

# **THE SCARBOROUGH OPPORTUNITY: A Comprehensive Walking and Cycling Network**

SEPTEMBER 2021

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## Acknowledgements

The authors of this report wish to acknowledge the financial and logistical support of the University of Toronto Scarborough Suburban Mobilities Research Cluster. We are also grateful for the valuable advice and feedback of our advisory committee: Brendan Agnew-Iler, Nancy Smith Lea, Marvin Macaraig, Dylan Reid, and Kevin Rupasinghe. The authors are solely responsible for any opinions expressed in the report, and for any remaining errors.

This project and report was inspired by the excellent work done by students during the Winter of 2021 in the Department of Human Geography: City Studies class “CITD12: Planning and Building Public Spaces in Toronto” taught by Professor Andre Sorensen. The five top students in the class were invited to participate in the research for and writing of this report during the period May–July 2021. It is dedicated to all University of Toronto Scarborough (UTSC) students who are working to make Scarborough a better and more sustainable place to live and work.



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# EXECUTIVE SUMMARY

This report provides recommendations to help the City of Toronto jump-start its policies for active transportation in Scarborough and achieve its policy goals for sustainability and inclusion. Active transportation — including walking, cycling, inline skating, and mobility aids such as motorized wheelchairs — is the most efficient, equitable, sustainable, and accessible form of mobility, yet existing infrastructure actively discourages it in Scarborough, and the city has made little progress in improving this situation.

The City of Toronto has excellent policies for active transportation, complete streets, and pedestrian/cyclist safety. A goal of the City's TransformTO climate change action strategy is to ensure that by 2050 75% of trips of less than 5km will be walked or cycled, and the Official Plan aims to have cycling infrastructure available within 1km of every resident in the city. Toronto's Vision Zero 2.0 framework promises to ensure a safer experience for all road users regardless of age and abilities, to encourage active and sustainable transportation, and to improve the public realm, guided by policy approaches outlined in the Toronto Complete Street Guidelines.

Scarborough suffers greatly from its automobile-dependent urban form, which prioritizes the movement of cars rather than people and actively discourages walking, cycling, and other active transportation modes. This report shows that despite its current automobile-dependent urban form and travel patterns, Scarborough presents a tremendous opportunity for transformation to a more walkable, cyclable, transit-oriented, and livable place. Scarborough's wide arterial rights-of-way provide major opportunities to improve the quality of infrastructure for pedestrians and cyclists without removing traffic lanes. And Scarborough's relatively high population densities, mixtures of land uses, and clusters of population density along arterial roads and near shopping malls/plazas create abundant opportunities for trips using active transportation. Finally, the vast majority of Torontonians want safer streets and better pedestrian and cycle facilities, as revealed in a survey for Toronto Public Health.<sup>1</sup>

Yet, although the City is working to enable active transportation, there has consistently been a focus on downtown areas when building new infrastructure. This report shows that the City's record on building cycling facilities in Scarborough has been an abject failure, with almost zero progress in Scarborough since 2016 despite significant achievements elsewhere in the city.

The report proposes a comprehensive active transportation network for Scarborough at the scale necessary to achieve existing City of Toronto policy targets. The suggestion is not that this is the only possible network, but that without a long-term plan for a comprehensive network, Toronto is unlikely to be able to significantly improve conditions for active transportation. It is past time to elevate our ambition and to transform Scarborough into a walkable, bikeable, and more livable place.

The City of Toronto must develop a comprehensive active transportation plan and a realistic timeline for building pedestrian and cycling infrastructure in order to achieve the City's policy goal of dramatically increasing the use of active transportation in Scarborough.

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<sup>1</sup> Toronto Public Health (2012). The Walkable City: Neighbourhood Design and Preferences, Travel Choices and Health. <https://www.toronto.ca/wp-content/uploads/2017/10/9617-TPH-walkable-city-report.pdf>.

## Recommendations

### **We call on the City of Toronto to:**

- Develop and implement a long-term plan for an active transportation network throughout Scarborough. The current piecemeal approach is simply not working.
- Implement measurable targets for increasing the share of trips taken by walking, cycling, and public transit, to be reviewed every five years until 2050.
- Identify all major obstacles to network connectivity and develop strategies to overcome them to ensure walking and cycling networks in Scarborough are connected.
- Greatly expand and improve off-road cycling and walking networks and establish improved connections between on-road and off-road facilities.
- Plan for redevelopment and intensification that prioritizes active transportation network construction and the creation of mobility hubs and destinations within walking and cycling distance of all Scarborough residents.
- Implement strategies to encourage walking and cycling to all schools in Scarborough
- Direct Toronto Bike Share to develop a plan to roll out Bike Share stations throughout Scarborough, starting with Major Station Areas and activity hotspots – to be completed by 2030
- Design and build, or upgrade, bicycle parking facilities for all current and future TTC Subway and GO stations in Scarborough.

# INTRODUCTION

*photo by Sean Marshall*

This report proposes a comprehensive active transportation network for Scarborough, an inner suburb in eastern Toronto. Our approach to transforming Scarborough's network is guided by the policy approaches outlined in the Toronto Complete Streets Guidelines. The goals of this report are to:

- Expose the grossly inadequate cycle and pedestrian infrastructure throughout Scarborough, which is a major cause of unnecessary deaths and serious injuries from collisions, and which discourages walking and cycling activity.
- Propose a cycling and walking network plan at the necessary scale and ambition to deliver on the City of Toronto's Official Plan targets for access to cycle facilities, and to ensure that 75% of all short trips (less than 5km) are by walking and cycling by 2050.
- Support the Vision Zero 2.0 framework to ensure a safer experience for all road users, regardless of age, ability, or travel mode, and put an end to deaths and serious injuries on Scarborough streets.
- Show that Scarborough presents major opportunities for transformation from an automobile-dependent and under-served suburb into a sustainable and resilient part of Toronto that enjoys high-quality pedestrian and cycling environments, active and livable streets, and a thriving local economy.
- Advance social equity by helping to enable walking and cycling as everyday modes of travel in Scarborough, as these modes are the least expensive and deliver proven health and wellness benefits to both individuals and communities.

Scarborough is characterized by its rich landscape of communities, landmarks, restaurants, parks and natural heritage systems, and destinations. It is also known for its cultural diversity, vibrancy, and resilience, particularly following the former city's amalgamation into Toronto in 1998.<sup>2</sup> Scarborough's population densities are not low, at about 4,000 people/sq.km, with a considerable mix of housing types, including townhouses and many mid-rise tower blocks. Scarborough as a whole contains highly mixed land uses, including large zones of commercial, industrial, and retail activity, large educational and health-care facilities, as well as major natural/recreational areas such as Highland Creek and Rouge National Urban Park.

At the same time, Scarborough's automobile-dependent urban form makes active transportation difficult and frustrates public transit users. Like most post-war suburbs, it was designed during an era when most people believed that automobiles were the future of transportation, destined to replace other travel modes, resulting in a grid of major arterial roads defining "superblocks" containing neighbourhood units, and land uses that were segregated.<sup>3</sup> This suburban development pattern means that Scarborough lacks adequate pedestrian and cycling facilities. By contrast to downtown, for most Scarborough residents walking and cycling are neither safe nor viable mobility options even though a large share of all trips are less than 5km, a distance that should be comfortable for walking and cycling.<sup>4</sup> As a result, even 69% of "short trips" under 5km are conducted by car.<sup>5</sup>

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2 Hulchanski, J. D. (2010). "The Three Cities Within Toronto." Cities Centre, University of Toronto.

3 Sorensen, A. and Hess, P. (2015). "Building Suburbs Toronto Style." *Town Planning Review* 86(4), 411-436.

4 Mitra, R., Smith Lea, N., Cantello, I., and Hanson, G. (2016). "Cycling Behaviour and Potential in the Greater Toronto and Hamilton Area." Transportation and Land Use Planning Research Laboratory at Ryerson University. <http://transformlab.ryerson.ca/wp-content/uploads/2016/10/Cycling-potential-in-GTHA-final-report-2016.pdf>.

