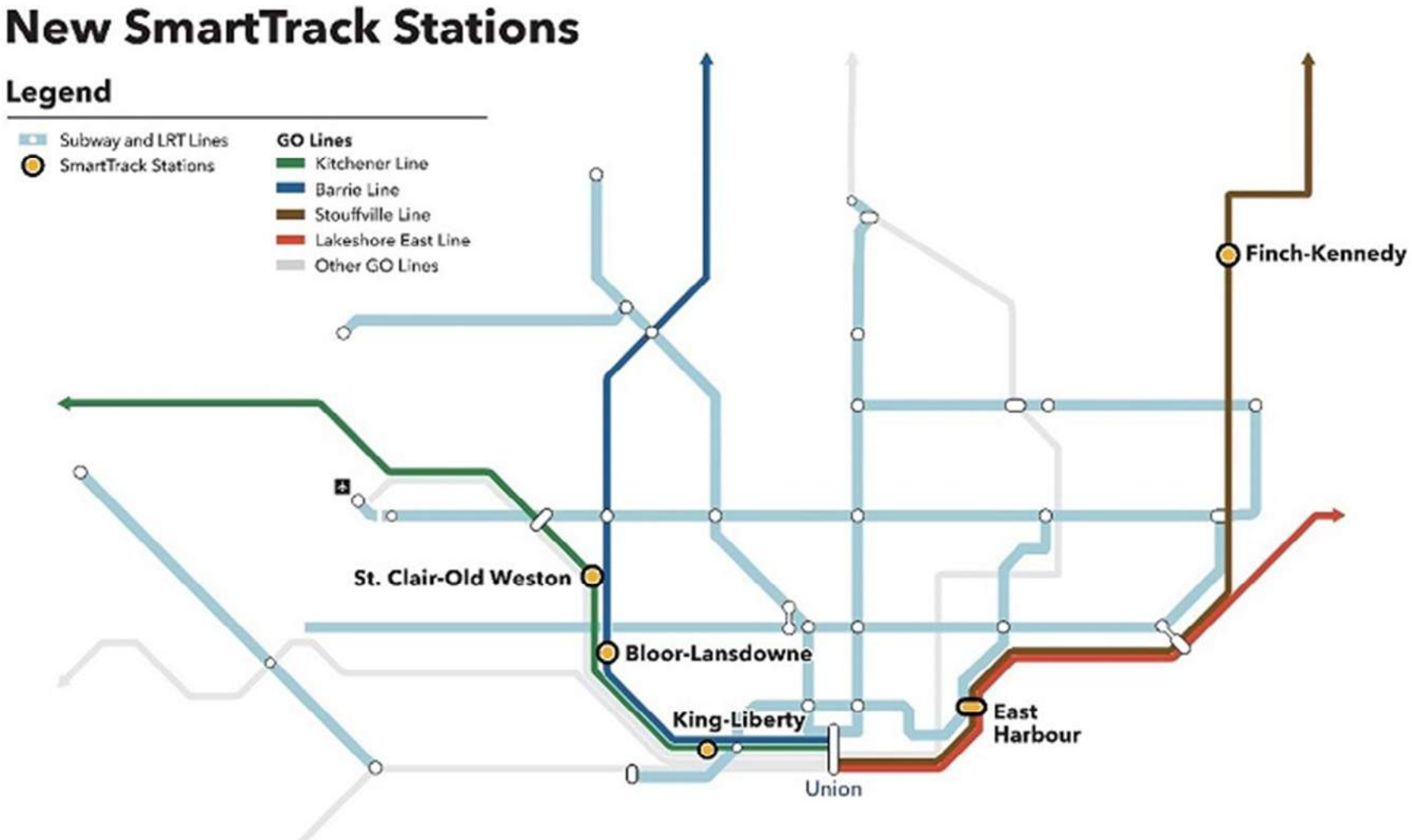
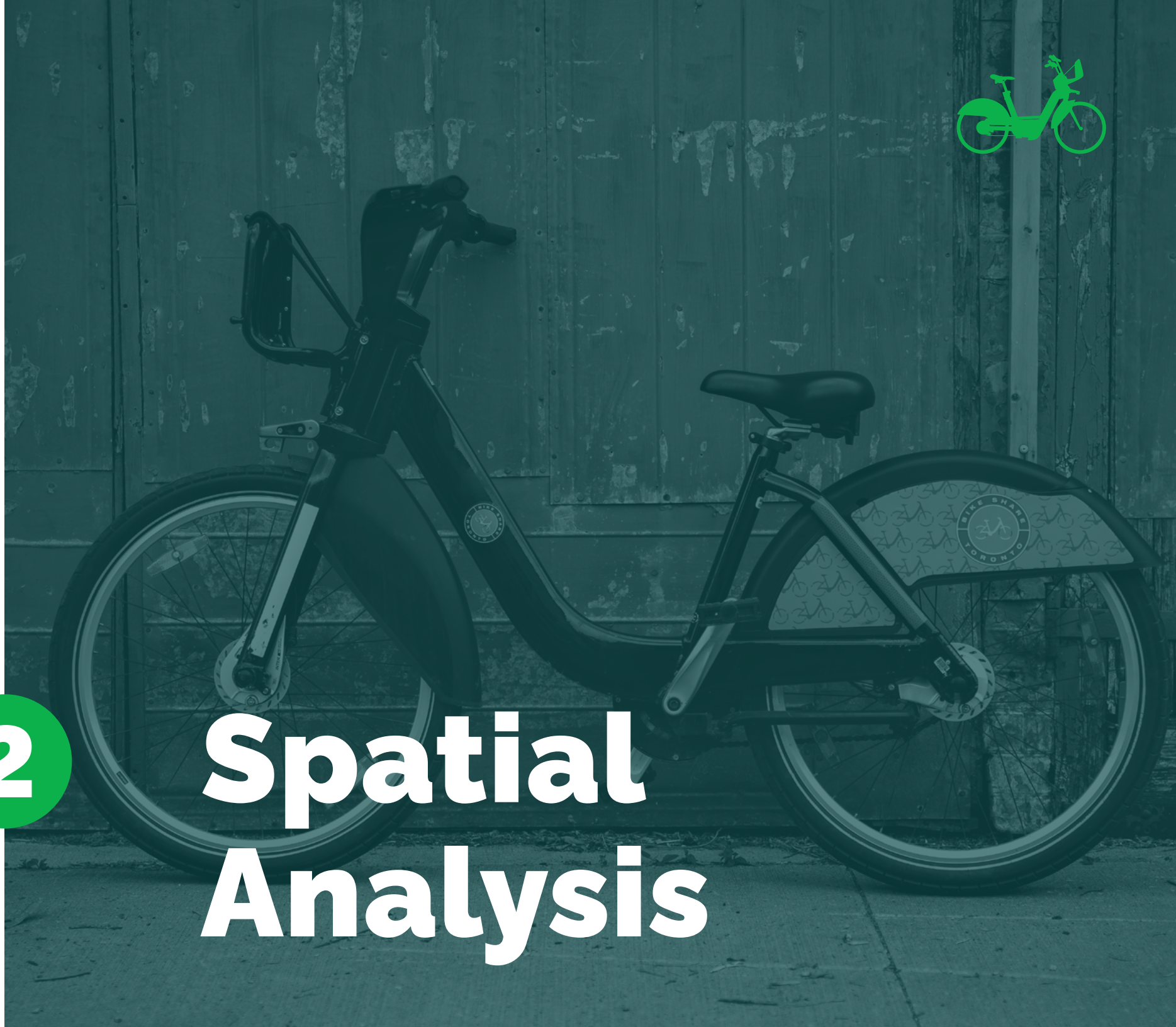


Figure 10. Location of new SmartTrack stations



2 Spatial Analysis

2.1 Overview

The purpose of the spatial analysis for the Four-year Growth Plan was to use quantitative data to assess and identify areas most suitable for bike share expansion over the next four years. This was an iterative and collaborative process shaped by the insights from TPA as well as feedback from stakeholders and the public. Critical to the success of the Four-year Growth Plan, it was integral that this process and the quantitative outputs be grounded with quantitative information and anecdotal experience by those who use the bike share system and partners who have a vested interest in Bike Share Toronto.

A summary of the spatial analysis process that was used to develop the Four-year Growth Plan is outlined on the right side of this page.

The first step of the spatial analysis process was to develop priority input layers which are geographic amalgamations of transportation behaviour, infrastructure, and socio-economic data in the City of Toronto. Data were collected from a variety of sources to develop the priority input layers and then categorized based on the planning objectives for the Four-year Growth Plan. The outputs from this initial step were mapped to show areas that would be most strategic for bike share expansion in order to achieve the respective planning objective. For example, the output for an equity priority input layer would highlight areas with NIAs and relative high proportion of low-income households. A summary of this step and the outputs are contained in section **2.2 Priority Input Layers**.

Spatial Analysis Process

1. Priority Input Layers
Four priority input layers were developed reflective of the planning objectives:

- Demand
- Equity
- First/Last-mile
- Future Alignment

2. Scenario Allocation Tool
Five scenarios were created which apply weights to the priority input layers to identify where stations should go.

3. Scenario Refinement
A preferred scenario was selected, and was refined with feedback from stakeholders.

4. Implementation Schedule
Stations from the refined scenario were identified for implementation timing.

Following the development and mapping of the priority input layers, the second step of the spatial analysis process was to create scenario options based on different weightings of the priority input layers. The outputs from this step illustrated areas most suitable for bike share expansion, based on the prioritization of the priority input layers that are representative of the planning objectives. The intent of this step and the derived outputs was to select a scenario that achieves a balance of network distribution across the city while also ensuring the planning objectives are realized over the next four years. To achieve this, the scenarios were evaluated with system planning principles to select a preferred scenario. Section **2.3 Scenario Allocation Tool** presents these steps.

The preferred scenario was manually refined using qualitative input from operational best practices, and stakeholder and bike share user feedback.

This process and the outcomes of the final allocation are presented in **2.4 Scenario Refinement**.

For the spatial analysis component of the Four-year Growth Plan, a hexagonal grid was created and applied across the city. The hexagons have a diameter of 300 m, equivalent to 67,500 m^2, and totalling 9,862 hexagons to cover the city. The diameter of the hexagons provides a balance of enough size to aggregate the data, while also providing enough detail at a neighbourhood scale.

Using a hexagon grid to aggregate data contained in points, lines, and polygons helps to normalize the geography. Hexagons are preferable to a square grid as they reduce sampling bias due to edge effects, better represents points and curves in the data, and has a better relationship with neighbouring hexagons than a square grid.

The following sections provide a detailed overview on both steps of the spatial analysis process. While the outputs have identified potential areas most suitable for bike share expansion, it is important to note that these do not represent specific locations. It is recognized that these recommendations are subject to future planning work, site-specific station siting, and coordination with respective partners.

2.2 Priority Input Layers

The priority input layers represent Bike Share Toronto's planning objectives of ridership, revenue, equity, and first/last-mile mobility. The priority input layers illustrate areas where the characteristics or indicators of each objective are more predominant relative to other areas. For example, the demand priority input shows where there is likely higher ridership demand and revenue for bike share comparatively across the city.

Demand

The demand priority input layer highlights the relative anticipated ridership for bike share across the city. To represent this across the city in places where bike share does not currently operate, historic bike share ridership in the existing service area was examined at the station-level to identify indicators of demand in land use and transportation characteristics.

A series of models then predicted ridership for hypothetical stations beyond the existing service area by combining outputs for 2019 and 2021 estimated ridership, which represent pre- and post-pandemic travel patterns respectively. The 2019 data had a more significant relationship with access to employment, while the 2021 data had a greater emphasis on parks. The priority input blends 2019 ridership at 80% and 2021 ridership at 20%.

The demand priority input in **Map 1** shows high demand in the central inner urban part of the city where bike share currently operates. Areas of higher demand are also located through Scarborough south of Highway 401, through the central midtown area, and into North York, particularly to the east of Jane Street.

Equity

The equity priority input layer is intended to identify areas currently underserved by mobility options and where people may have greater barriers to accessing services. In these areas, bike share service has the potential to incentivize active transportation for short trips and improve access to public transit. Where communities have disproportionately high concentrations of low-income households, bike share service also offers a low-cost mobility alternative to driving. This layer combined the City of Toronto's **Neighbourhood Improvement Areas** (NIAs) with more geographically disaggregated data about low-income households (LICO-AT) from the 2016 Census of Canada.

The bike share system currently serves some areas with higher equity priority, such as Parkdale and Regent Park neighbourhoods, but there is an opportunity to expand into new equity-deserving neighbourhoods. As demonstrated in **Map 2**, there are large areas of the city with higher equity priority that are either partially served or completely unserved by bike share stations. Neighbourhoods that are partially served by bike share include Thorncliffe Park, Oakridge, Scarborough Village, Golfdale-Cedarbrae-Woburn, and neighbourhoods in the northwest part of the city, such as Rockcliffe-Smyth and York University Heights. Neighbourhoods such as Humber Summit, Black Creek, Elms-Old Rexdale, Glenfield-Jane Heights in the northwest and Victoria Village, Eglinton East, and Woburn North in Scarborough are currently unserved by the bike share system.

First/Last-mile Transit Integration

The first/last-mile transit integration priority input layer is intended to represent areas where bike share can improve access to local and regional transit using existing transit service characteristics. Bike share is a cost-effective, convenient means of traveling and can help connect passengers from their starting point to transit and then complete their last mile after deboarding. Areas were scored based on:

- Current transit ridership;
- Suitable distances to transit (GO: 400m to 3.5 km, Subway/Rail: 400 m to 2.8 km, Priority/Express bus: 400 m to 1.1 km);
- Potential for bike share to fill gaps in transit service coverage; and
- Estimating the time savings that bike share would provide for people connecting to transit and the ability to reduce wait times.

The first/last-mile priority input is shown on **Map 3**. It shows that the areas with the highest potential for first/last-mile integration are located in northwest Etobicoke, North York, East York, and Scarborough. Most notably, areas adjacent to corridors with frequent transit service are in the highest percentile for the characteristic. This analysis shows that bike share service in these areas would provide improved access and time savings for people to connect to/from transit for longer distance trips.

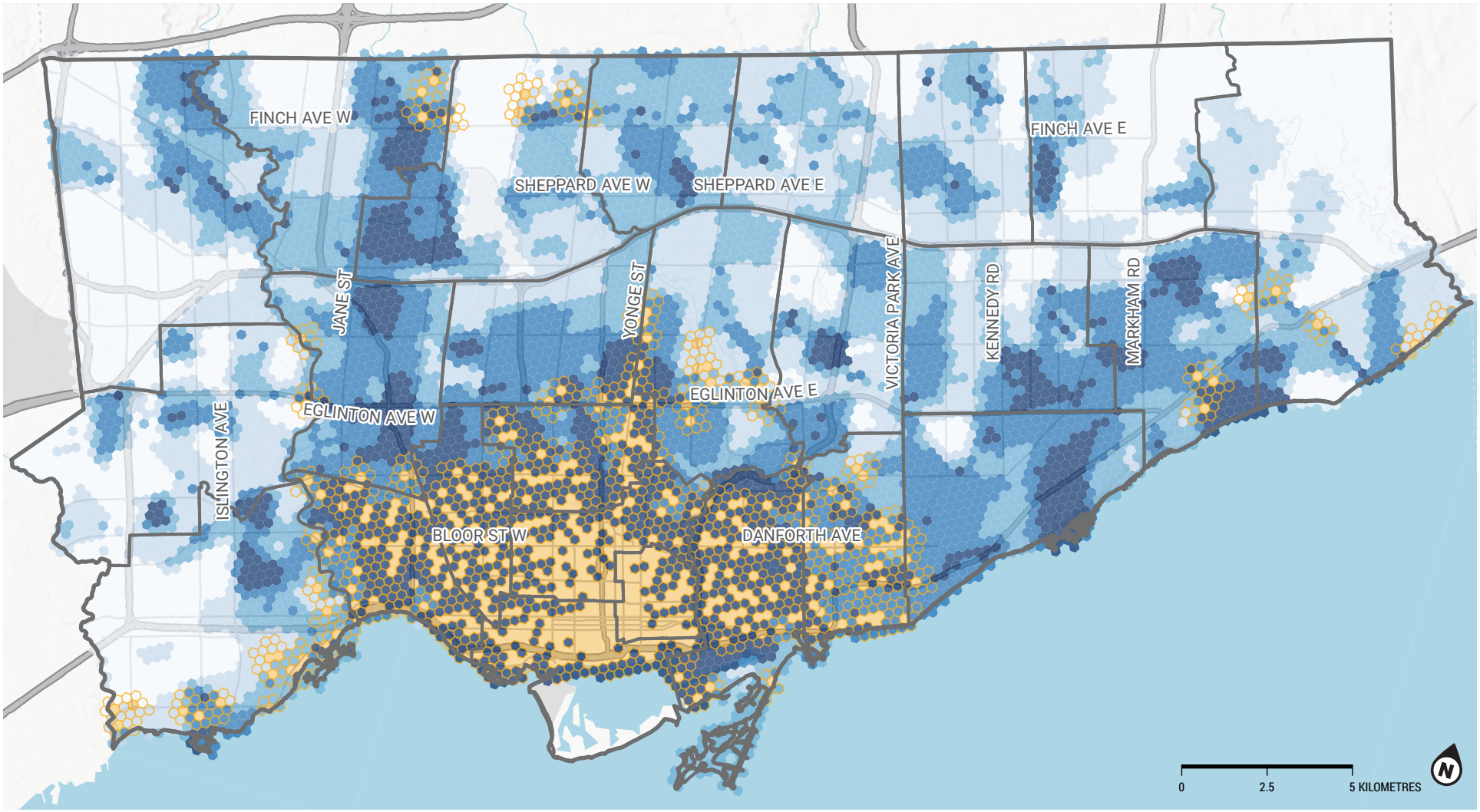
Future Alignment

The future alignment priority input layer represents areas where high population and employment growth are anticipated by 2041 based on the City of Toronto's Travel Demand Model. The layer also represents areas where new and upgraded cycling facilities are planned for delivery as part of the City's 2022-2024 Near-Term Implementation Program of the Cycling Network Plan.