5 Ledsham, T. and Verlinden, Y. (2019). "Building Bike Culture Beyond Downtown: A guide to suburban community bike hubs." The Centre for Active Transportation at Clean Air Partnership. <https://www.tcat.ca/resources/building-bike-culture-beyond-downtown/>.

Public transit holds the second-largest mode share after cars, with high-ridership bus routes on several arterial roads. In 2018, the 939 Finch Express bus transported 35,100 passengers every day — the most of any express bus route in the City of Toronto. Seven more routes that travel through Scarborough — the 34 Eglinton East, 53 Steeles East, 54 Lawrence East, 85 Sheppard East, 86 Scarborough, 102 Markham Road, and 116 Morningside — each transported over 20,000 individuals per day.<sup>6</sup> As all public transit trips include walking or cycling trips at both ends, this high bus ridership also underlines the importance of excellent active transportation infrastructure in Scarborough as part of the “last mile” infrastructure needed to support public transit riders.

Residents in over a quarter of Scarborough households are either unable to drive or do not have full-time access to automobiles, and existing infrastructure does not adequately serve these individuals. The share of population living in poverty is significantly higher than the Toronto average, and Scarborough includes eight of the City’s Neighbourhood Improvement Areas (NIAs), which underlines the importance of improving facilities to enable walking and cycling as everyday travel modes.

Active transportation modes such as walking and cycling currently account for a small share of all trips conducted both within Scarborough and between Scarborough and neighbouring communities. Overall, cycling in Scarborough accounts for less than 1% of trips by mode share, compared to nearly 7% in Toronto as a whole.<sup>7</sup> Commuters in Scarborough use active transportation about 3% of the time, significantly lower than the citywide average of about 12%.<sup>8</sup> A major reason is that cycling on arterial roads with high traffic volumes and high speeds is dangerous, and pedestrian infrastructure on major thoroughfares is often inadequate. Yet the arterial road grid is the best location for active transportation infrastructure because local roads are

designed to prevent through traffic, and arterials are often the only routes to cross major obstacles such as Highway 401, railway tracks, and major ravines.

Major arterial roads in Toronto were designed for the primary purpose of moving motor vehicles as efficiently as possible. Although Vision Zero policies have recently been introduced to reduce the alarming rate of deaths and serious injuries along these routes, these initiatives have seen disappointing results. Between 2017 and 2019, the number of pedestrians and cyclists killed or seriously injured on city streets did not decline significantly from 2016 pre-Vision Zero levels.<sup>9</sup> Building infrastructure to support the safe travel of cyclists, pedestrians, and public transit passengers, regardless of age and ability, is a key way to ensure roads become safer and more accessible for active transportation.

The City of Toronto has recently renewed its Vision Zero and Complete Streets policies, and promises to improve safety and transit, bicycle, and pedestrian facilities throughout the city. But most investments so far have been in the downtown area. Even if fully implemented, the current Toronto Cycling Network Plan will produce only scattered cycle facilities in Scarborough, many of which are off-road paths in parks (see section 3 below).

We believe that until a comprehensive network of active transportation facilities is achieved in Scarborough, reducing deaths and serious injuries is unlikely, and active transportation will remain a marginal travel mode as it is simply too dangerous. Yet, we are also convinced that there is enormous potential for active travel in Scarborough, a potential that could have even more impact than downtown initiatives. It is past time to move beyond the piecemeal “one step forward, one step backward” approach to active transportation in Scarborough, and towards building a comprehensive network for the people of Scarborough, through both immediate action and long-term planning. This proposal is a contribution to achieving that goal.

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6 Toronto Transit Commission (2018). “Ridership statistics for surface routes.” [https://www.ttc.ca/PDF/Transit\\_Planning/Ridership\\_and\\_service\\_statistics\\_2018-A.pdf](https://www.ttc.ca/PDF/Transit_Planning/Ridership_and_service_statistics_2018-A.pdf).

7 The Centre for Active Transportation (2018). “Scarborough Cycles Snapshot.” <https://www.tcat.ca/resources/scarborough-cycles-snapshot-june-2018/>.

8 Toronto Public Health (2012). Road to Health: Improving Walking and Cycling in Toronto. <https://www.toronto.ca/wp-content/uploads/2017/10/967b-TPH-road-to-health-report.pdf>.

9 City of Toronto. “Vision Zero 2.0 – Road Safety Plan Update (2019).” <https://www.toronto.ca/legdocs/mmis/2019/ie/bgrd/backgroundfile-134964.pdf>.



# POLICY CONTEXT

- **The City of Toronto's Existing Policy Frameworks**
- **Vision Zero 2.0**
- **Pedestrian Frameworks**
- **Cycling Frameworks**

# City of Toronto’s Existing Policy Frameworks

The City of Toronto currently has policies, guidelines, and frameworks in place that support the implementation of a comprehensive and connected network for active transportation regardless of age, ability, or mode of mobility. We argue that it is past time to apply these policies in the Scarborough context to create a comprehensive network of pedestrian, cycling, and transit infrastructure for Toronto’s east end.

## Official Plan

The City of Toronto’s Official Plan (“the Plan”) sets out goals, policies, and objectives intended to manage and direct urban growth and redevelopment and its effects on the economic, social, built, and natural environment of the City. The Plan establishes provisions for the city’s urban structure; land use designations; secondary plans; and site and area-specific policies. Further, the Plan articulates a vision of creating vibrant neighbourhoods and complete communities; quality, well-serviced, and affordable transportation networks; robust public infrastructure systems; high-quality public spaces and facilities; and a healthy natural environment. The City’s vision is grounded in principles of “diversity and opportunity,” “beauty,” “connectivity,” and “leadership and stewardship.” The Cycling Network Plan Update of 2019 notes that a key policy objective in the City of Toronto Official Plan is to ensure that all Toronto residents are within one kilometre of a designated cycling route.<sup>10</sup>

## TransformTO

TransformTO is Toronto’s ambitious climate action strategy. Unanimously approved by City Council in July 2017, it includes a set of long-term goals and strategies to reduce local greenhouse gas emissions and improve health, grow the economy, and improve social equity, many of which are related to transportation.<sup>11</sup> A key TransformTO goal is that 75% of trips under 5 km will be walked or cycled by 2050.

Although the City is encouraging active transportation (walking, cycling) and transit, the strategy is missing any prioritization of these goals and objectives for Scarborough specifically. As articulated during the first engagement phase of the strategy in 2019, levels of active transportation in Toronto’s downtown are historically higher compared to the suburbs. This contrast has contributed to a focus on downtown areas when building new active transportation infrastructure, and has limited investment in Scarborough.<sup>12</sup>

According to the Transportation Tomorrow Survey (2016), in Scarborough nearly 500,000 trips per day are 5km or less, yet 69% of these short trips are made by car.<sup>13</sup> This situation presents a clear opportunity for the City to leverage existing policy frameworks and objectives and apply them specifically to the Scarborough context. Building better active transportation infrastructure in Scarborough will support the City’s climate change objective to increase the number of short trips conducted by walking or cycling. It is clear that a change to the suburban landscape is imperative in order for the City to meet its TransformTO goal of 75% of all trips under 5km being walked or cycled by 2050.<sup>14</sup>

<sup>10</sup> City of Toronto (2019). “Cycling Network Plan Update.” <https://www.toronto.ca/wp-content/uploads/2019/07/993a-backgroundfile-134913-Cycling-Network-Plan-Update.pdf>

<sup>11</sup> City of Toronto, TransformTO. <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/transformto/>.

<sup>12</sup> City of Toronto. Equity + Engagement: TransformTO (2016). <https://www.toronto.ca/wp-content/uploads/2017/10/917b-TransformTO-Engagement-and-Equity-Report-2016.pdf>.

<sup>13</sup> Transportation Tomorrow. Transportation Tomorrow Survey (2016). [http://dmg.utoronto.ca/pdf/tts/2016/2016TTS\\_Conduct.pdf](http://dmg.utoronto.ca/pdf/tts/2016/2016TTS_Conduct.pdf). In fact, the majority of short trips in the city are made outside of the downtown area (Mittra, R., Smith Lea, N., Cantello, and I. & Hanson, G. (2016). “Cycling Behaviour and Potential in the Greater Toronto and Hamilton Area”).

<sup>14</sup> The Centre for Active Transportation (2019). “TCAT responds to Toronto’s Cycling Network Plan Update.” <https://www.tcat.ca/tcat-responds-to-torontos-cycling-network-plan-update/>.

## Toronto Complete Streets Guidelines

“Complete streets” are streets that are designed to be safe for all users (pedestrians, cyclists, transit riders, drivers), regardless of age, ability, or mode of mobility. The City of Toronto has developed Complete Streets Guidelines that provide a new approach for how we design our city streets. Complete streets build on many of the City’s existing policies, guidelines, and recent successful street design and construction projects. The Toronto Complete Streets Guidelines provide an expanded toolbox of ways to improve Toronto’s streets through the following:<sup>15</sup>

- Ensuring safe and accessible streets for people of all ages and abilities;
- Giving people a range of transportation choices;
- Creating healthy and livable neighbourhoods;
- Creating vibrant and attractive public spaces;
- Supporting economic prosperity; and
- Improving environmental sustainability.

The Guidelines offer evidence-based, best-practice policy and design guidance. The City of Toronto is now at the early stages of applying these excellent, up-to-date complete streets policies in concrete applications throughout the city.

This policy presents an important opportunity for Scarborough, which was built out during the post-war era with design principles that produced a highly automobile-dependent urban form characterized by a grid of high-capacity arterial roads that have proven dangerous for pedestrians and a major deterrent for cyclists, as discussed in section 3 below.



Photograph Copyright Queen’s Printer for Ontario, photo source: Ontario Growth Secretariat, Ministry of Municipal Affairs

<sup>15</sup> City of Toronto. Complete Streets Overview. <https://www.toronto.ca/services-payments/streets-parking-transportation/enhancing-our-streets-and-public-realm/complete-streets/overview/>.

## Vision Zero 2.0

The Vision Zero Road Safety Plan is the City's pledge to improve road safety using a data-driven and targeted approach focusing on improving road conditions in areas where this effort is most needed. The Plan particularly addresses safety for the most vulnerable users of our transportation system — pedestrians, school children, older adults, and cyclists.

The City's Vision Zero Road Safety Plan includes the Scarborough District Safety Action Plan. This document was a response to fatal collisions in Scarborough, which experiences the highest rate of fatalities from traffic collisions per 100,000 population in the city. Scarborough has the longest and widest high-speed arterial roads in the city. It also has longer distances between designated crossing locations than any other district in the city, up to 870 metres.<sup>16</sup> The lack of protected crossings along arterials spurs people to cross at mid-block locations, a dangerous and potentially fatal behaviour on these wide, high-speed roads.

The summary of approaches in this action plan include: installing additional mid-block crossing signals at priority locations; road design improvements; targeted speed limit reductions; and an expansion of the red light camera program. City Council approved speed limit reductions on Scarborough arterials from 60 to 50 km/h, which launched in January 2020. In addition, 10 mid-block signalized crossings were added on major arterial roads like McCowan and Morningside. In 2021, Council released a new version of the Road Safety Plan that aims to decrease speed limits for local roads, including those in Scarborough, from 40 to 30 km/h, expected to be implemented by the end of 2023.<sup>17</sup>

## Pedestrian Frameworks

The Toronto Walking Strategy was approved in 2009, and was developed with the intent to produce supportive pedestrian environments and increase walking culture across Toronto. It included a 52-point action blueprint for building pedestrian facilities, with a 10-year implementation plan. The action plans were not specific to neighbourhoods; instead, they emphasized the overall development of different pedestrian facilities, such as increasing winter maintenance, building pedestrian safety zones, and transforming sidewalks into public squares. The plan did emphasize, however, that improving pedestrian networks was most important and most challenging in suburban areas and priority neighbourhoods. It suggested that making suburbs walkable would increase social equity, by increasing access to social and community services.<sup>18</sup>

Following the Walking Strategy, Toronto Public Health released a series of policy reports that focused on active transportation and health. The Walkable City Report (2012) summarized the findings of a Residential Preferences Survey that gauged public demand for walkable versus more auto-oriented neighbourhoods: 75% of residents in Toronto preferred a walkable neighbourhood, while only 8% had a strong preference for an auto-oriented neighbourhood.<sup>19</sup> The study also found a correlation between walkable neighbourhoods and overall health. People living in walkable Toronto neighbourhoods were found to have a lower average body weight index than people living in less walkable neighbourhoods. Unfortunately for its residents, very little of Scarborough can convincingly be described as walkable, highlighting the need for the City of Toronto to develop a targeted strategy to encourage walking in Scarborough.

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<sup>16</sup> City of Toronto (2019). "Scarborough District Safety Action Plan." <https://www.toronto.ca/legdocs/mmis/2019/ie/bgrd/backgroundfile-135002.pdf>.

<sup>17</sup> For the first two wards in Scarborough targeted for these reductions, see City of Toronto (2021). "Vision Zero Road Safety Plan Speed Limit Reductions to 30 km/h on Local Roads and Public Lanes - Scarborough Area (Ward 21 and Ward 23)." <https://www.toronto.ca/legdocs/mmis/2021/sc/bgrd/backgroundfile-166426.pdf>.

<sup>18</sup> City of Toronto (2009). "Focus on Priority and Tower Renewal Neighbourhoods" in Toronto Walking Strategy. <https://www.toronto.ca/wp-content/uploads/2017/10/9932-Pages-from-09-3410-Walking-Strategy-3.pdf>.

<sup>19</sup> Toronto Public Health (2012). The Walkable City.