The layer also accounts for new local and regional transit stations that will open during the implementation timeframe of the Four-year Growth Plan.

The future alignment priority input is shown on **Map 4**. It shows that there is high future alignment within the existing service area through the inner urban area. There is also high future alignment along and around major corridors such as Eglinton Avenue, Finch Avenue West, Yonge Street north of Highway 401, Sheppard Avenue East, and Midland Avenue in Scarborough.

Map 1. Demand Priority Input Layer



Demand Priority Input

Bike Share Toronto
Four-year Growth Plan

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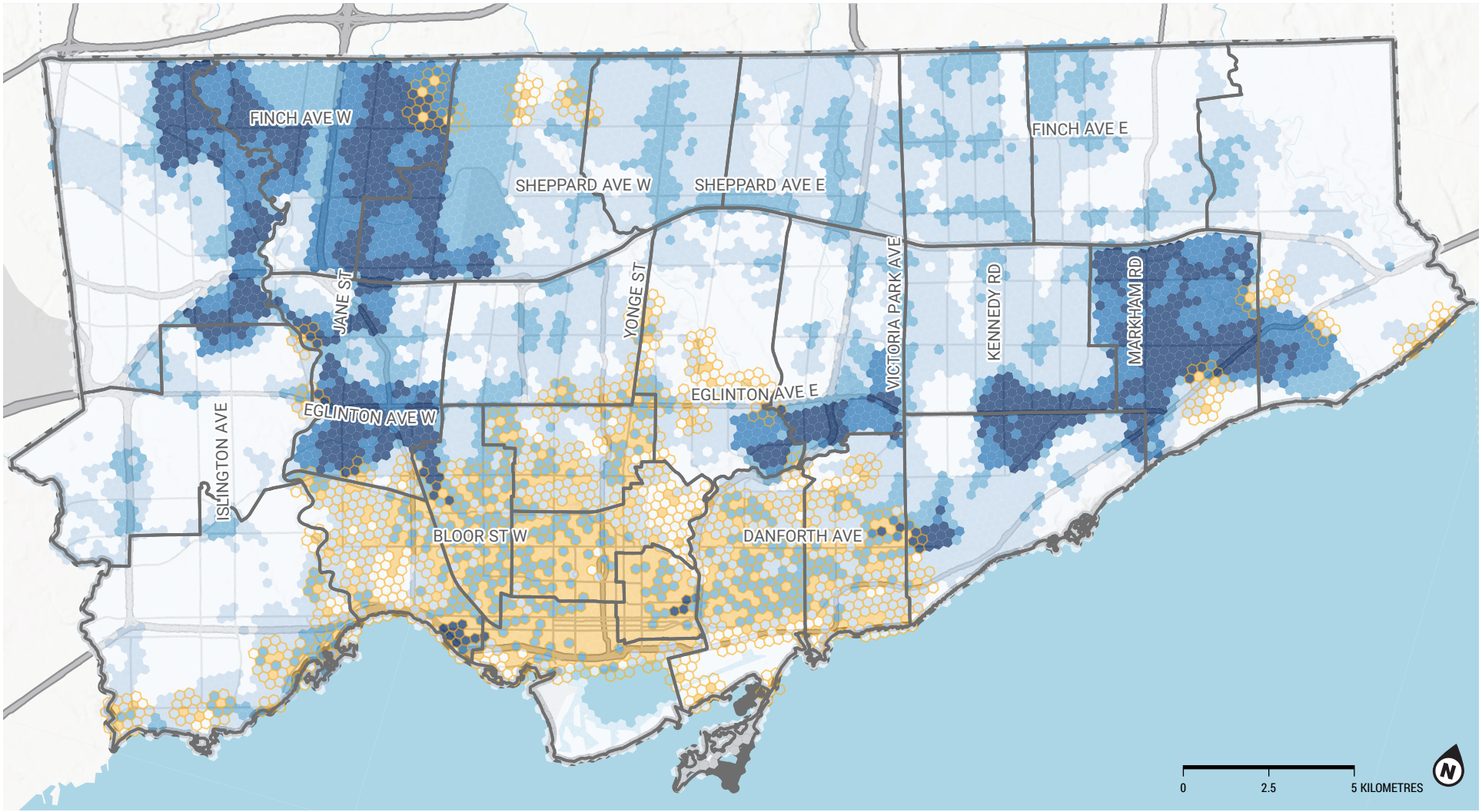
Demand (Percent Rank)

- Higher Priority
- Lower Priority
- Current Bike Share Station
- Current Bike Share Service Area
- Wards

The demand priority input is a percentile rank of blended 2019 (80%) and 2021 (20%) ridership estimates of average trip starts and trip ends. The current bike share service area extends 300 m from existing stations.

Map 2. Equity Priority Input Layer



Equity Priority Input

Bike Share Toronto
Four-year Growth Plan

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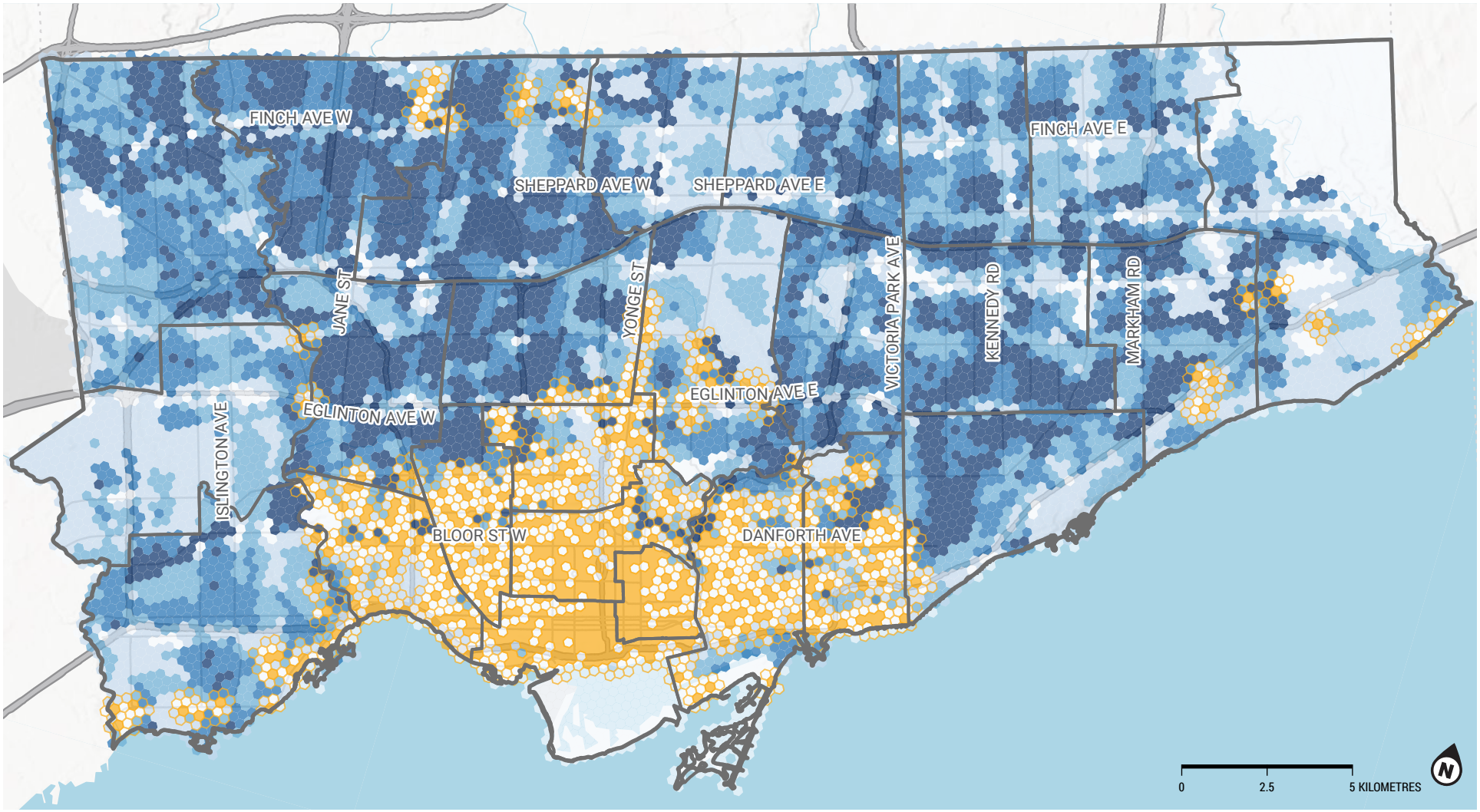
Equity (Percent Rank)

- Higher Priority
- Lower Priority
- Current Bike Share Station
- Current Bike Share Service Area
- Wards

The Equity priority input equally considers Neighbourhood Improvement Areas (NIA) identified by the City of Toronto and more localized and more up-to-date socioeconomic data from the 2016 census for low-income individuals (LICO-AT).

Map 3. First/Last-Mile Priority Input Layer



First/Last-Mile Priority Input

Bike Share Toronto
Four-year Growth Plan

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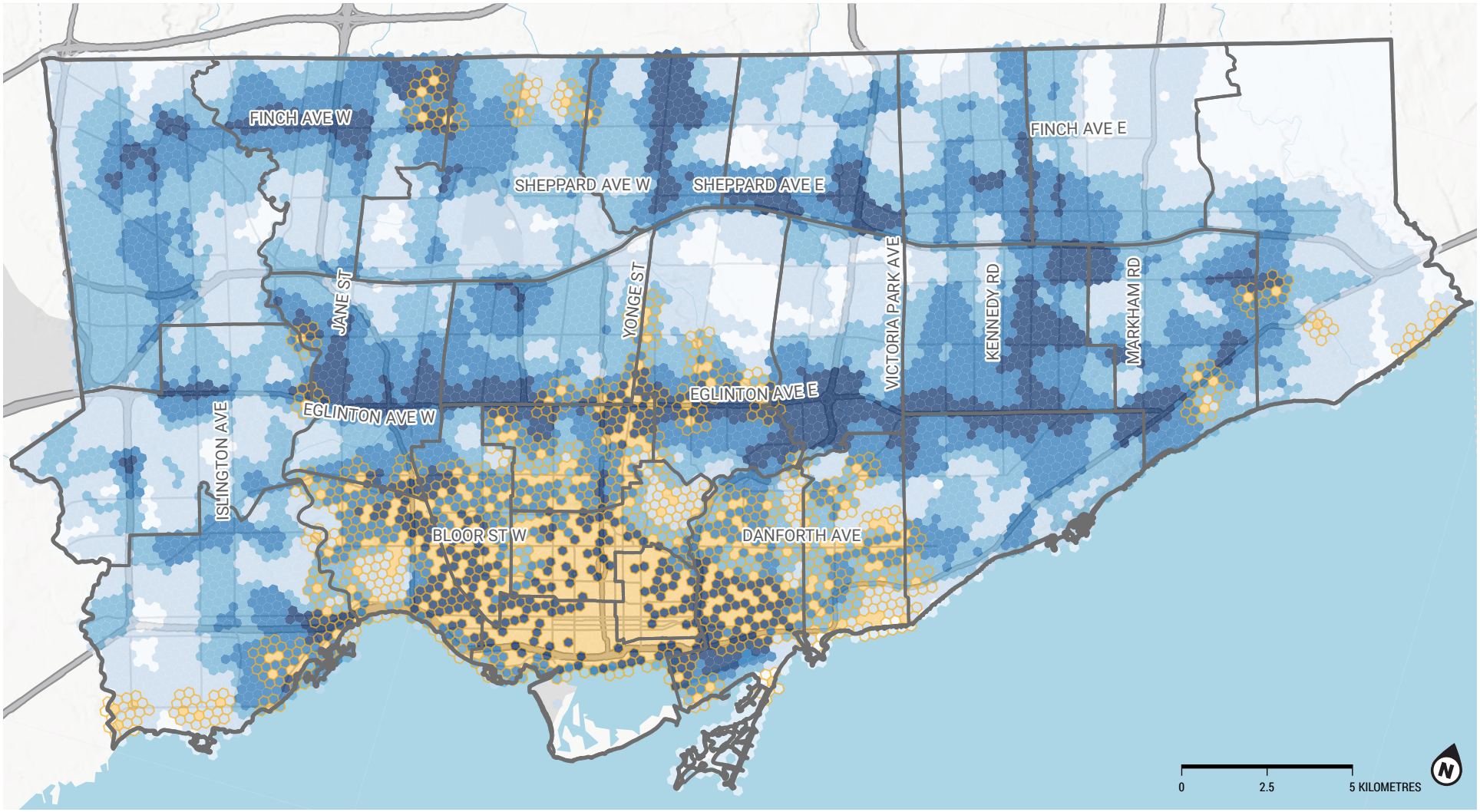
First/Last-Mile (Percent Rank)
- Higher priority
- Lower Priority
- Current Bike Share Station
- Current Bike Share Service Area
- Wards

The first/last-mile priority input is a percentile rank of a composite score that combines ridership, service coverage, and an estimated growth factor. The current bike share service area extends 300 m from existing stations.