# Cycling Frameworks

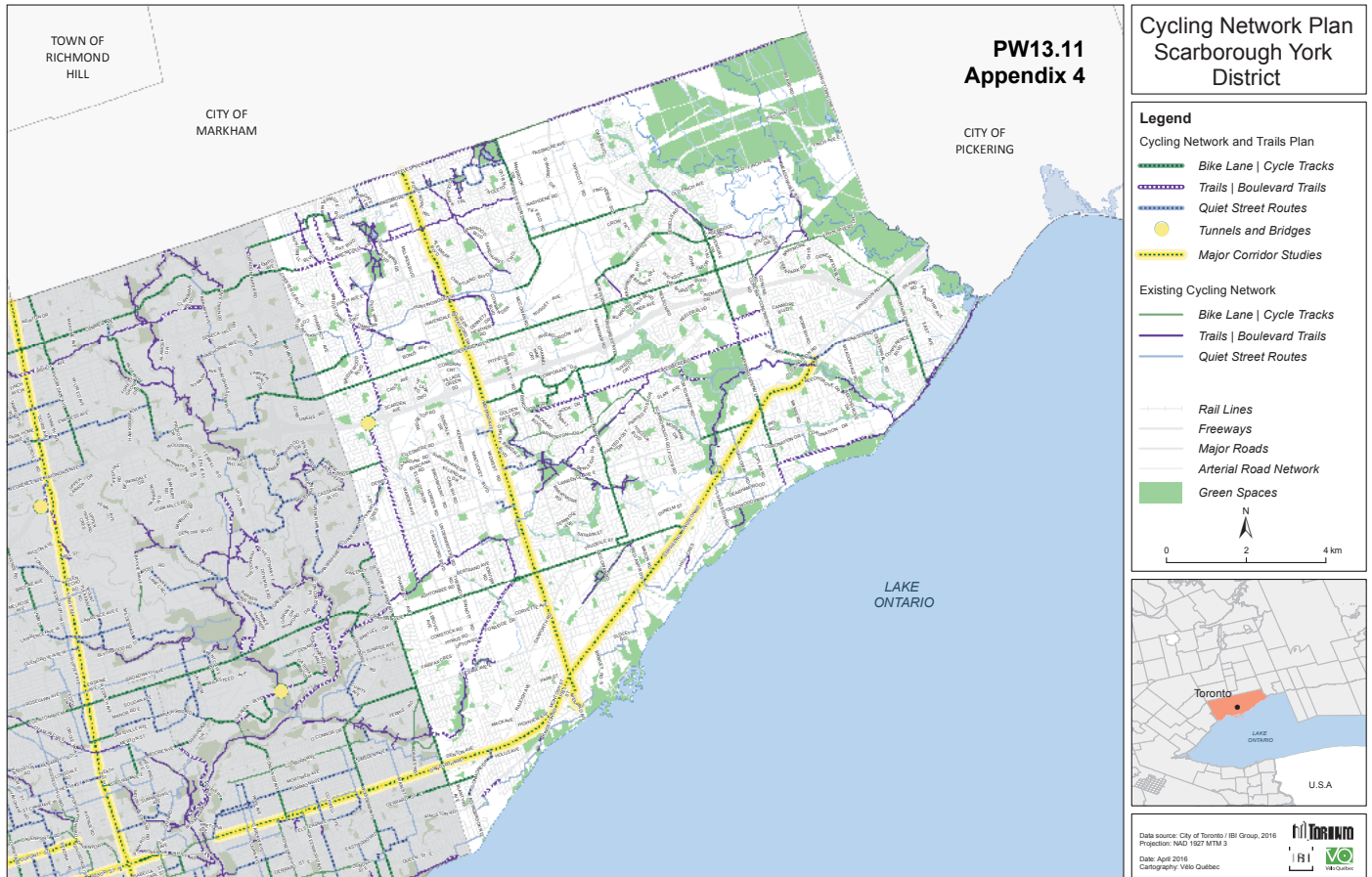
Directions for the City of Toronto’s current cycle infrastructure plan can be found in the Ten Year Cycling Network Plan approved by City Council in 2016. This plan promised to spend \$153.5 million dollars over ten years to build 525 centreline kilometres (km) of new cycling infrastructure throughout the city.<sup>20</sup> For the Scarborough district, the City proposed 138km of cycling infrastructure, including 79km of cycling facilities on “Fast, Busy Streets,” 17km of “Quiet Street” facilities, and 42km of off-road Trails. The Scarborough part of this plan was published as Appendix 4, showing both existing and planned facilities, shown here as Figure 2.1.<sup>21</sup>

Careful analysis of this plan reveals that virtually all of the existing cycling infrastructure identified in 2016 was off-road trails in parks, including the trail along Highland Creek from Kingston Road to Lawrence Avenue, the trail along

the Gattineau Hydro Corridor from Victoria Park Avenue to Ellesmere Avenue that was built for the 2015 Pan American Games, and a short segment of the Finch Hydro Corridor from Midland Avenue to Middlefield Road. The few existing on-road segments included Sheppard Avenue East from Conlins Road to Highway 401, and Brimorton Road from Brimley to Scarborough Golf Club Road. Major new “Bike Lane / Cycle Tracks” on arterial roads were planned for the entire length of Sheppard Avenue East, Eglinton Avenue East, Steeles Avenue East, Ellesmere Road, Bellamy Road North, Morningside Avenue, Progress Avenue-McLevin Avenue, Middlefield Road, McNicoll Avenue, Warden Avenue north of the 401, and Port Union Road. “Major Corridor Studies” were proposed for Danforth Avenue from Victoria Park Avenue to Kingston Road, Kingston Road from Danforth Avenue to Military Trail, and the entire length of Midland Avenue.

Figure 2.1 City of Toronto, “Cycling Network Plan: Scarborough District,” 2016

Source: City of Toronto



20 City of Toronto (2016). “Ten Year Cycling Network Plan.” <https://www.toronto.ca/legdocs/mmis/2016/pw/bgrd/backgroundfile-92811.pdf>. Measuring by centreline kilometre means that one kilometre of cycle path counts as one kilometre whether it has one, two, or more lanes.

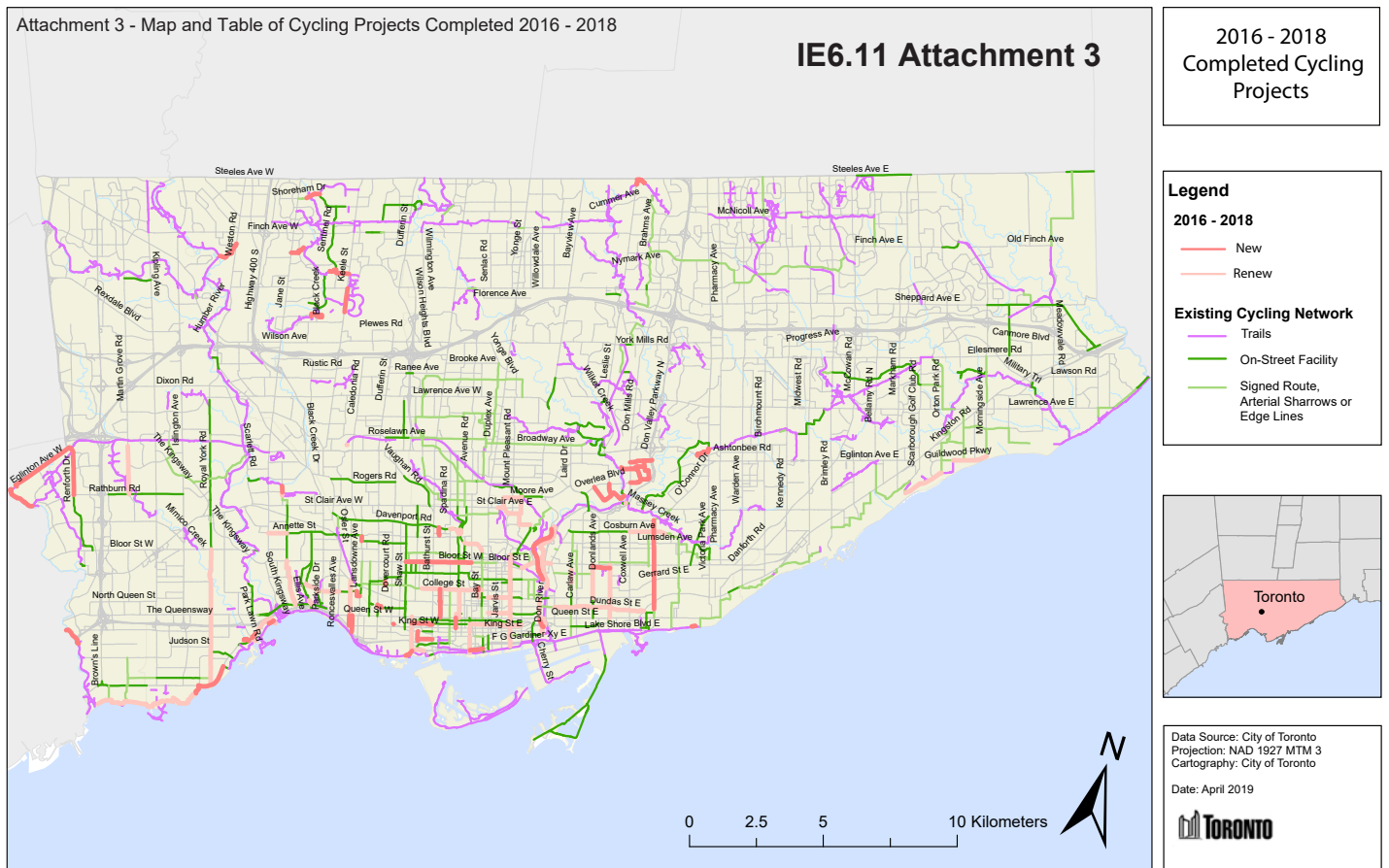
21 City of Toronto (2016). Cycling Network Plan, Scarborough District. <https://www.toronto.ca/legdocs/mmis/2016/pw/bgrd/backgroundfile-92815.pdf>.

Sadly, none of these proposed projects has been built, and none of the major corridor studies have been completed. At the time of writing (August 2021), the 2km segment of Port Union Road was under construction, representing the only part of this plan for cycle facilities in Scarborough to be (almost) completed. At this rate of construction, it will take about 70 years to complete the Scarborough part of the 10-year cycling network plan, which itself does not come close to a comprehensive cycle network for Scarborough. Perhaps worse, in the summer of 2020 the City installed separated cycle tracks on a 4km stretch of Brimley Road as part of the COVID-inspired ActiveTO program, and removed them 5 months later after protests by some drivers whose travel times increased. It is notable that cycle facilities on Brimley Road have never formed a part of Toronto's cycle network plans. This ad-hoc and chaotic approach to cycle facility construction is entirely inadequate.

In 2019, the City released its Cycling Network Plan Update, revealing current progress and outlining the next phases of the Network Plan. The Cycling Network Plan Update maintains the originally established goal to “connect, grow, and renew” cycling infrastructure in Toronto. The Update also seeks to achieve a key policy objective in the City's Official Plan: to ensure that all residents are within one kilometre of a designated cycling route, as well as reach the TransformTO long-term goal that 75% of trips under 5km are walked or cycled by 2050. The update provided a development status, showing that roughly 60km of new cycling infrastructure was installed across the city from 2016–2018, but as shown in Figure 2.2, “Map and Table of Cycling Projects Completed 2016-2018,” of the 60km of new and renewed infrastructure none was in Scarborough, except for the renewal of two existing cycle routes along the Guildwood Parkway and Sylvan Avenue, small segments that consist entirely of a few painted sharrow plus wayfinding.<sup>22</sup>

Figure 2.2 City of Toronto ‘Map and Table of Cycling Projects Completed 2016-2018’

Source: City of Toronto<sup>23</sup>



22 City of Toronto (2019). Map and Table of Cycling Projects Completed, 2016-2018. <https://www.toronto.ca/legdocs/mmis/2019/ie/bgrd/backgroundfile-134916.pdf>.

23 <https://www.toronto.ca/legdocs/mmis/2019/ie/bgrd/backgroundfile-134916.pdf>.

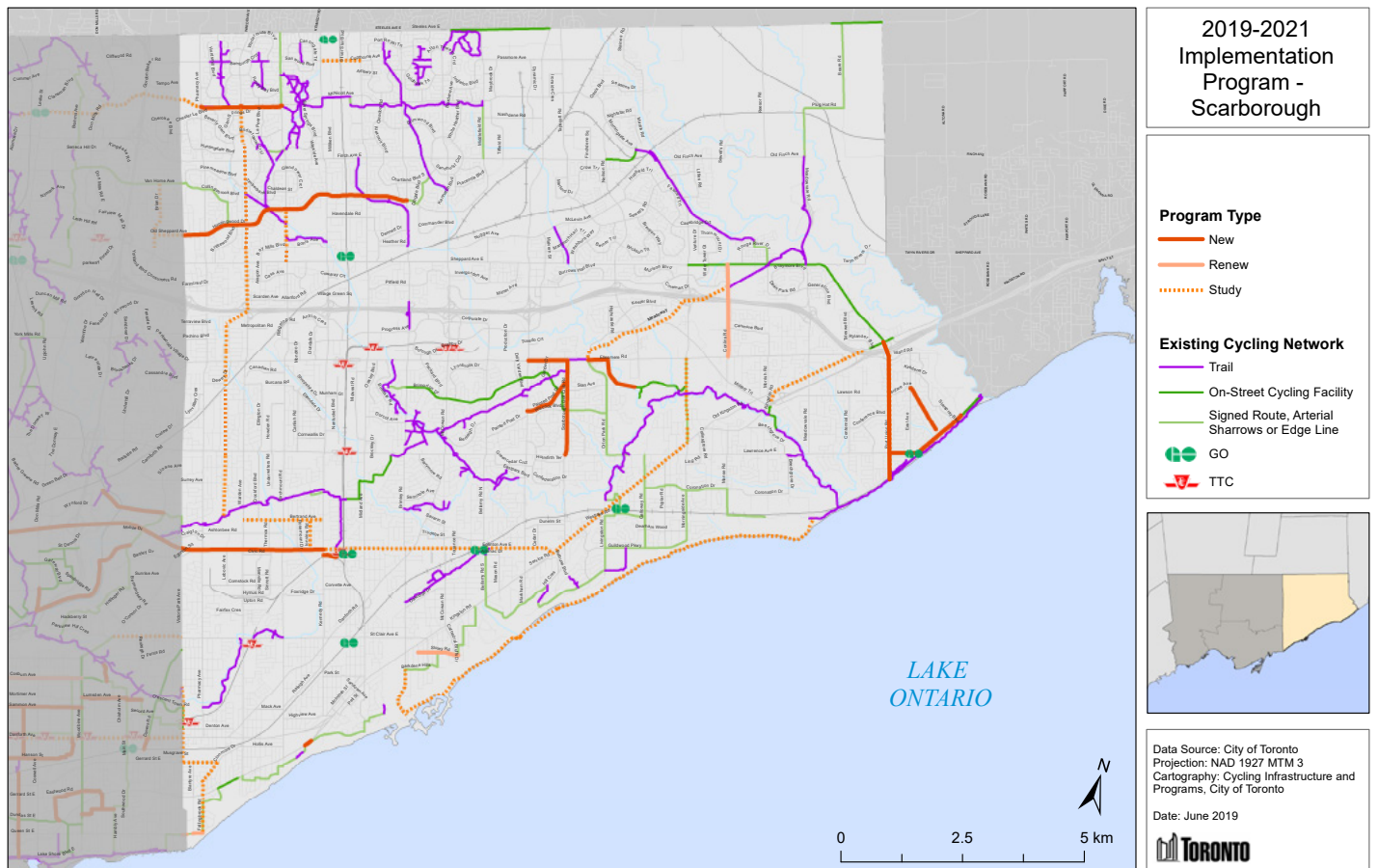
It is also worth noting that even this map greatly exaggerates the state of existing cycle facilities in Scarborough, as most of those indicated are actually pre-existing multi-use paths in parks that are often too narrow for safe use. For example, the East Highland Creek Trail from Brimley Avenue to Finch Avenue is 1.23m (4ft) wide, narrower than the City’s recommended minimum sidewalk width, and consists of sidewalk-style poured concrete slabs that are not intended for cycling. In Toronto, cyclists over the age of 14 are prohibited from riding on sidewalks because of the high likelihood of conflicts with pedestrians, enforced with a \$60 fine, so it is hard to understand why the City considers these narrow paths through parks to be the primary component of the “Existing Cycling Network” in Scarborough. The City of Toronto record on building cycling facilities in Scarborough can only be described as an abject failure, with almost zero progress in Scarborough since 2016 despite significant achievements elsewhere in the city.

The City is currently working on projects outlined in its current three-year rolling program, called the Near-Term Capital Implementation Program (2019-2021). The program plans over 120km of cycling infrastructure across Toronto, the Scarborough portion of which is shown in Figure 2.3.

The Second Quarter Update of the Near-Term Implementation Program was released in May 2021, identifying cycling infrastructure projects proposed in 2021 and 2022.<sup>24</sup>

Figure 2.3 City of Toronto ‘2019-2021 Implementation Program — Scarborough’

Source: City of Toronto<sup>25</sup>



<sup>24</sup> City of Toronto (2021). “2021 Cycling Network Plan Update: Progress, Prioritization, and Near-Term Program.” <https://www.toronto.ca/wp-content/uploads/2021/06/90bb-Cycling-Network-Plan-Update-BackgrounderMay2021.pdf>.

<sup>25</sup> [https://www.toronto.ca/wp-content/uploads/2019/07/994b-Scarborough\\_2019-2021.pdf](https://www.toronto.ca/wp-content/uploads/2019/07/994b-Scarborough_2019-2021.pdf).