Map 4. Future Alignment Priority Input Layer



Future Alignment Priority Input

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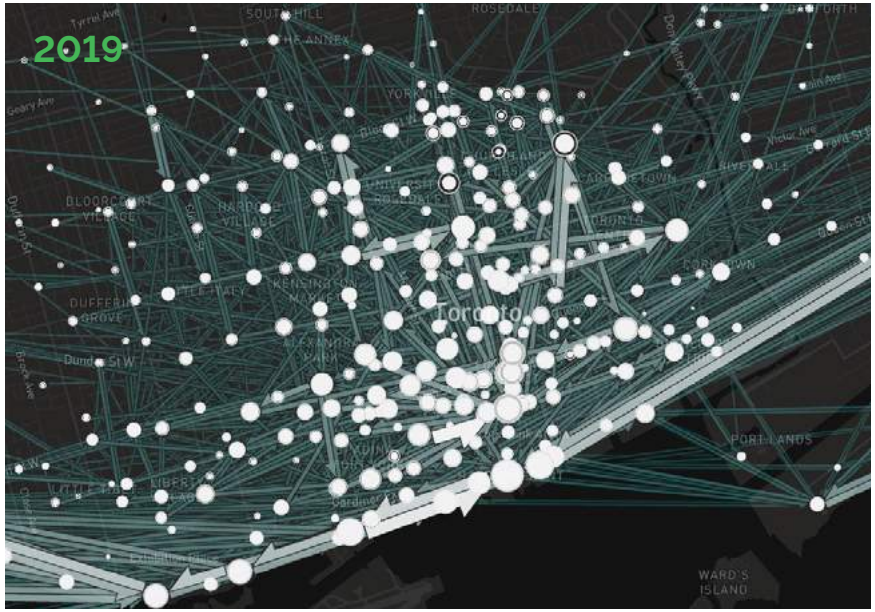
Future Growth (Percent Rank)

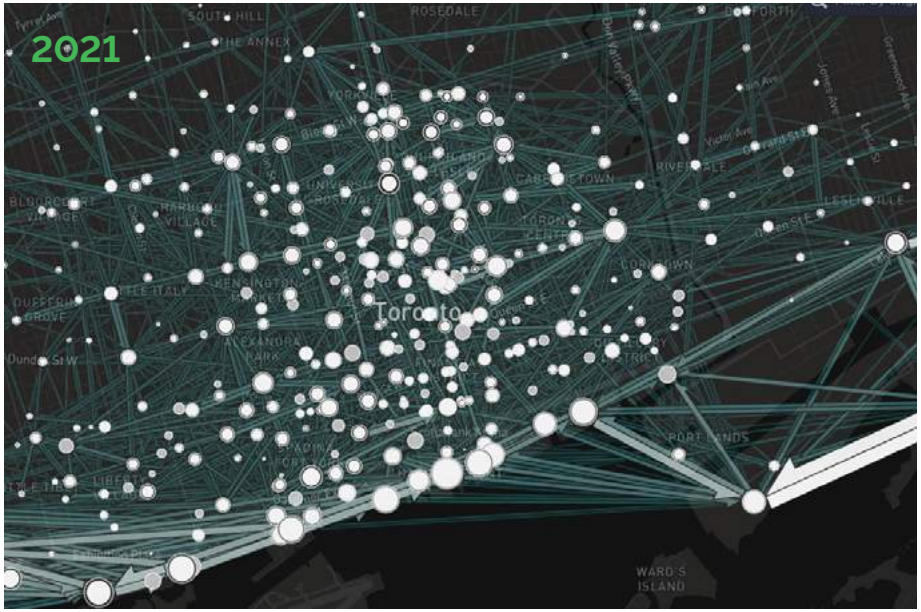
- Higher Priority
- Lower Priority
- Current Bike Share Station
- Current Bike Share Service Area
- Wards

Equally weighting population growth, employment growth, future bike, and future transit facilities. The current bike share service area extends 300 m from existing stations.

Interactive Origin and Destination Map

Bike Share Toronto ridership data from 2019 and 2021 was mapped in an **interactive web map** that allows the user to explore the origin and destination of bike share trips over the course of a day. The map visualizes the number of trips being made between areas, as well as the balance between incoming and outgoing trips from stations. Users can toggle visualizing the data between the year, member type, and the time of day. This map enabled a comparison of how the system was used before and during the COVID-19 pandemic and insights into travel behaviour across the system.





2.3 Scenario Allocation Tool

The scenario allocation process identifies areas of the city where the installation of new bike share stations should be prioritized for expansion. A custom scenario allocation tool was developed for this project. The tool incorporates the priority input layers and calculates a total priority score for each hex. The tool then allocates a defined number of stations (375) based on hexes with the highest priority scores, allocating at least one station to each of the City's 25 wards. As the tool allocates stations, it decreases the priority score of all hexes within a user-defined radius to prevent placing stations too close together and duplicating coverage. For this project, 300 m was used as the radius distance because that is a standard station spacing distance used by Bike Share Toronto.

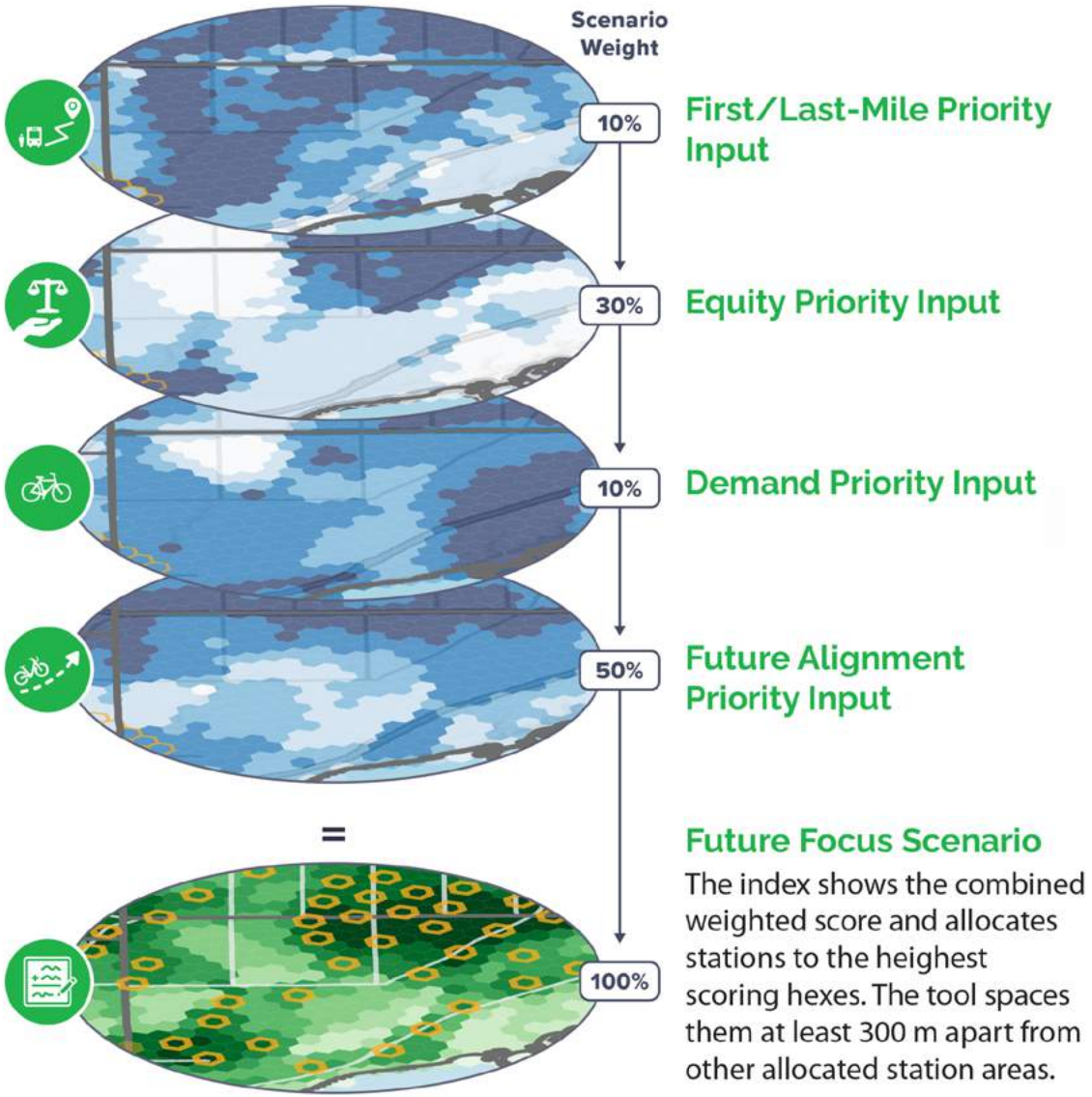


Figure 11. Graphic of scenario allocation tool

Scenario Weighting

The tool calculates the priority score by weighting the priority input layers. This enables the creation of multiple unique scenarios where the priority input layers are weighted differently, affecting the allocation and spatial distribution of stations across the city. Creating multiple scenarios is helpful because comparing scenario outputs strengthens our understanding of how competing priorities can impact station distribution.

Five distinct scenarios were formulated for bike share expansion, as shown in **Table 1**. Each scenario has a theme that corresponds with the weighting of the priority input layers for that scenario, and reflects the priorities of Bike Share Toronto.

Table 1. Weighting of Priority Input Layers for Each Scenario

Scenario Name	Equity	Demand	First/Last-Mile	Future Alignment
Balanced	25%	25%	25%	25%
Access and Revenue	40%	40%	10%	10%
Equity First	50%	15%	20%	15%
High Utilization	10%	50%	20%	20%
Future Focus	30%	10%	10%	50%

Scenario Evaluation

The distribution of stations in each scenario was evaluated manually by the project team to consider opportunities and threats associated with implementing and operating the proposed stations. Reviewing the scenario maps allowed for the project team to understand and consider different options for where stations could go as part of this expansion. **Table 2** summarizes the evaluation of the different scenarios. The evaluation criteria considered the tension between having larger system coverage and better access to the service.

- Limited islands refer to the scenario having few isolated station areas which aren't connected to the rest of the system
- Station density relates to the distances between allocated station areas in the scenario. Historically bike share has strove towards placing stations 300 m apart to maintain walking distance between stations
- Geographic spread evaluates how much coverage the scenario achieves and how it is spread between areas of the city
- Strategic expansion criteria considers alignment with new cycling corridors, transit expansion, and how new stations connect the existing satellite areas with the core network

Following the review of scenarios, a preferred scenario was selected and shared with stakeholders during the second round of workshops. Stakeholder feedback on the preferred scenario was used to help guide manual revisions as part of the scenario refinement process.

The scenario maps are included in **Appendix B: Scenario Maps**

Key Consideration for the Scenarios

The scenarios assumed the system to expand by 375 stations over a four-year period (2022-2025) to achieve a system size of 1,000 stations

At least one station is allocated in every ward but the addition of 375 stations will not enable the bike share system to service every community in Toronto. Future expansions beyond this plan will be required to extend the system into all communities, if desired

The **Future Focus scenario** was selected as the preferred scenario because:

- It provides better continuous service along corridors than the other scenarios
- It creates and expands a service area with sufficient station density in key areas of interest, including those with higher equity priority
- It provides good first/last-mile connections to Line 5 and Line 6 along Eglinton Avenue and Finch Avenue West, respectively
- Realistic expansion to all 25 wards with station frequency that facilitates bike share trips
- Minimal “islands” (or isolated clusters) of bike share stations

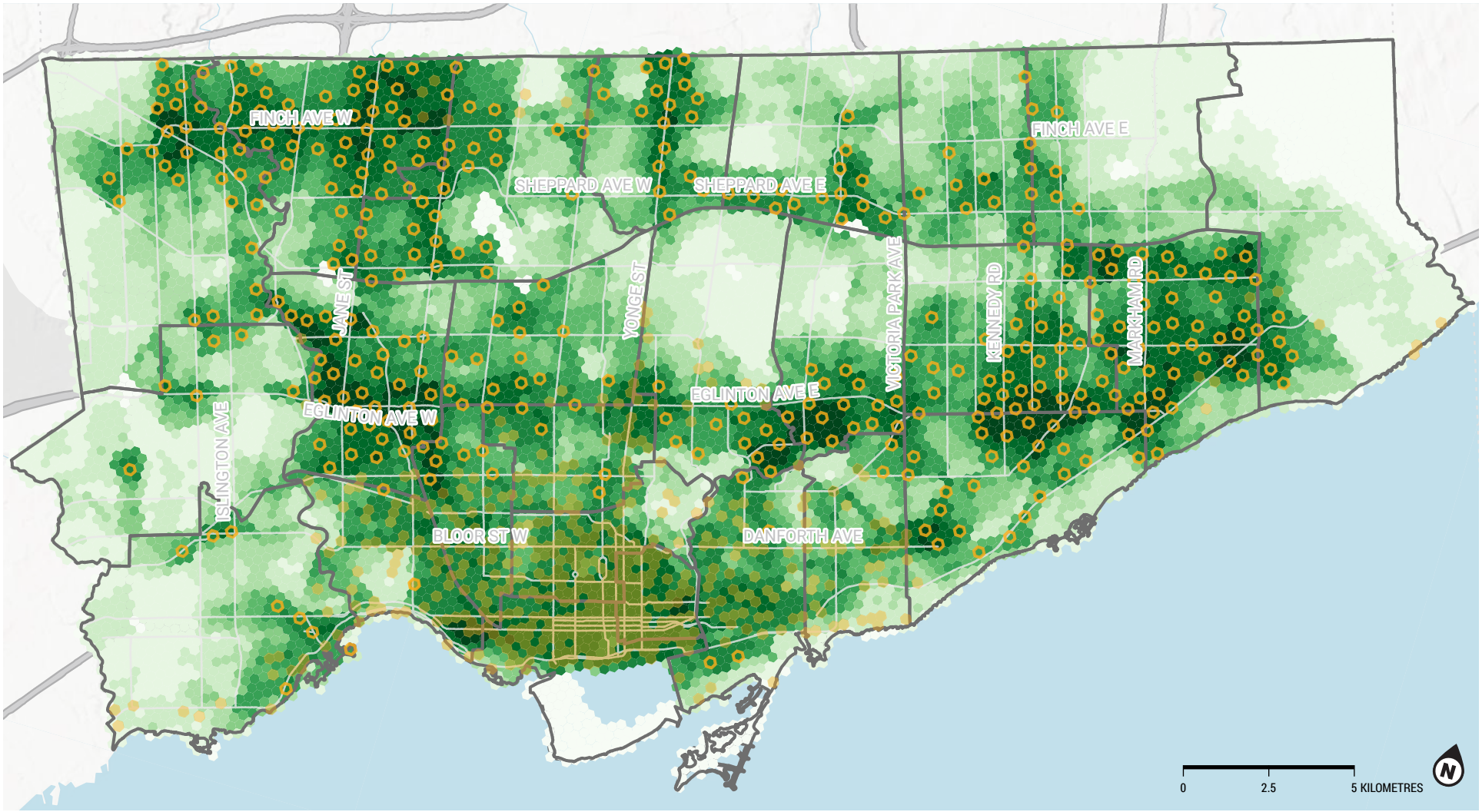
The Future Focus scenario map is shown on **Map 5**.

Table 2. Scenario Evaluation Matrix

Scenario Name	Limited Islands	Station Density	Geographic Spread	Strategic Expansion
Balanced	○	○	◐	◐
Access and Revenue	○	◐	◐	○
Equity First	◐	●	○	◐
High Utilization	○	○	◐	○
Future Focus	●	●	●	●

○ Did not meet criteria
◐ Somewhat met criteria
● Met criteria

Map 5. Future Focus Scenario



Future Focus Scenario

Bike Share Toronto
Four-year Growth Plan

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Scenario Priority Index

- Higher Priority
- Lower Priority
- Current Bike Share Station
- Proposed Bike Share Station Area
- Wards

The Scenario Priority Index represents the prioritization index score represented by the combination of weights and chosen metrics for the scenario. Proposed Station Areas are allocated based on the highest scoring areas based on the scenario.

The Future Focus scenario prioritizes the future alignment and equity priority inputs as the key inputs to allocate stations. The station areas in the scenario are the output of the tool and are not the final recommendations.

2.4 Scenario Refinement

While the scenario allocation tool located 375 stations using the weighted priority input layers, manual refinement to the proposed station locations were necessary to address outliers in the scenario and contextual considerations that could not be addressed through the automated scenario allocation process. Refinements to the preferred Future Focus scenario were identified using feedback from the TPA, City of Toronto staff, and other stakeholders engaged on the project during the second round of stakeholder workshops. The refinements can be generalized into the following themes:

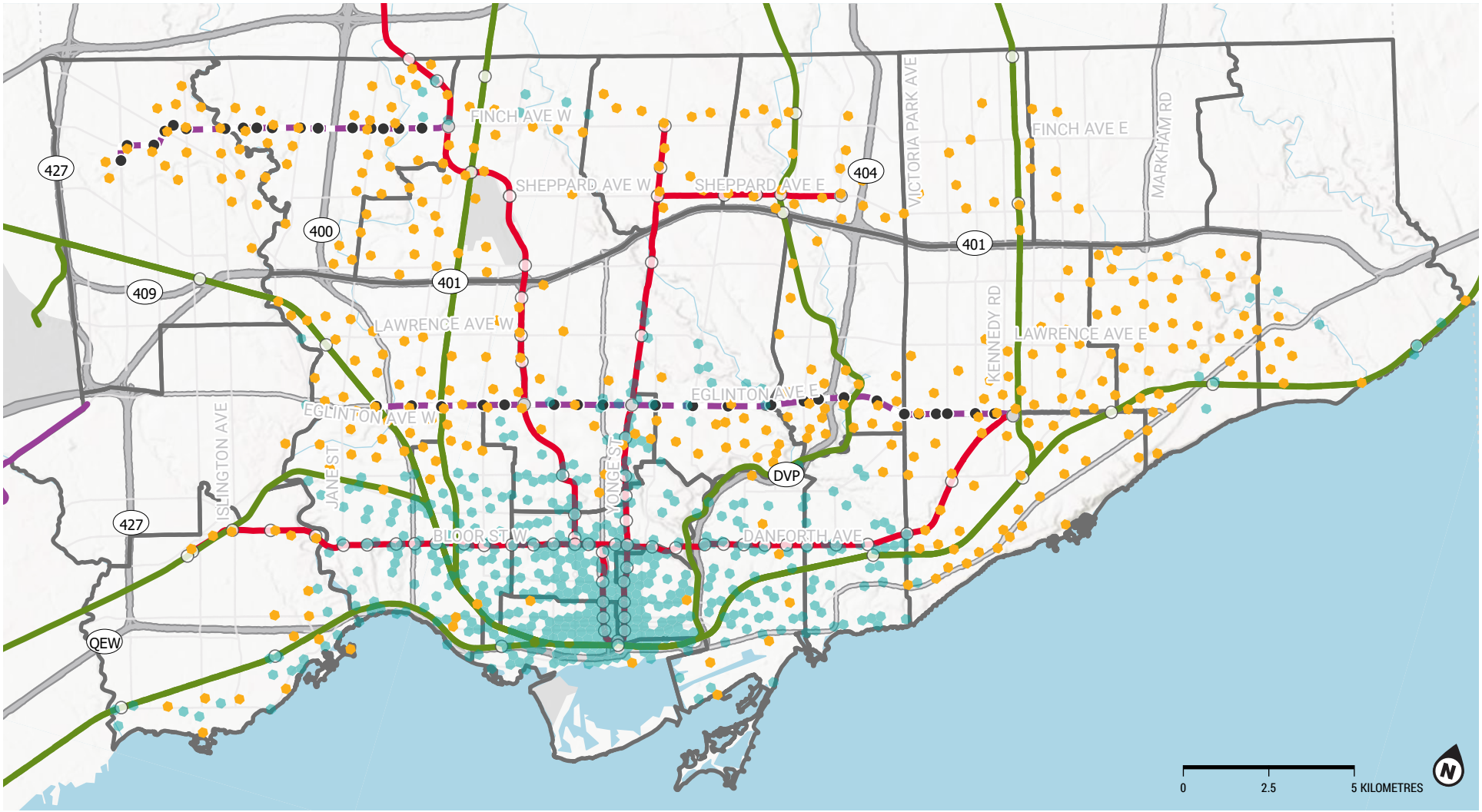
- Relocating stations that were isolated "islands" to the larger service area (i.e., relocating stations that were beyond 600m from the nearest station)
- Improving station density and addressing gaps between stations in the existing service area
- Creating corridors of connected stations to improve connectivity between segmented zones of the existing and proposed bike share service area
- Aligning stations with opportunities based on feedback, such as upcoming cycling infrastructure, transit, and property development projects where stations could be installed in coordination with other divisions and organizations
- Locations where bike share users have previously requested stations since the last expansion (i.e. bike share user requests received after the 2020 expansion)

Map 6 shows the modified Future Focus scenario following TPA and stakeholder refinement. It reflects the final iteration of the Four-year Growth Plan that will guide the bike share station expansion from 2022 to 2025. It accounts for 375 new stations over the four-year implementation period.

The Four-year Growth Plan will see the system expand through Weston, up the Humber River Trail, and into Rexdale, Jane and Finch, Humber College in the city's northwest area. The expansion will add more stations around York University, along the Finch Hydro Corridor, and expand service in North York. The system will expand through midtown around Eglinton Avenue. The system will also expand to serve Thorncliffe Park and Flemingdon Park neighbourhoods, as well as throughout many areas in Scarborough.

The schedule of station implementation may be impacted by supply chain issues or other considerations such as major transportation infrastructure projects, right-of-way constraints, or other station site planning limitations. Section **3.1 Implementation Schedule** discusses where stations will be implemented each year over the course of the four years.

Map 6. Refined Station Allocation



Refined Station Allocation

Bike Share Toronto
Four-year Growth Plan

Bike Share Stations
- Allocated Station Area
- Current Bike Share Station

Exist | Future
- Cycling Network
- Transit Station
- GO Rail
- LRT/BRT
- Subway

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Scenario Refinement Outcomes and Planning Objectives

The refined network addresses Bike Share Toronto's planning objectives in the following ways:

Ridership

The proposed expansion supports ridership by expanding where the system operates, enabling more trips to be taken by bike share. Popular destinations and trails are included in this expansion that will attract ridership, including along the Waterfront, Humber, Don, Finch, and Meadoway Trails.

Equity

The proposed expansion supports equity by prioritizing equity-deserving and low-income areas. Only 13 NIAs are currently served by the system, many with one or two stations. The expansion will result in 30 of the 31 NIAs in the City of Toronto being served by the system. Overall, 211 of the 375 stations proposed in this plan are allocated within a NIA.

Revenue

The proposed expansion supports revenue by expanding service along trails where casual members commonly use the system. Revenue is also being considered by expanding and improving service coverage in areas with high ridership demand.

First/Last-mile

The proposed expansion supports first/last-mile mobility by expanding the bike share system to 47 more TTC subway/LRT stations and 8 more GO stations. This brings Bike Share Toronto closer to achieving its 2030 TransformTO objective by reaching 101/138 of all higher-order transit stations (subway, LRT, and GO stations) in the City of Toronto. By 2025, a bike share station will be located at or near every TTC subway station along Line 2.

Accessibility

The proposed expansion supports accessibility by minimizing geographic and topographic barriers to use the system. This includes connecting the existing satellite areas to the main system service area. The expansion focuses on using separated crossings via the Humber and Don Trails to connect the system across Highway 401. Aligning expansion with new bikeway projects will also help to improve access and comfort for riders on major roads that can be considered barriers. Stations have been identified with consideration to where there are crossings to cross rivers and streams. Expanding the availability of e-bikes will help people overcome steep hills.

3 Next Steps

3.1 Implementation Schedule

The implementation schedule provides guidance on how the planned stations should be phased annually from 2022 to 2025. The schedule has been developed to align with key infrastructure projects being completed within the four-year horizon, such as new bikeways and transit projects. The implementation schedule also considers the following goals and strategies:

- Installing at least one station in all of the city's 25 wards by 2024
- Prioritizing the connection of existing satellite areas in Scarborough and North York with the main service area
- Establishing a series of connected stations to cross Highway 401 along safe cycling corridors where feasible
- Filling gaps in the existing service area
- Mitigating the creation of isolated 'islands' of stations from the main service area

Map 7 shows the proposed implementation schedule for the expansion by identifying station areas to be installed each year. **Table 3** summarizes the number of new stations planned for implementation each year of the Four-year Growth Plan.

The expansions in 2022 and 2023 will be focused at expanding from the edges of the existing service area, with a particular focus around Eglinton and Finch Avenues to align with the opening of the Eglinton Crosstown and Finch Avenue West LRT projects in 2023. Stations will also be implemented to connect the existing Scarborough satellite service area. Stations implemented along the Humber River Trail route will connect the York University and North York satellite service area with the main service area. It will also establish a crossing of Highway 401.

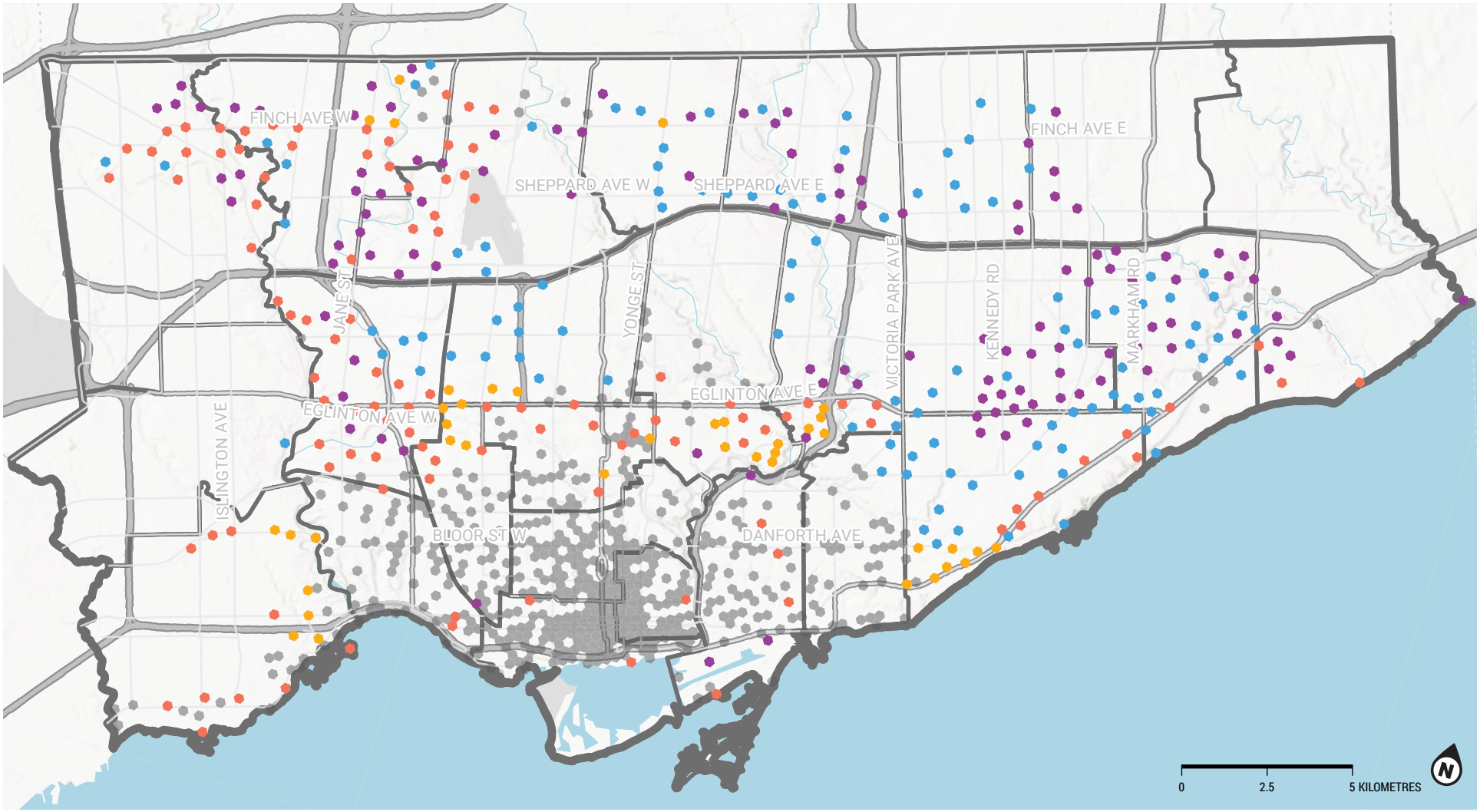
Table 3. Planned Station Implementation by Year

Year	New Stations
2022	40
2023	110
2024	110
2025	115

The expansion in 2024 and 2025 will be focused on extending service across densely populated regions of North York and expanding the system to regions of Scarborough north and south of Highway 401.

As with existing stations in the system, Bike Share Toronto will be monitoring the use of stations in the expansion over time. Stations may be relocated if they do not achieve expected ridership targets. Relocation may also occur due to other site-specific considerations or user feedback

Map 7. Implementation Schedule



Implementation Schedule

Bike Share Toronto
Four-year Growth Plan

Implementation Schedule

- 2022
- 2023
- 2024
- 2025
- Current Bike Share Station

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3.2 Recommendations

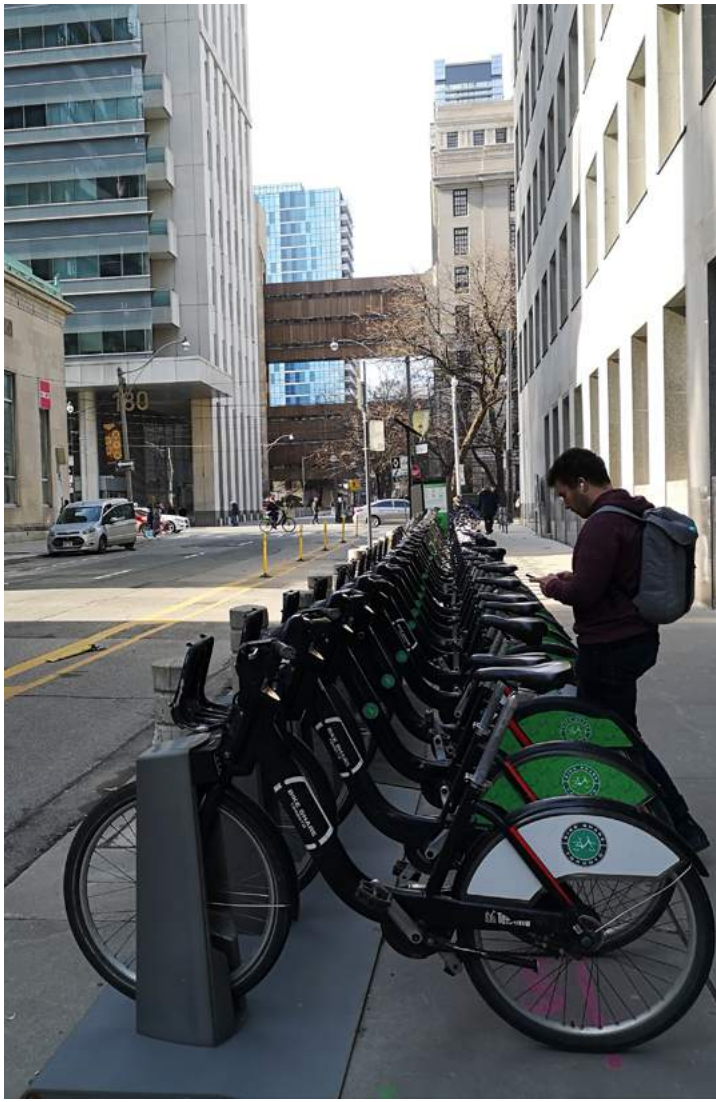
Implementation of the Four-year Growth Plan will require support and partnerships with stakeholders to establish permanent homes for new stations on public or private properties. Implementing stations requires coordination, agreements, and approvals from multiple parties external to the TPA. For example, TPA already works with City planners to identify opportunities for bike share stations in development proposals. Where e-stations are feasible, the process is complicated due to the civil construction works necessary to establish an electrical connection to the e-station site.

The two rounds of stakeholder workshops that were completed as part of this planning initiative were excellent opportunities to connect relevant staff of departments, agencies, and organizations with the TPA.

Stakeholder feedback on successes and barriers to station implementation were collected to identify opportunities to improve station implementation moving forward.

Bike share user feedback collected through the engagement survey and workshops highlighted the value of public feedback on station siting, which will be explored by the TPA in future expansions.

The following recommendations support the Four-year Growth Plan objectives of ridership, revenue, equity, accessibility, and first/last-mile.