The current reconstruction project for Port Union Road noted above includes sidewalks and bicycle lanes along a 2km corridor from Lawrence Avenue East to Island Road.<sup>26</sup> This project is included in the Near-Term Capital Implementation Program (2019-2021). The cycle lanes on Huntingwood Drive in the northwest corner of Scarborough have been completed, but those on Eglinton Avenue East from Victoria Park Avenue to Kennedy Road have been delayed by the Eglinton Crosstown transit project.

The Meadoway Project is a hydro corridor revitalization project in Scarborough led by the Toronto and Region Conservation Authority (TRCA). When completed, it will provide a 16km off-road multi-use trail for pedestrians, cyclists, and persons with disabilities all the way across Scarborough, from the East Don Trail in the Don River ravine to the main trails in Rouge National Urban Park, while also connecting to the Highland Creek ravine system in Morningside Park. The corridor will also have important connections to major arterials, and will complement the active transportation network on arterial roads.

The Meadoway Project — Eastern Gate



Rendering courtesy The Meadoway Project

<sup>26</sup> City of Toronto. Port Union Road Improvements. <https://www.toronto.ca/community-people/get-involved/public-consultations/infrastructure-projects/portunionroad/>.



# SCARBOROUGH URBAN FORM AND THE SCARBOROUGH OPPORTUNITY

• The Scarborough Opportunity

It is not an accident that Scarborough has limited infrastructure for active transportation, higher rates of deaths and serious injuries from collisions, and lower shares of walking and cycling than in older parts of the city. The priority of Scarborough's automobile-centred road design was to enable smooth automobile travel, centred on the development of a grid of arterial roads that would handle most trips, accommodate large amounts of traffic, and move cars through the system as fast as possible. These arterial roads connected with the 400-series highways, designed for inter-city travel, and local streets in neighbourhoods, which provided access to individual homes. Local streets were designed to be inconvenient for through trips, with winding street patterns and many looped streets, partly to ensure safety for pedestrians and especially children walking to school. Such "neighbourhood units," with schools and parks in the center of superblocks defined by arterial roads, were one of the main modernist ideas of the middle of the 20th century, designed to accommodate rapidly increasing automobile traffic and the shift of population to residential suburbs far from the city centre and existing public transit systems.<sup>27</sup>

As is typical of postwar suburbs, the vast majority of trips in Scarborough are made by car. This transportation system worked reasonably well for the first generation of Scarborough residents, who were predominantly middle-income, often families with young children, and mostly households with a single breadwinner who used the car to get to work. But Scarborough has changed greatly since then. Instead of being on the edge of open countryside, Scarborough soon became an inner suburb, with Richmond Hill and Markham expanding to the north, and Pickering, Ajax, Whitby, and Oshawa growing to the east, all generating more traffic. The population has become much more diverse, with many recent immigrants, while most households now have more than one earner, and many find that they need more than one car (although up to 38% of Scarborough households do not even have access to one car).<sup>28</sup> The number and distance of car trips per capita continues to increase, supported by the trend towards larger regional-scale big box stores and power

centers displacing smaller local stores.<sup>29</sup> The obstacles to through traffic in neighbourhoods mean that arterial roads have to carry almost all traffic, and they have become more and more congested, especially in peak periods when people are travelling to and from work. This congestion in turn means that bus travel is less efficient and more unreliable, as buses are increasingly stuck in traffic. In the Toronto area the worst congestion is increasingly found in the suburbs, where other mobility options are limited. The problems associated with automobile-dependent urban forms have been well documented. As most trips are faster and more convenient by car, driving is the dominant travel mode. Large amounts of surface parking for cars mean that population and jobs densities are even lower, and walking is inconvenient because distances are large and places like shopping malls are designed primarily for those arriving by car, not on foot or bike. In these areas, small stores often cannot survive because there is not much foot traffic, and it is often easier to drive to a power center than to walk to a store.

Over the last 30 years a consensus has emerged among transportation experts that automobile-dependent urban areas are bad for everyone. They suffer from congestion, collisions, increased pollution, lack of mobility options that harm everyone who can't drive or doesn't have access to a car, and negative health outcomes because residents do not benefit from the exercise provided by walking and cycling. High levels of fast traffic on arterial roads mean that it is dangerous to cycle on them, and uncomfortable to walk along them. This kind of suburban design simply does not work very well, and at the root of the problems is the design priority for cars and the neglect of other modes of mobility.

It is also increasingly agreed that the solution to automobile dependence is to make other mobility options, including transit, walking, and cycling much more convenient, safe, and attractive. This solution can benefit everyone by providing more options for getting around, and reducing congestion for all those trips that are still in motor vehicles, including buses.

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27 Johnson, D. L. (2002). "Origin of the Neighborhood Unit." *Planning Perspectives* 17(3), 227-245.

28 Ledsham, T. (2016). "The twisted myth of car ownership in Scarborough." *Spacing*. <http://spacing.ca/national/2016/06/06/twisted-myth-car-ownership-scarborough/>.

29 Buliung, R. and Hernandez, T. (2009). *Places to Shop and Places to Grow: Power Retail, Consumer Travel Behavior, and Urban Growth Management in the Greater Toronto Area*. Neptis Foundation. <https://neptis.org/publications/places-shop-and-places-grow>.

# The Scarborough Opportunity

Although it is highly automobile-dependent, Scarborough is also not typical of automobile-dependent suburbs in several key regards, and has a number of urban form characteristics that create major opportunities for a transition away from automobile dependence and towards more mixed mobility options.

First, Scarborough is not as low-density as a typical postwar suburb, but in fact has many areas of higher density, mostly located on the arterial roads and in clusters near shopping malls. Partly as a result of these higher densities, Scarborough already has a relatively high transit ridership, which in the past has grown when better transit service has been supplied. Major new transit investments such as the Eglinton Crosstown, the Line 2 Scarborough Subway Extension, the planned Eglinton East LRT to Malvern, and the GO Regional Express Rail expansions promise significant improvements to transit service in the future.



photo by Jeff Hitchcock



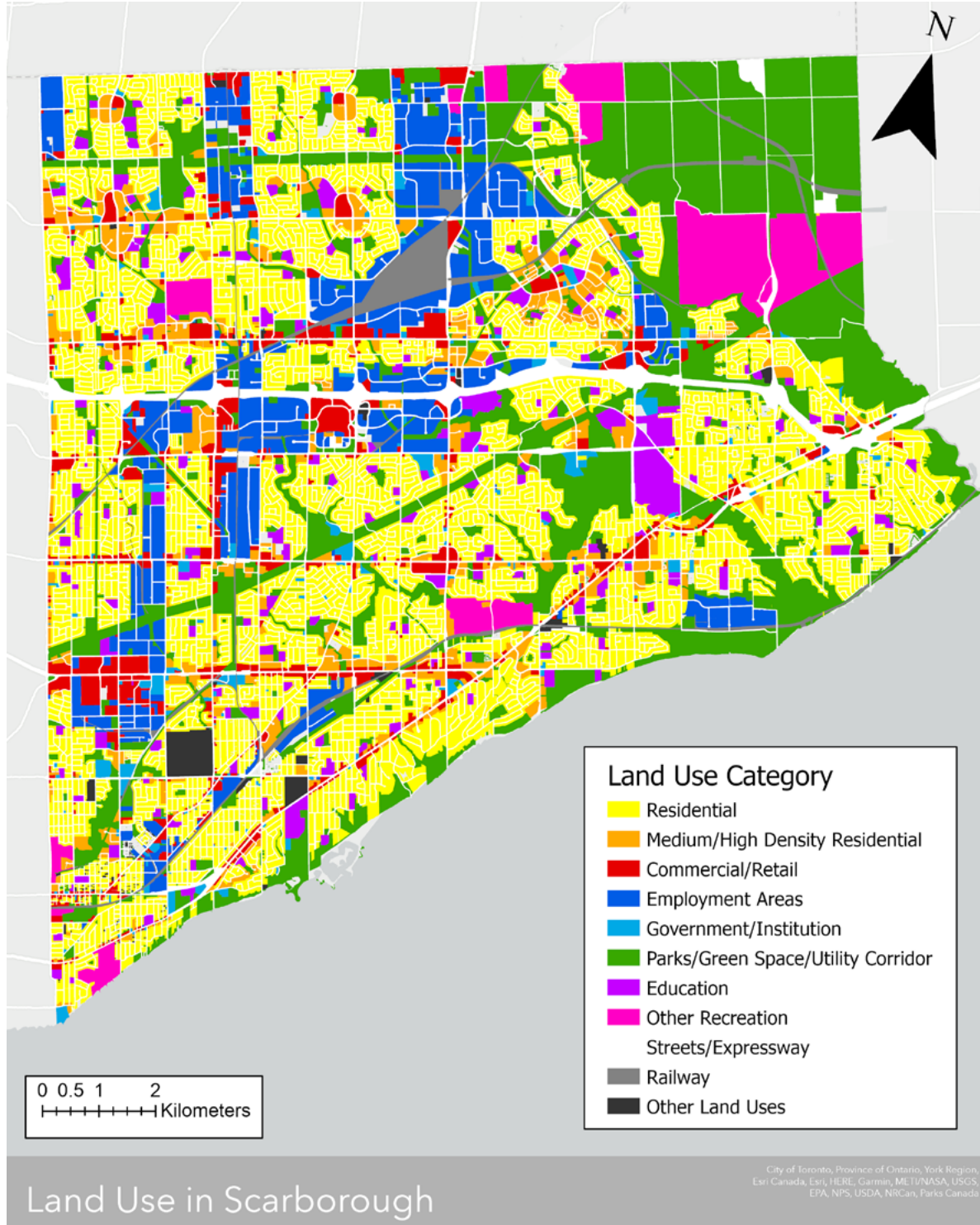
photo by Simon P.