1) Work with City Planning to establish parameters for when Bike Share Toronto (TPA) should be circulated on development applications

Create a bike share station guideline document that includes standard station configurations, sizes, and site requirements. This will support stakeholders who are interested in planning for a bike share station on their existing or planned property. The document should address:

- Typical station components
- Standard station configurations and dimensions for both e-stations and solar-powered stations
- Site spacing requirements from other features (e.g., pedestrian clearway, fire hydrants, TTC bus stops)
- E-station power requirements
- Steps to request a station on-site and contact information

2) Develop an interactive online tool to solicit public input for station expansions

Providing an opportunity for bike share users to offer unmatched local knowledge to inform station siting. An online tool can solicit the following information, preferably in an interactive map format:

- Identification of areas for potential new stations
- Requests for revisiting the siting of an existing station
- Operational challenges at existing locations associated with the frequency of bike and dock unavailability
- Identification of upcoming large events that may require bike rebalancing or valets

3) Build ridership around new stations and service areas

Developing a communications campaign can help potential new riders get familiar with the system and could include:

- Mailers to nearby businesses and homes
- Working with local newcomer settlement agencies to identify material translation needs
- Collaboration with the TTC and Metrolinx for promotion of stations near transit
- Education and communications on how to use the service
- Consider innovative approaches such as a youth ambassador program to engage with communities
- Explore new strategies to market and communicate bike share expansion in new communities where the system has never operated

4) Incorporate the updated Toronto Strong Neighbourhoods Strategy (when available) for future station expansions

The Toronto Strong Neighbourhoods Strategy, which identifies the Neighbourhood Improvement Areas used to inform the equity priority input layer, is in the process of being updated. The updated strategy was not available during the planning process of the Four-year Growth Plan. When the strategy is released, the TPA should review it and identify opportunities for future system expansion that ensures equity-deserving populations have access to the system

5) Develop an Operations Strategy to Support the System Expansion

Ensure new and existing stations are effectively rebalanced throughout the day to minimize full and empty stations. Operational improvements should also be considered to maximize the availability of e-bikes across the system.

6) Analyze Ridership to Ensure Station Dock Supply Reflects Demand

Annually assess all bike share stations to determine if the dock supply should be increased or reduced to reflect the local demand. Using this information, the TPA can reallocate bike share station equipment to maximize use and meet system-wide objectives.

7) Explore Implementing Permanent Station Designs

Identify and assess opportunities to pilot stations with docks and kiosks integrated directly into the streetscape (i.e. no aluminum base plates, wired connections are housed below grade).

- Develop standards for this station design
- Seek public or private partners interested in piloting this station design

3.3 Planning Beyond 2025

During the development of the Four-year Growth Plan, opportunities were identified for bike share expansion beyond the 2022-2025 implementation timeframe. The Toronto Parking Authority should continue to work with relevant stakeholders to ensure that space is protected during the site planning and design processes for these long-term projects, particularly where projects are located at or near transit stations.

Future Transit Opportunities

Given the long planning and development process for transit station planning, it is vital that the Toronto Parking Authority participate as a stakeholder in the review of station planning projects. Together with Metrolinx and the TTC, the Toronto Parking Authority should identify opportunities in the design of new transit stations or redesigns of existing transit stations for bike share stations. Particular attention should be made toward identifying opportunities to connect power to bike share stations at or near transit to support e-stations. The Toronto Parking Authority should continue conversations with Metrolinx on the potential to include bike share in their bike parking design standards for station access planning and hold similar conversations with TTC.

Specific transit projects where the Toronto Parking Authority should have a role are outlined below.

LRTs and Subways – Early Stages

- Eglinton Crosstown West Extension (from Mount Dennis to Renforth)
- Eglinton East LRT (from Kennedy Station to Malvern)
- Ontario Line
- Waterfront East LRT

GO Expansion and Smart Track Stations

- Finch-Kennedy, St. Clair-Old Weston, Bloor-Lansdowne, King-Liberty, East Harbour Smart Track Stations
- GO Expansion will improve service on Lakeshore East, Lakeshore West, Kitchener, Barrie, and Stouffville GO Rail corridors with many stations seeing significant service increases to 15 minutes, two-way all-day in future

Other Transit Projects

- RapidTO bus priority corridors

Major Development Projects

Similar to transit opportunities, some large-scale development projects will require bike share to be accommodated significantly in advance of construction. Major projects where Bike Share Toronto should ensure integration include:

- Port Lands (Waterfront Toronto)
- Golden Mile (Daniels Corporation)
- Malvern Mall Town Center
- Projects as identified by Toronto City Planning staff

Stakeholder Desired Areas Beyond This Expansion

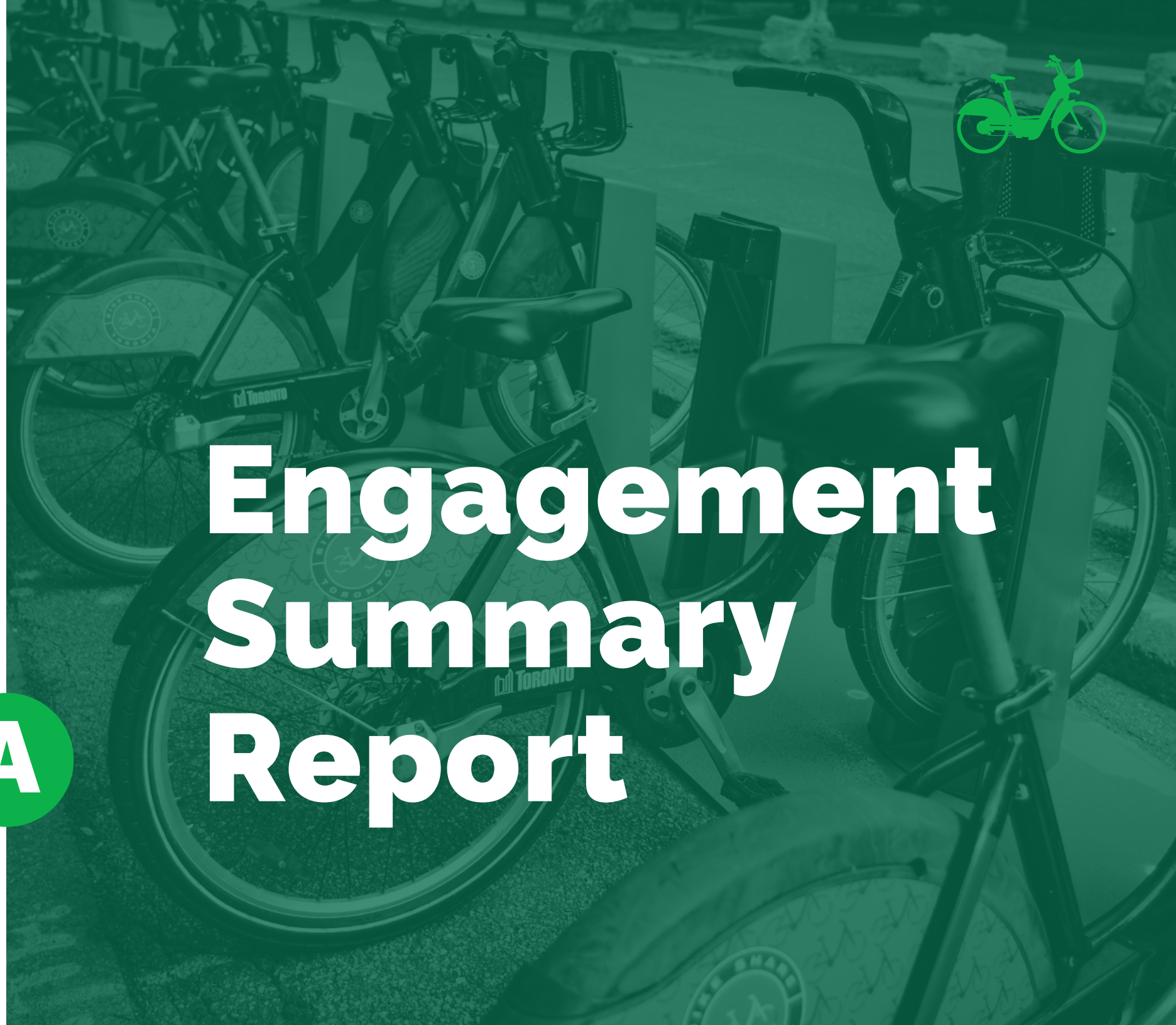
During the stakeholder workshops, some opportunities were identified with stakeholders that were not able to be included as part of this growth plan. The following are these locations that may be considered as strategic expansion opportunities or priorities for a future growth plan.

- Toronto Zoo
- Morningside Industrial Park

3.4 Conclusion

The Four-year Growth Plan provides a strategic, comprehensive roadmap for where 375 new stations should be allocated to best achieve a balance of Bike Share Toronto's planning objectives of ridership, revenue, equity, accessibility, and first/last-mile connectivity. The plan has been developed through a comprehensive spatial analysis process. It has been refined and informed through stakeholder and public feedback. The plan will guide the expansion of the Bike Share Toronto system over the next four years (to 2025). The following are some key considerations moving forward as Bike Share Toronto adopts and begins to implement this plan.

- This plan does not provide site specific recommendations for station locations. Future planning and site-specific investigations will be required to confirm specific placement of new bike share stations
- Should there be additional opportunities beyond the 375 stations, Bike Share Toronto will investigate these where appropriate, in alignment with the Four-year Growth Plan
- This plan is not the final plan for the system's expansion. There will be future plans that continue to guide the expansion of the bike share system



Engagement Summary Report

A

Bike Share Toronto Four-year Growth Plan

Appendix A - Engagement Summary

September 2022

Prepared by:
Access Planning Ltd.
Alta Planning + Design

Table of Contents

List of Attachments

1.0 Overview of Engagement

The Bike Share Toronto Four-year Growth Plan is informed by input collected from municipal partners, stakeholders and members of the public through a number of engagement events. This document provides a summary of the engagement events that were undertaken with stakeholders and the public, as well as the feedback that was collected at each session. An overview of the stakeholders (both external and the public) that were consulted as part of the development for the Four-year Growth Plan are outlined in **Figure 1** with touchpoints identified in **Table 1**.

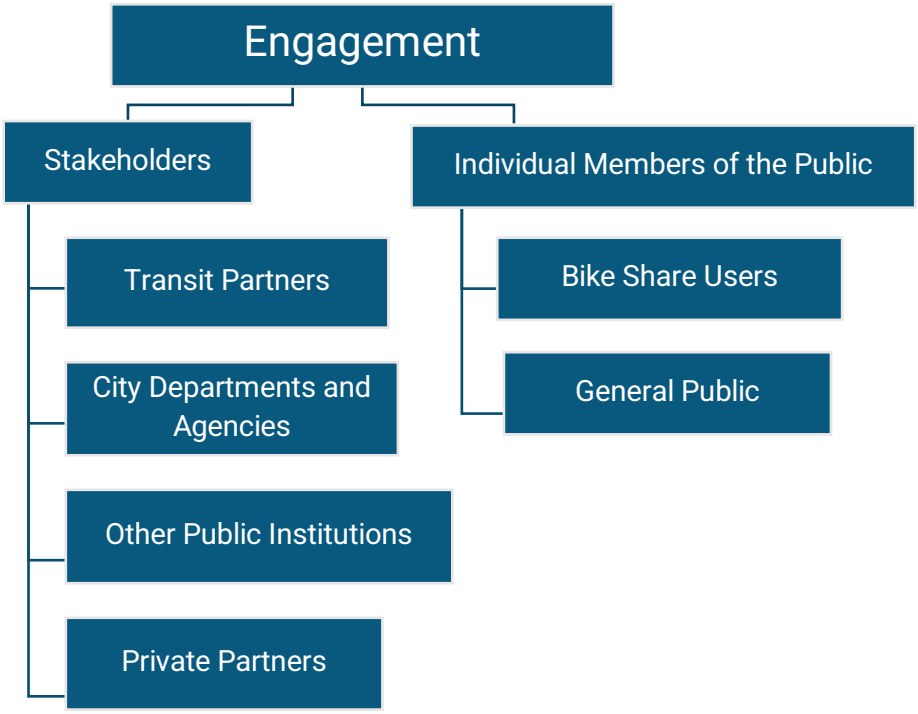


Figure 1. Stakeholder Map

Feedback from stakeholder and public engagement was used to refine outputs from the spatial analysis including proposed areas for system expansion and the implementation schedule over the next four year. The feedback was also used to better understand challenges and opportunities that could impact implementation of the Four-Year Growth Plan as well as other long-term projects beyond the horizon of this plan. A key outcome of the engagement process that was deployed for the Four-year Growth Plan was the development of relationships between Bike Share Toronto staff and various stakeholder groups. The engagement touchpoints were an opportunity for stakeholders to develop a better understanding of Bike Share Toronto's plans and efficiencies for working together.

Stakeholder Type	Group	Touchpoint(s) (2022)
Organizations	Transit Partners	Engagement #1 April 13 Engagement #2 July 13
	City Departments and Agencies	Engagement #1 April 13 Engagement #2 July 11
	Other Public Institutions	Engagement #1 May 2 Engagement #2 July 14
	Private Partners	Engagement #1 May 5 Engagement #2 July 15
Individual Members of the Public	Bike Share Users	User Survey – May – June User Workshops (2) – July 25 and 26
	General Public	Public Information Session – August 8

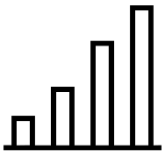
Table 1. Summary of Engagement Touchpoints

2.0 Engagement by the Numbers

8

stakeholder meetings

177



user survey responses

4

stakeholder groups

2 user workshops

22+ user workshop attendees

50+

stakeholders invited

80+

public information session attendees

3.0 What We Heard

Stakeholder and public feedback shaped the Four-year Growth Plan by validating the output of the spatial analysis and identifying gaps or missed opportunities for system expansions. Findings are grouped thematically below, with further detail found in **section 4.0.**

Understanding that the scope of the Four-year Growth Plan is related to the expansion of bike share over the next four years, findings outside of the scope (i.e., beyond 2025 or feedback on bike share operations) are still presented here to inform future policy, operational, and strategic work. The bullet points below summarize what was heard during the full engagement program for the Four-year Growth Plan.

Spatial Implementation of Bike Share Stations

- There is opportunity for alignment of expansion planning with other ongoing City and TTC initiatives:
    - Toronto Poverty Reduction 2023-2025 Action Plan
    - Cycling Network Plan (2022-2024) and further long-term planning (particularly as it relates to safe or protected Highway 401 crossings)
    - RapidTO Corridor Implementation (such as Jane Street)
    - State-of-good repair roadworks (opportunity to assess potential hydro connections)
    - The TTC's top 20 intersections for boardings are targeted for customer experience improvements; potential to align bike share stations expansion to better support these intersections
- North York General Hospital, Downsview Park, Centennial College (Ashtonbee Campus connection to the Eglinton Crosstown), and Humber College (north campus) can see immediate benefit from bike share implementation. York University's pilot can be supported through greater expansion to nearby amenities, such as grocery stores.
- Existing and upcoming trail networks (such as the Meadoway in Scarborough) can be places to introduce and socialize bike share in areas that have a lower cycling-for-transportation mode share.
- Stations should be placed to support recreational rides in places like Tommy Thompson Park and on the Beltline Trail.
- Continue to reach out to and push for collaboration with Toronto Hydro in support of e-station allocation.
- When placing stations to support access to transit, consider strategic placement to relieve pressure on TTC feeder buses to subways (i.e., placing a station 1-2km from a subway and one at the subway station to give riders who would otherwise take an at-capacity bus another option).

Map of Stakeholder Input

Stakeholders provided input regarding opportunities for siting bike share stations in both rounds of stakeholder engagement. These opportunities are summarized in **Figure 2** and have been used to inform the final recommended areas for expansion in the Four-year Growth Plan.

Site Planning and Design

- The complexities of transit station planning, design, and procurement require consistent and open communication between the relevant project teams and Bike Share Toronto. In the immediate future, SmartTrack stations should have input from Bike Share Toronto via Metrolinx. A guidelines document that outlines exact spatial needs of bike share stations can be developed and provided as a tool for transit station planners and designers across TTC and Metrolinx.
- Although major developments like the Golden Mile will not be completed within the timeframe of this expansion plan, site plan work is underway now and the window of opportunity for bike share input is closing. Consider allocating resources for reviewing site plans and discussing station requirements for large scale developments that are further out to ensure space is preserved.
- The TTC reviews site plans and works closely with developers building near stations; there is an opportunity for a continued collaboration between Bike Share Toronto and TTC so bike share requirements can be integrated in TTC conversations. Similarly, bike share can provide an alternative to some GO-TTC double-fare trips, such as York University students who arrive at Pioneer Village station via GO and need to pay a full TTC fare to get to campus on the subway.

Operations and Communications

- Consider developing a culturally and context-sensitive promotional campaign for bike share when expansion comes to new areas of the City. Consider working with local community groups and newcomer organizations to identify translation needs and critical questions from the community.
- Stations near the edge of the existing service area are frequently full/empty (i.e., not useable for ending/starting a trip, respectively). Consider usability of edge stations during expansion planning.
- Consider ease-of-use for tourists and others who are new to the system; scanning the QR code on a bike with a phone camera could link users to a "how to sign up for Bike Share" page vs. an showing an error.
- When procuring bikes, consider greater cargo capacity and bikes that are more accessible to shorter and taller riders.

Pricing and Memberships

- Consider pricing options that support more recreational use. Users, private partners, and public partners, particularly those located in areas outside the existing bike share service area, all re-iterated how longer pricing windows could support longer and less stressful trips for recreation. Consider that 45 minutes is not as easy to mentally calculate as a 60 minute pass; therefore ease of use may increase if the maximum time limit is changed.
- An individual hour-long pass would be useful for recreational rides with friends (i.e., a short-term pass, not an annual one).
- There is potential to encourage post-secondary students to use bike share as a commute option, however the restrictive policies for under-18 riders will need to be revisited.
- For riders using short-term passes (i.e., not annual members), paying “double fare” when using bike share to connect to TTC is not an affordable option. Consider continuing conversations on integration of fares or payment technology with the TTC and PRESTO.
- The overage fees don’t have a grace period and can be off-putting to first-time riders. Consider a grace period for new riders.

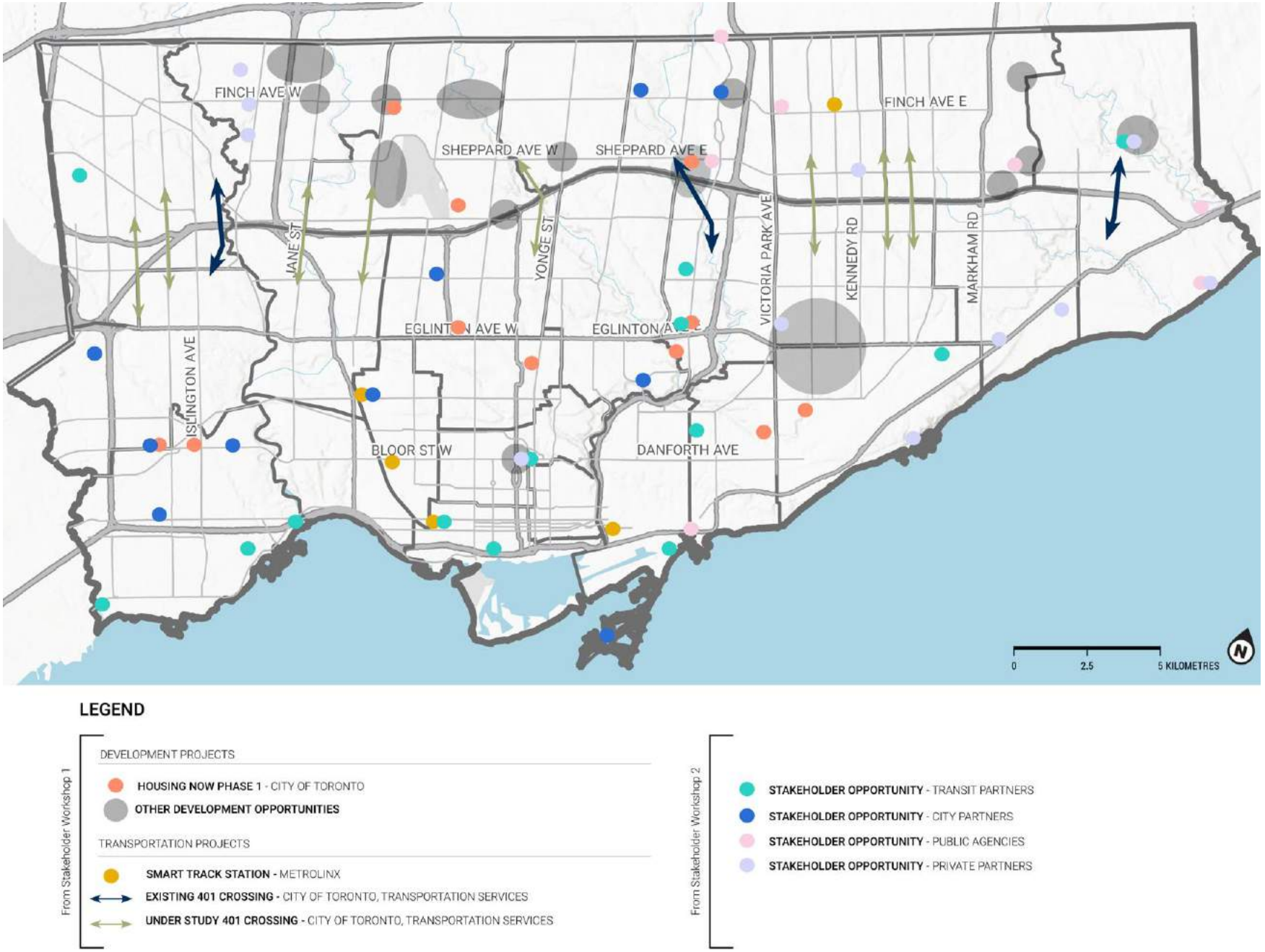


Figure 2. Summary map of stakeholder-identified opportunities for bike share expansion

4.0 Engagement Touchpoints – Summary of Meetings

4.1 Stakeholder Engagement

The two sets of stakeholder workshops were organized into the following groups to allow for context-specific discussions. The first round of workshops addressed (1) introducing the Four-year Growth Plan objectives and (2) soliciting general feedback on opportunities for bike share. **Attachment A.1** contains the materials presented to stakeholders during the first found of workshops.

The second round of workshops focused on (1) sharing the analysis methodology and asking for feedback, (2) displaying how feedback is integrated into expansion planning, and (3) continuing to identify any opportunities for bike share expansion not addressed in the first workshop. **Attachment A.2** contains the materials presented to stakeholders during the second found of workshops.

1. City of Toronto Partners

Department Contacted
City Planning
Area Transportation Planning
Human Service Integration
Poverty Reduction Office
Cycling and Pedestrian Projects (Transportation Services)
Traffic Management (Transportation Services)
Permits and Enforcement (Transportation Services)
Capital Projects and Programs (Transportation Services)
Strategic Policy and Innovations (Transportation Services)
Infrastructure and Development Services
Waterfront Sector (City Planning)
BIA Office (Economic Development)
CreateTO
Corporate Real Estate Management (CREM)
Parks Forestry and Recreation (PFR)
Waterfront Toronto
Environment & Energy Division

2. Transit Partners (TTC and Metrolinx)

Department Contacted
Metrolinx
Stations Planning / Transit Integration
Sponsor Office
Rapid Transit Planning
Project Planning
Transportation Policy
TTC
Strategy and Foresight
System Accessibility
Racial Equity Office
Transit Systems Planning

3. Other Public Institutions (outside the City of Toronto)

Department Contacted
Toronto Catholic District School Board
Centennial College
University of Toronto
Canada Lands Company
Seneca College
North York General Hospital
Toronto and Region Conservation Authority (TRCA)
Toronto District School Board
Toronto Public Library
Parks Canada
University of Toronto Scarborough
York University/Glendon Campus
Infrastructure Ontario

Department Contacted
Toronto Community Housing Corporation (TCHC)
Toronto Zoo

4. Private Partners

Department Contacted
Business Improvement Areas (BIAs)
Downtown Yonge
Financial District
Waterfront
Junction
Emery Village
Bloordale
Mirvish Village
Willowdale
TABIA
Other
Daniels Corporation
Rio Can Real Estate
Yorkdale Shopping Centre
Point A (Smart Commute)
Toronto Hydro
Parkway Centre Business Association
BILD Toronto

Summary of Observations – Stakeholder Engagement #1

Each stakeholder engagement provided fruitful conversation to support bike share expansion across the city. The following is a summary of the opportunities and challenges discussed with stakeholders, organized by stakeholder group for engagement #1.

Opportunities

City Partners

- The City has secured Bike Share Toronto memberships for residents and on-site stations with some developers – TPA has coordinated with City of Toronto staff in reviewing development applications to identify and secure locations for bike share stations.
- Consider alignment in development of the Four-year Growth Plan and the Toronto Poverty Reduction 2023-2025 Action Plan.
- A nodal network for expansion (reflective of key trip generators and destinations) can help set the stage for expansion, but a full network will need to consider expansion beyond the nodes.
- The City's cycling program has expanded considerably over the last few years; bike share expansion can build on the momentum for increasing cycling as a transportation mode outside the downtown area.
- The City's near-term implementation plan for the Cycling Network Plan (2022-2024) has been approved by Council – much of this is bundled with state of good repair road work in Scarborough and North York; opportunity for alignment of bike share stations with new infrastructure.
- The City's long-term cycling network vision is in development and includes equity criteria; the next RapidTO corridor will be on Jane Street – opportunity for bike share to coordinate with these processes to identify potential for stations.
- Bike share can fill the lack of bike parking outside the downtown core – challenges related to older apartment buildings not having safe or adequate parking.
- Consider framing of "key destinations" when planning for areas outside the downtown core – destinations other than transit and offices are important too (such as community centres).
- Existing and upcoming trail networks in Scarborough (such as the Meadoway) should see more bike share stations.

Transit Agencies

- Transit agencies are interested in Bike Share as first and last mile support – opening lines of communication and setting up consistent check-ins is a first step to a more integrated process.
- TTC identified the top 20 intersections for boardings and alightings across the network; opportunity to align bike share expansion with these.

Transit Agencies (continued)

- TTC works closely with third party developers related to condo development near stations; opportunity to coordinate bike share with this process.
- Smart Track station planning is ongoing, and construction will start end of the year; opportunity to influence planning now.
- There are opportunities to place bike share stations along RapidTO corridors (shared bus and cycling lanes).

Other Public Institutions

- There are opportunities for Bike Share to support both inter-campus and intra-campus travel for post-secondary institutions in suburban areas such as Humber College, Centennial College
- Connecting campuses to new and existing transit infrastructure, such as Centennial's Ashtonbee Campus with the Eglinton Crosstown LRT, is an opportunity for first/last-mile support by bike share.
- Bike share alignment with upcoming bike infrastructure on Sheppard can support staff access to North York General Hospital.
- Downsview Park would benefit from bike share to connect the post-secondary institutions and transit access points to/through the park.

Private Partners

- As part of Bike Share Toronto's upcoming Pricing Strategy review, consideration should be given to options that support recreational/tourism trips, student-based discounts/pricing, and permitting high-school aged students to use bike share.
- BIAs are interested in receiving advanced notice prior to station installation; BIAs may have insight on future plans that may be impact station siting after receiving notice.
- To integrate bike share in large development projects, a long lead time is needed to coordinate with developers to reserve space for bike share as site plans are created; it is important to start conversations now for projects that will be complete beyond the scope of the Four-year Growth Plan.

Challenges

City Departments

- Working with developers to set aside bike share station space outside the downtown core is a challenge prior to expansion; developers don't see the benefit until the network expands.
- Recommended coordination between Toronto Hydro and TPA for e-station construction as part of state of good repair roadworks.
- There are limited opportunities for safe Highway 401 crossings by bike; existing crossings are limited to Humber River Recreational Trail, Don Trail, and Conlins Road (east Scarborough) – in future, Jane/Keele and Midland/Brimley will be studied, but timelines for a central Highway 401 crossing are uncertain.
- Proactively reviewing development applications for potential bike share stations may be onerous due to the volume of development applications received.

Transit Agencies

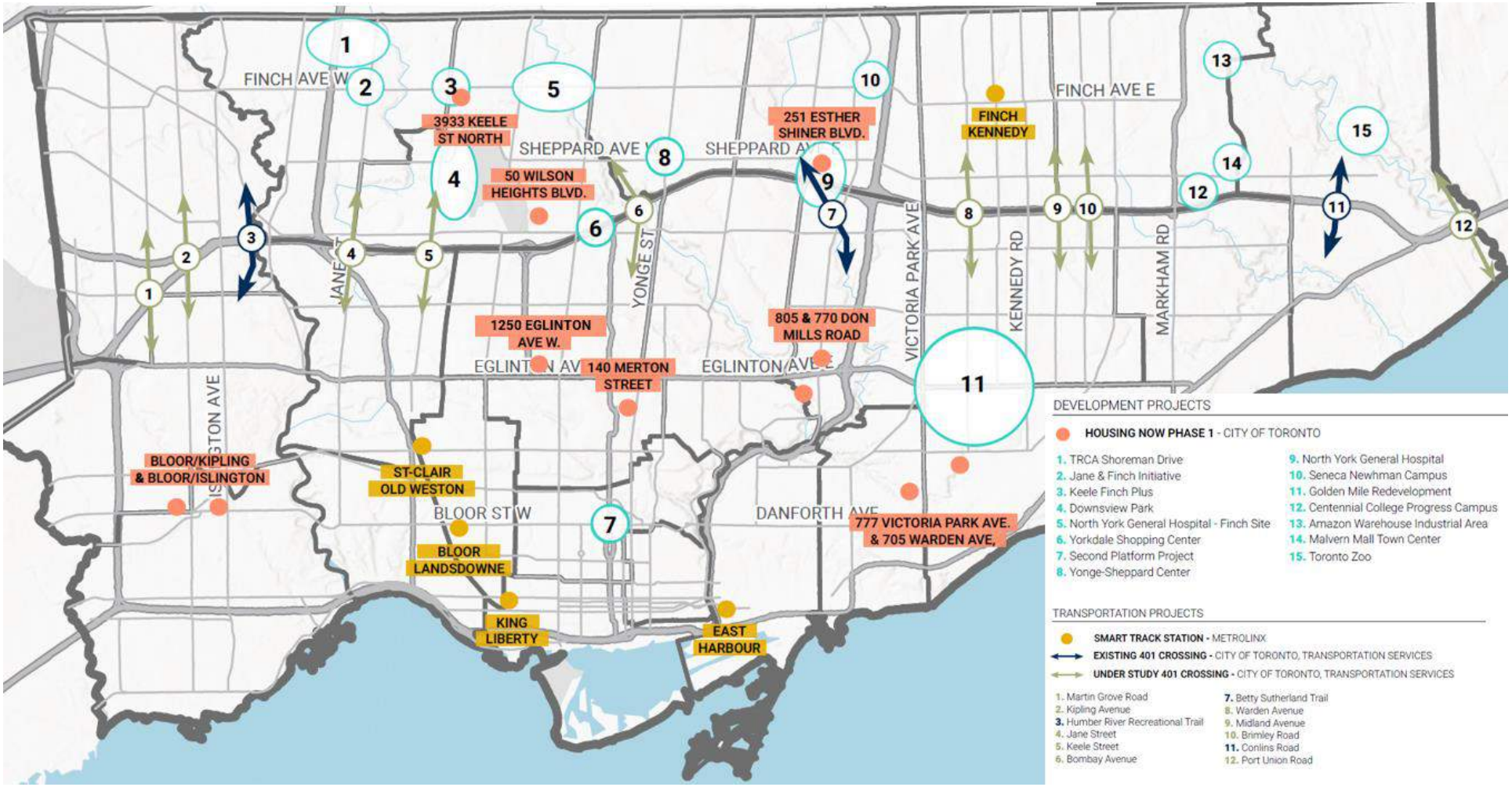
- The TTC does not own any land beyond station property; planning is out of the TTC's control and space cannot be guaranteed for bike share stations (this is a similar challenge for Metrolinx, where urban stations are constrained).
- For station siting at TTC stations, emergency exits and sightlines for buses are a constraint.
- There is a lack of clear process on when the appropriate timelines are to engage Bike Share Toronto for large infrastructure projects, such as the Ontario Line or Eglinton Crosstown stations; this has a potential to lead to missed opportunities.

Other Public Institutions

- Siting stations at/near post-secondary schools only benefits staff, currently, as the existing pass structure is restrictive for riders under 18 years of age.
- Recreational opportunities for bike share use are limited due to 30 minute time limit.
- Centennial's Progress Campus (Markham/Highway 401) is surrounded by wide arterial roads – there could be opportunity to integrate bike share stations should the surrounding roads be re-designed or re-constructed in the future to accommodate cycling infrastructure.

Private Partners

- Private landowners outside the downtown core have hesitations related to whether or not hosting a bike share station would require them to pay a fee (particularly related to electrical connections).
- To integrate Bike Share into new developments, a longer lead time is needed – it won't fit into the Four-year Growth Plan, but it's important to set the stage now.