Second, while not as mixed-use as downtown Toronto, Scarborough has a much greater mixture of land uses than most other postwar suburbs. Scarborough includes several large employment areas (shown in blue in Figure 3.1), many of which saw significant conversion to commercial and retail land uses, including many restaurants, since the mid-1990s. Even more importantly, Scarborough has a

number of major mixed-use corridors, such as Kingston Road, Eglinton Avenue East, Lawrence Avenue East, Sheppard Avenue East, Finch Avenue East, Kennedy Road, and Markham Road, that are clearly visible in Figure 3.1 as a large grid of corridors of retail land-uses (red), higher-density residential land-uses (brown), and institutional land-uses such as schools and hospitals (turquoise).

Figure 3.1 Scarborough Land Uses

Mapping: Isaac Bortolussi

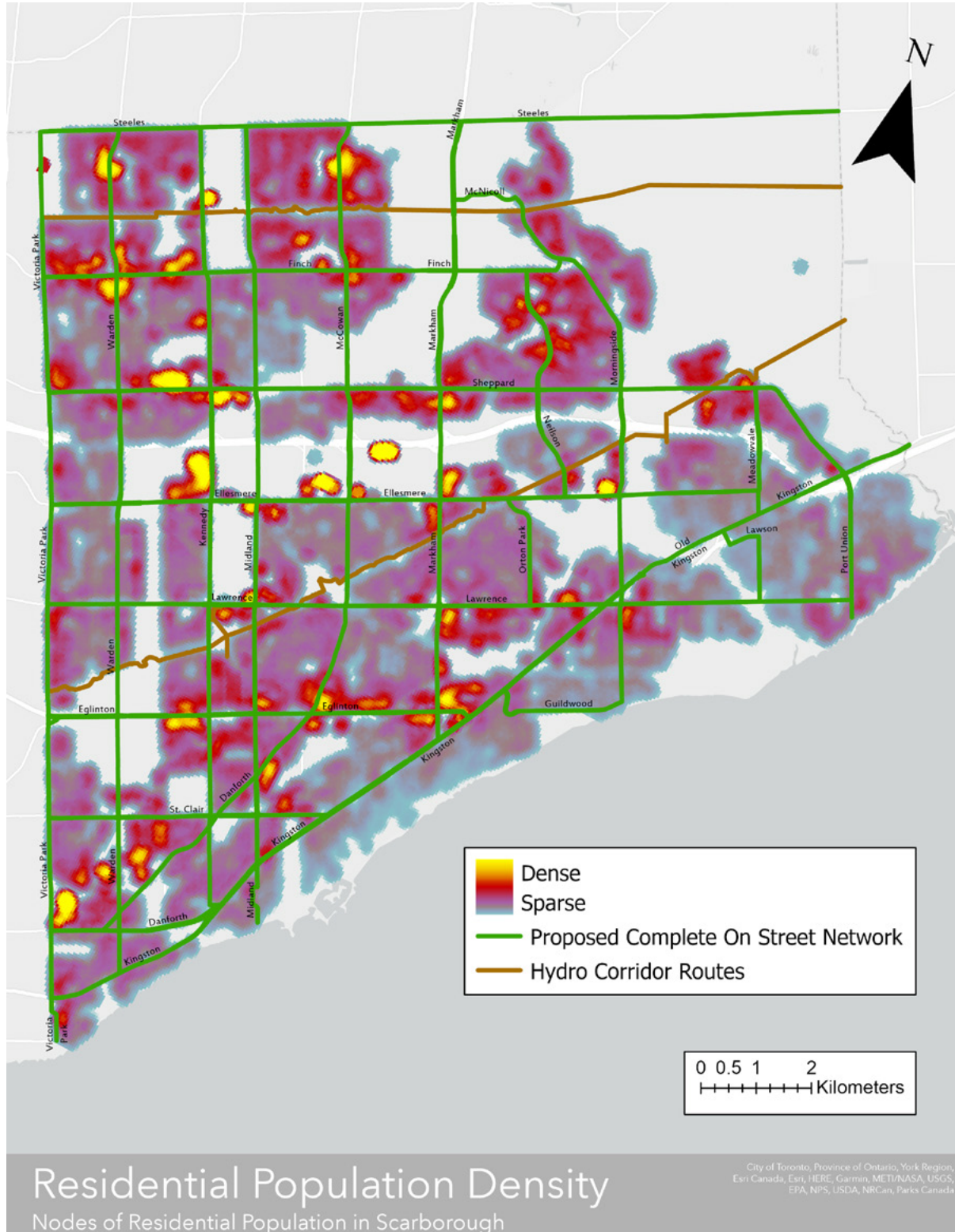


Significantly, almost all major clusters of higher-density residential land uses are located in nodes at the intersections of these arterial roads, or are arranged along them in corridors, as shown in Figure 3.2. These patterns

of higher density land uses are ideal to encourage active transportation for large numbers of short trips, if only our streets were designed to encourage such activity, instead of discouraging it.