[3] Under study Highway 401 crossings from https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-173665.pdf

Figure 3. Map of opportunities from Stakeholder Engagement #1

Summary of Observations – Stakeholder Engagement #2

The second set of stakeholder workshops provided further insights into opportunities and strategic considerations for implementation of the Four-year Growth Plan. Participants were asked to add ideas to a shared MURAL board, an online whiteboarding tool. The following is a summary of the comments and feedback collected on the online MURAL board.

City Partners

- Understanding that Bike Share Toronto is currently constrained to expansion within the City of Toronto borders, consider how to address edges of network with frequent travel to adjacent municipalities (for example, edge stations near Mississauga, Vaughan, supporting the Jane-Finch community access north of Steeles, etc.).
- Consider strategic implementation of "islands" of stations as needed – these could be aligned with secondary planning efforts, such as within Etobicoke Centre and Golden Mile.

Transit Partners

- Consider overlaying hexagon maps with the top 20 TTC stops identified by TTC to assess alignment and identify potential gaps (i.e., bike share stations should support these top TTC stops).
- Bike share stations should be placed near bus stops that are feeders to the subway – they could relieve some pressure on feeder routes.
- Bloor-Yonge second platform project has a long timeline and will conclude in 2030; however there is opportunity now to discuss potential integration.
- Spatial analysis demand layer doesn't seem to address potential for recreational travel as much as utilitarian travel; consider extra attention on potential for recreation.
- Ensure we are aware of groups that are not being represented in engagement – are we speaking to people in lower socioeconomic segments?
- There is a tension between allocating constrained transit station space for short-term bike parking that could potentially be used for bike share stations instead (or additionally) – potential to have discussions on space allocation priorities.

Other Public Institutions

- There are cross boundary opportunities or potential near edges of City – Mississauga, Vaughan – for bike share to potentially help facilitate (such as a solution to the double fare access issue to York University that students face when connecting to Pioneer Village Station via GO Transit – they could take bike share to campus vs. paying an extra fare for one stop on the TTC subway).
- Consider bike share expansion in parallel with other City active transportation initiatives, such as bike lockers at transit stations.

Private Partners

- Consider communications and ease of understanding around pass structure when expanding system. For example, 45 minutes is a difficult number to calculate – a one-hour pass would be easier to comprehend. A public communications campaign could advertise new stations in areas that haven't had bike share previously.
- Smart Commute North Toronto Vaughan can help socialize and promote bike share to local businesses.
- Consider state of good repair in planning for expansion to ensure rusty stations are dealt with in a timely manner.

Gaps/Additions to Note

- Map of expansion areas under consideration shows a north/south gap between Westway and Queensway.
- Mimico GO station has a transit-oriented community development underway with a greenway that will extend east – suggest emphasis here.
- Many empty or full stations at the waterfront during peak season – for example, near Sunnyside Pavilion (beach and pool access); consider enhancing offering at key recreational sites.

4.2 User Engagement

Survey

Bike share users were invited to participate in a survey to capture information on trip behaviour, challenges and barriers, and how potential trips that users may take with upcoming station expansion. The survey contained 21 questions and was promoted through two Bike Share Toronto newsletters on May 10 and June 8. Upon close on June 13, the survey had 177 responses. A detailed summery of user survey results can be found in **Attachment A.3.**

User Workshops

Building on findings from the survey, two user workshops were held to solicit greater context on key results. Participants were selected from survey respondents who indicated they would be willing to attend a focus group. The one-hour user workshops were held virtually on July 15 and July 16. Topics discussed covered:

- User purpose for using bike share
- Barriers to using bike share
- Trip length and pass types
- Potential use of e-bikes

Participants were also asked to contribute to a group MURAL board to draw their regular bike share routes and how that may change with greater access to e-bikes. A summary of the comments collected through the online MURAL board can be found in **Attachment A.4.** An overview of key insights collected from the user workshops is contained in **section 3.0.**

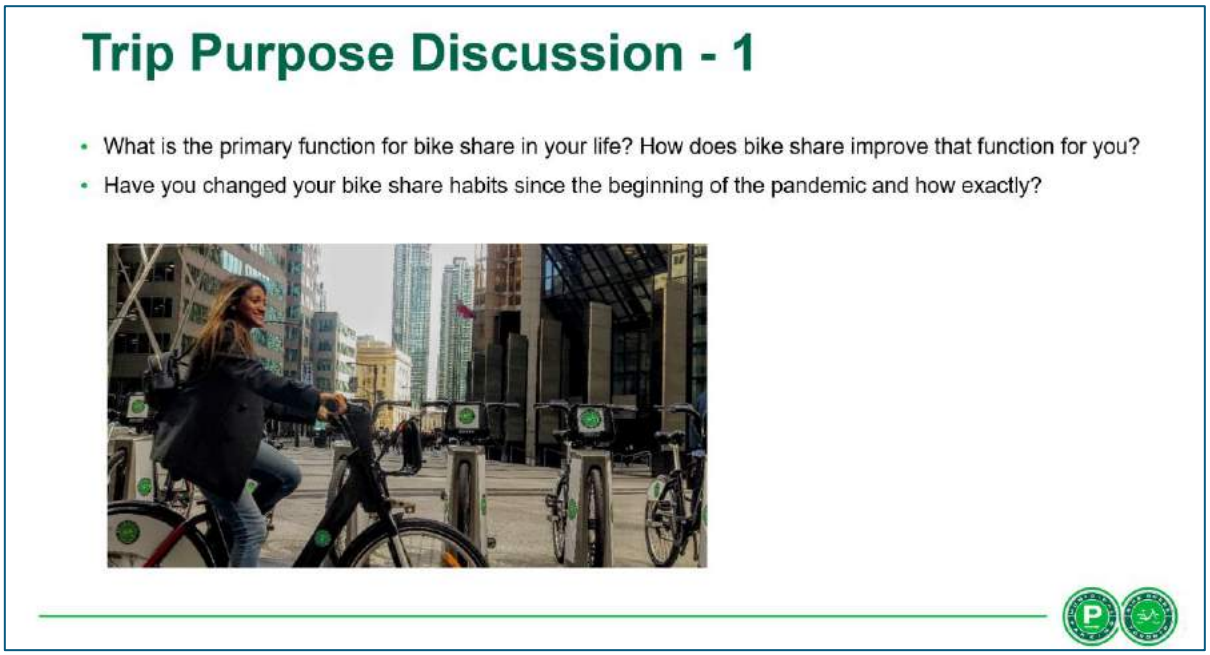


Figure 4. Snapshot from slide used at the User Workshop

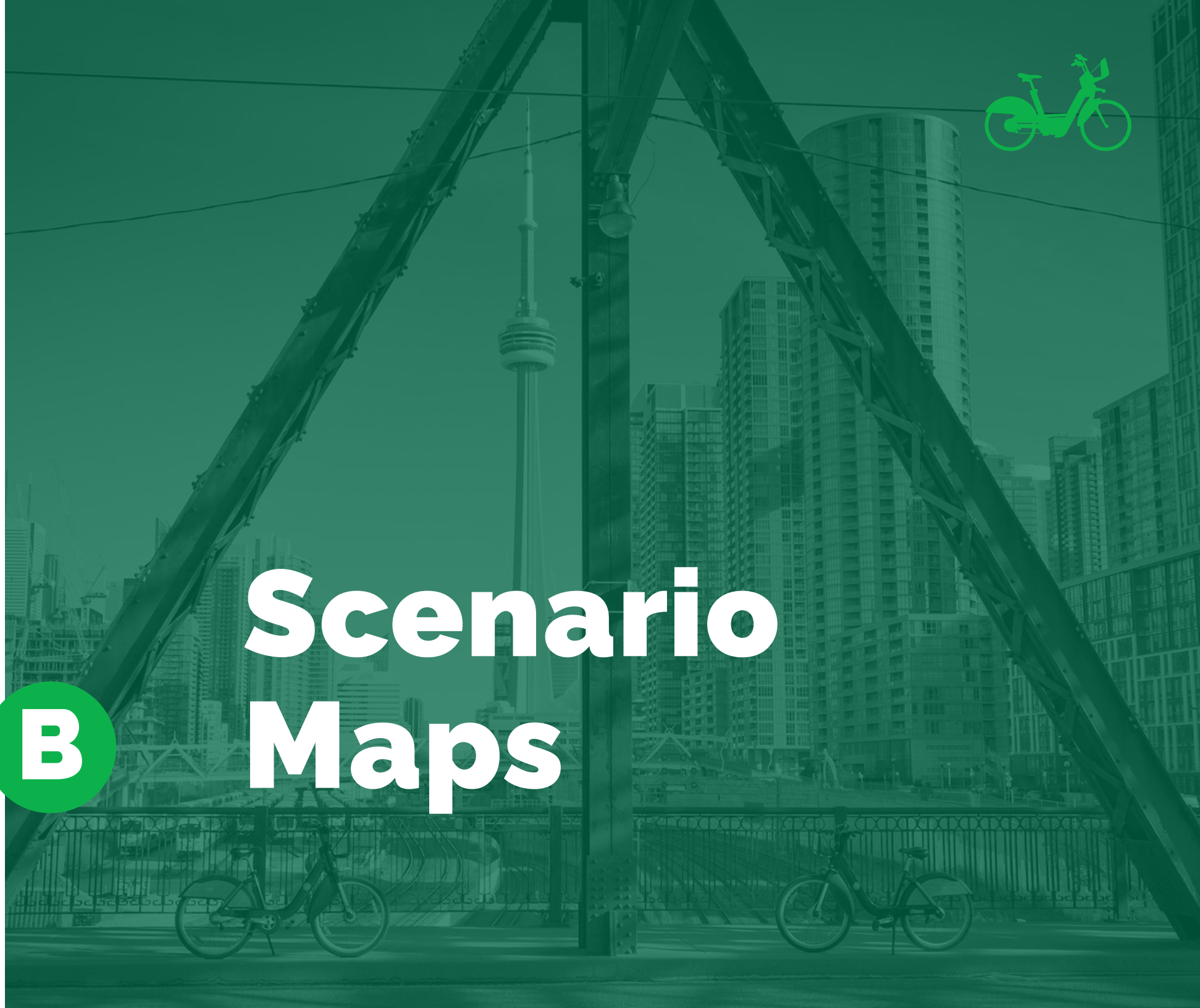
Public Information Session

On August 8, a one-hour public information session was held virtually to share information about the upcoming expansion. The session was promoted through Bike Share Toronto media channels and had 87 participants. Bike Share Toronto and consultant staff gave a presentation on the context of expansion, the methods for developing the Four-year Growth Plan, and the areas under consideration for expansion. Questions from participants were asked via the chat function and included:

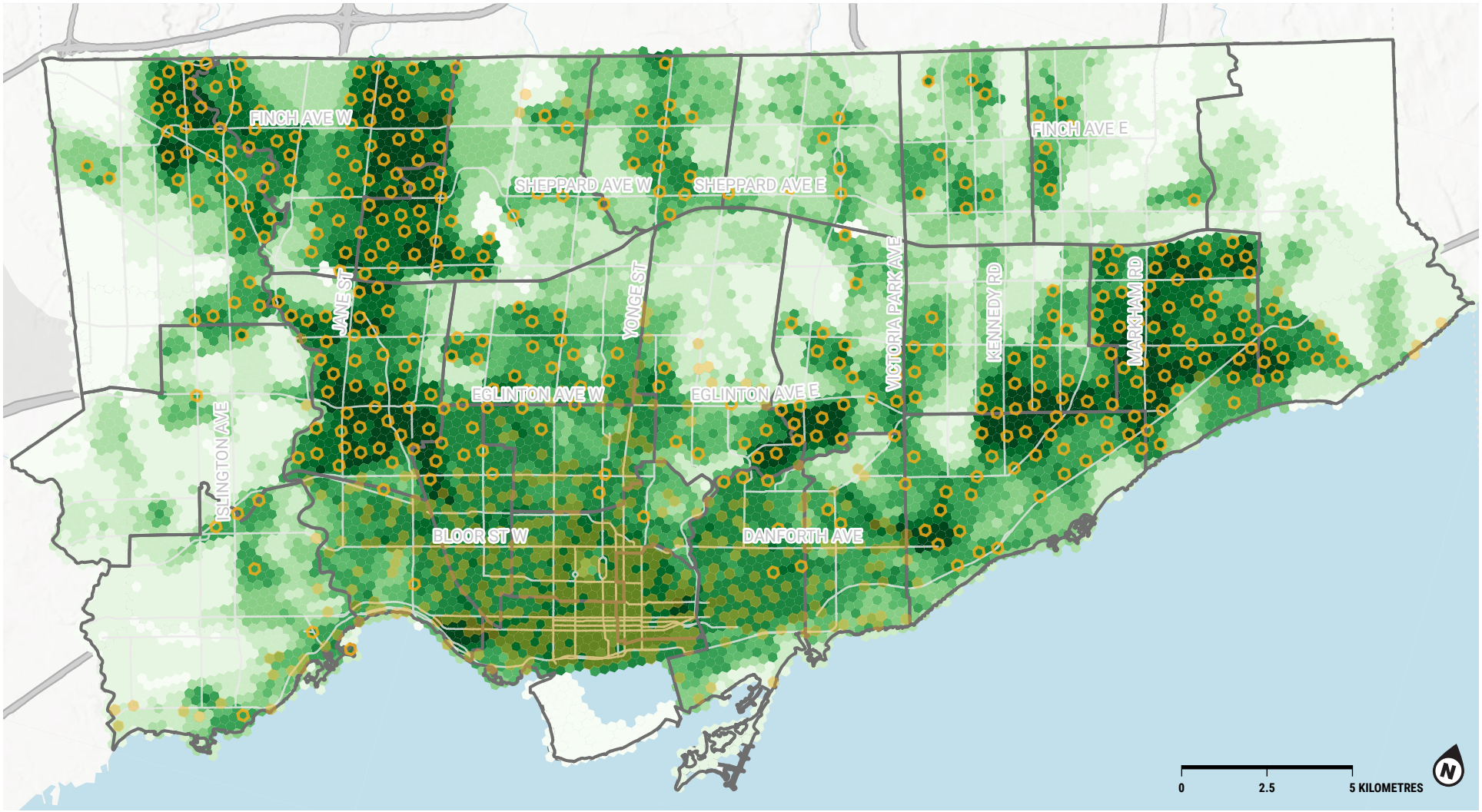
- How is Bike Share considering equity when they consider new stations?
- Any plans to integrate with PRESTO?
- Why would bike share not go 100% electric?
- Is the expansion aligned with the City's cycling infrastructure plans?

The presentation material used for the public information session is included in **Attachment A.5.**

Figure 5. Snapshot from slide used at Public Information Session



B Scenario Maps



ACCESS AND REVENUE SCENARIO

BIKE SHARE TORONTO
FOUR-YEAR GROWTH PLAN

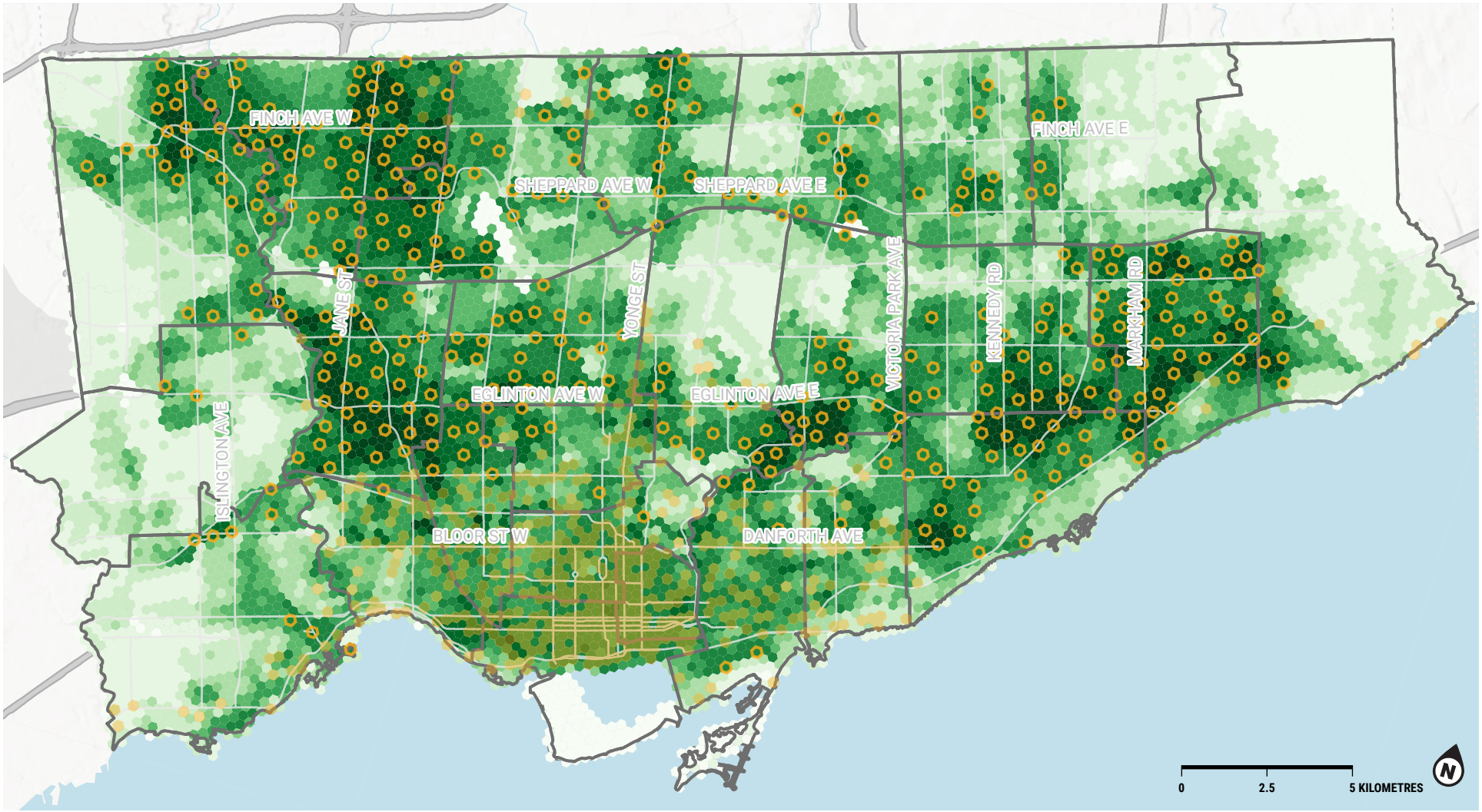
alta

SCENARIO PRIORITY INDEX

- Low
- High
- Current Bike Share Station
- Proposed Station Area
- Wards

The Scenario Priority Index represents the prioritization index score represented by the combination of weights and chosen metrics for the scenario. Proposed Station Areas are allocated based on the highest scoring areas based on the scenario.

The Access and Revenue scenario prioritizes the demand and equity indexes to allocate stations.



BALANCED SCENARIO

BIKE SHARE TORONTO
FOUR-YEAR GROWTH PLAN

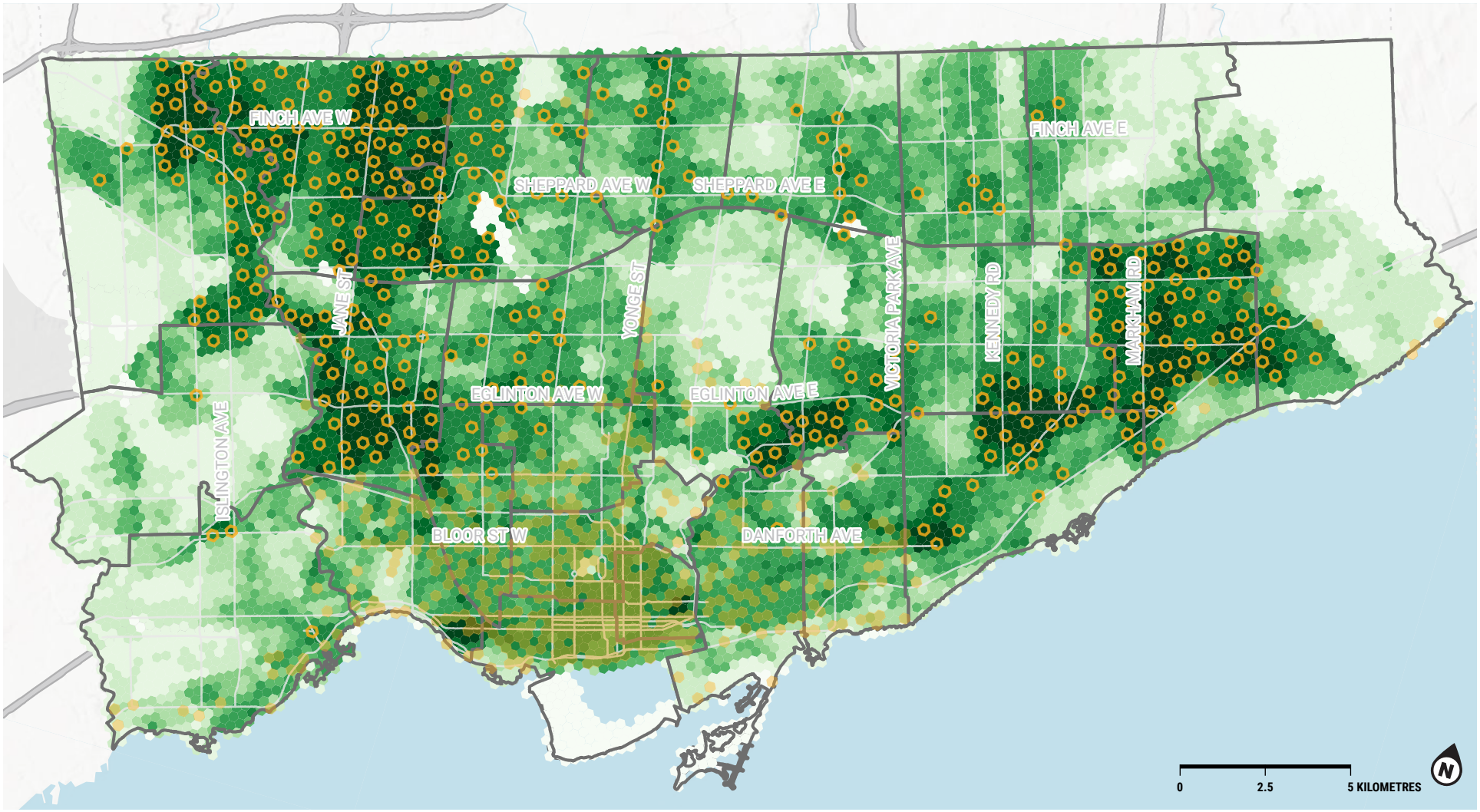
alta

SCENARIO PRIORITY INDEX

- Low
- High
- Current Bike Share Station
- Proposed Station Area
- Wards

The Scenario Priority Index represents the prioritization index score represented by the combination of weights and chosen metrics for the scenario. Proposed Station Areas are allocated based on the highest scoring areas based on the scenario.

The Balanced scenario equally weighs demand, first last mile transit, equity, and the future alignment to allocate stations.



EQUITY FIRST SCENARIO

BIKE SHARE TORONTO
FOUR-YEAR GROWTH PLAN

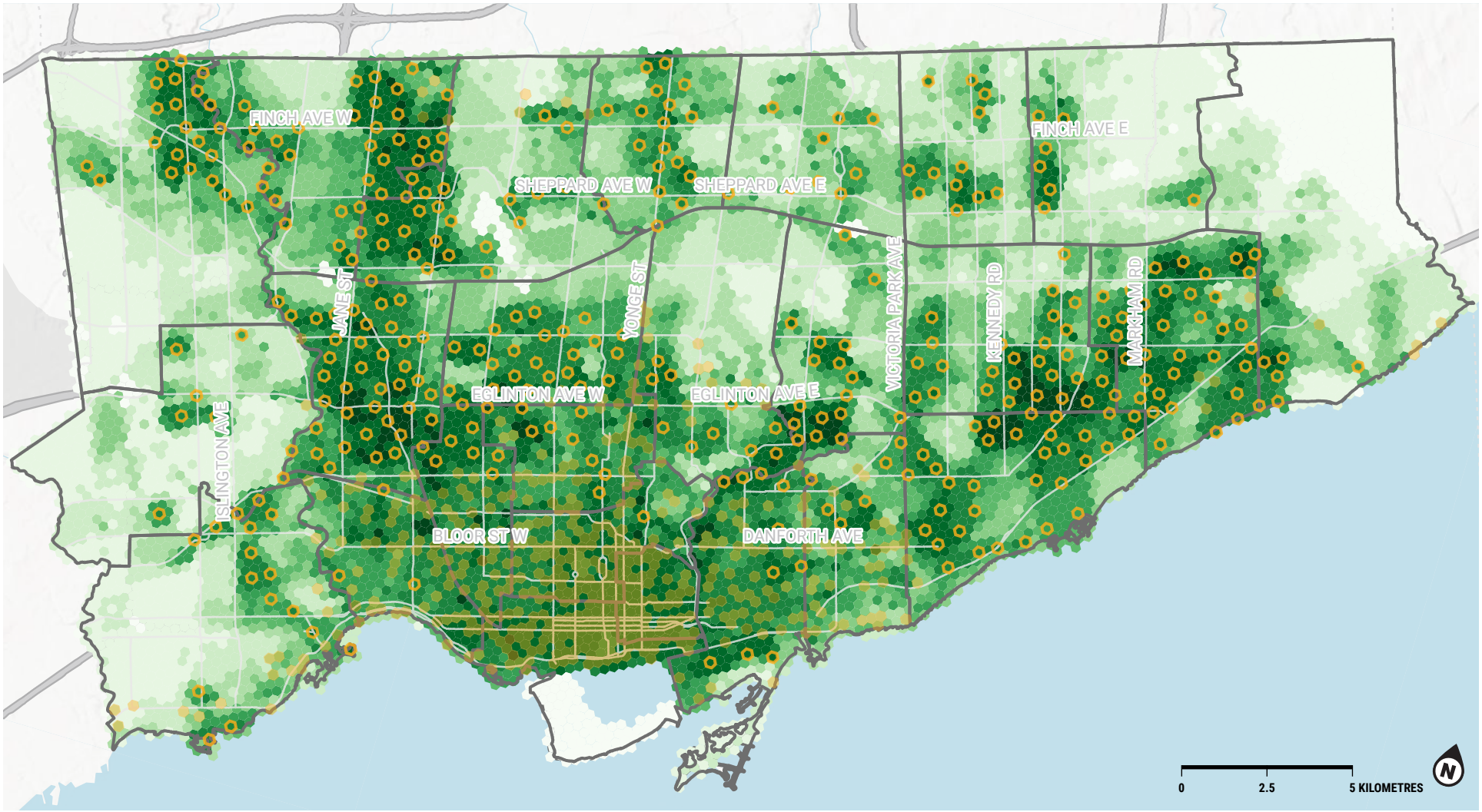
alta

SCENARIO PRIORITY INDEX

- Low
- High
- Current Bike Share Station
- Proposed Station Area
- Wards

The Scenario Priority Index represents the prioritization index score represented by the combination of weights and chosen metrics for the scenario. Proposed Station Areas are allocated based on the highest scoring areas based on the scenario.

The Equity First scenario prioritizes the equity index as the key input to allocate stations.



HIGH UTILIZATION SCENARIO

BIKE SHARE TORONTO
FOUR-YEAR GROWTH PLAN

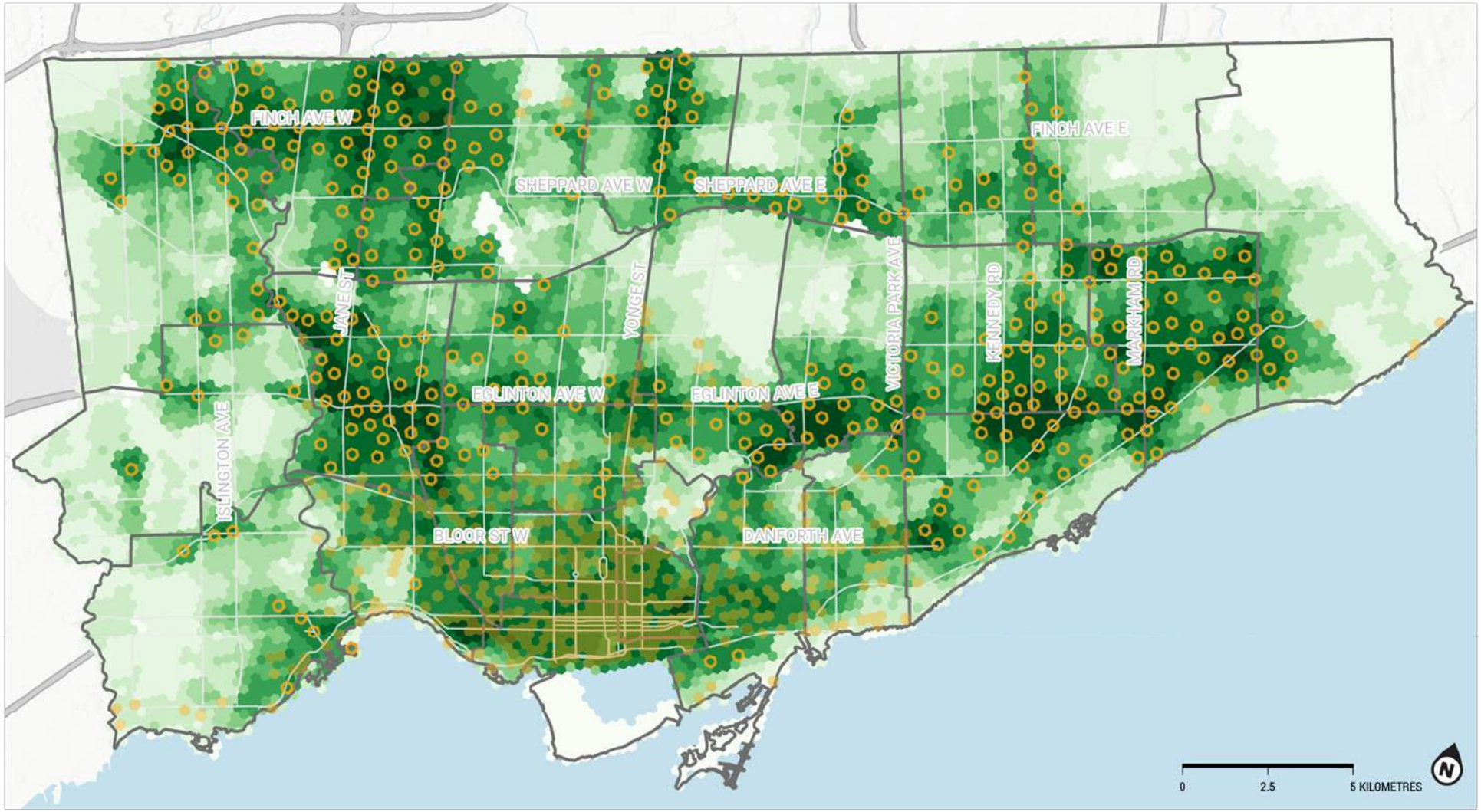
alta

SCENARIO PRIORITY INDEX

- Low
- High
- Current Bike Share Station
- Proposed Station Area
- Wards

The Scenario Priority Index represents the prioritization index score represented by the combination of weights and chosen metrics for the scenario. Proposed Station Areas are allocated based on the highest scoring areas based on the scenario.

The High Utilization scenario prioritizes the demand index as the key input to allocate stations.



FUTURE FOCUS SCENARIO

BIKE SHARE TORONTO
FOUR-YEAR GROWTH PLAN

alta

SCENARIO PRIORITY INDEX

- Low
- High
- Current Bike Share Station
- Proposed Station Area
- Wards

The Scenario Priority Index represents the prioritization index score represented by the combination of weights and chosen metrics for the scenario. Proposed Station Areas are allocated based on the highest scoring areas based on the scenario.

The Future Focus scenario prioritizes the future alignment and equity indexes as the key inputs to allocate stations


MUNICIPAL
P
PARKING
BIKE SHARE
TORONTO

alta

ACCESS.


LEFT TURN
RIGHT TURN