Figure 3.2 Clusters of Higher Population Density in Scarborough

Mapping: Isaac Bortolussi

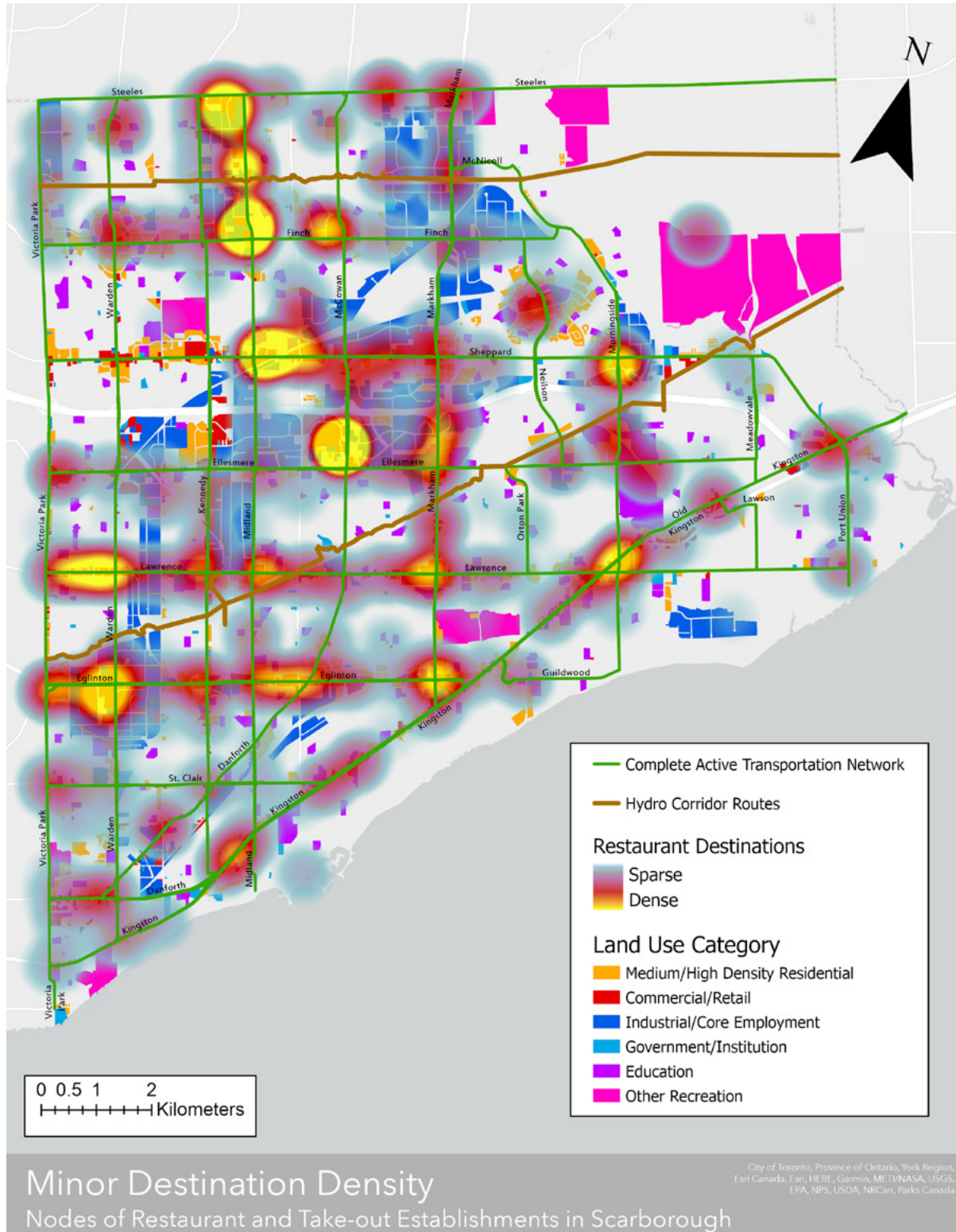


These mixed-use corridors are within walking and cycling distance of almost all residential areas in Scarborough, are the location of heavily-travelled bus routes, and already have significant numbers of jobs and destinations, as well

as providing ample opportunities for intensification. This pattern is also seen in Figure 3.3, which combines a “heat map” of clusters of restaurants along with mapping major institutional and commercial land uses.

Figure 3.3 Clusters of Restaurants in Scarborough

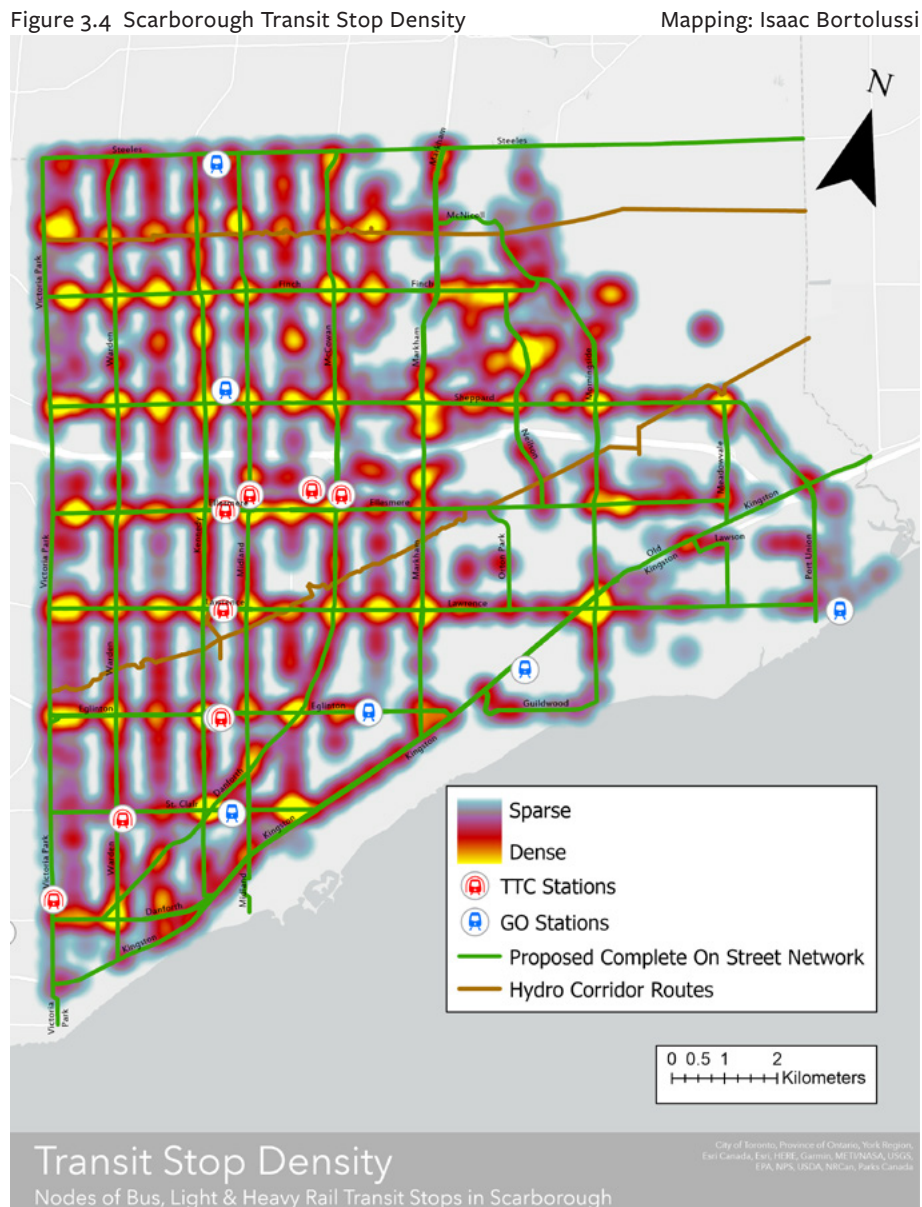
Mapping: Isaac Bortolussi



Third, and also seen in Figures 3.2 and 3.3, Scarborough was designed with several major higher-density mixed-use nodes, including Scarborough Town Centre, Scarborough Village, Malvern, Agincourt North, and L'Amoureux, to which can be added the emerging redevelopment areas of the Golden Mile and Kennedy Station. The combination of mixed-use nodes and corridors provides an opportunity for encouraging a shift from automobile-dependent travel patterns to more mixed mobility options, with rapid transit along the corridors linking the nodes together and a concentration of destinations in locations that are walkable and accessible by transit and bicycle. The grid of arterial roads is also the location of most public transit stops in Scarborough, as shown in Figure 3.4, a heat-map analysis of the density of transit stops. Given the high levels of bus ridership throughout Scarborough,

and the fact that all transit trips begin and end with pedestrian or cycle trips, the transit network is a very important consideration when planning improved walking and cycling infrastructure.

Fourth, in part because Metro Toronto prioritized flood prevention following Hurricane Hazel in 1954, Scarborough has an excellent regional park system, including much of the Highland Creek floodplain, the Rouge National Park, and the Lake Ontario shoreline. Together with two wide Hydro transmission corridors, the creeks and river valleys create a world-class opportunity for a network of off-road cycling and walking paths both for recreation and for commuting, especially if linkages are made between this network and the major transit nodes shown in Figure 3.4.

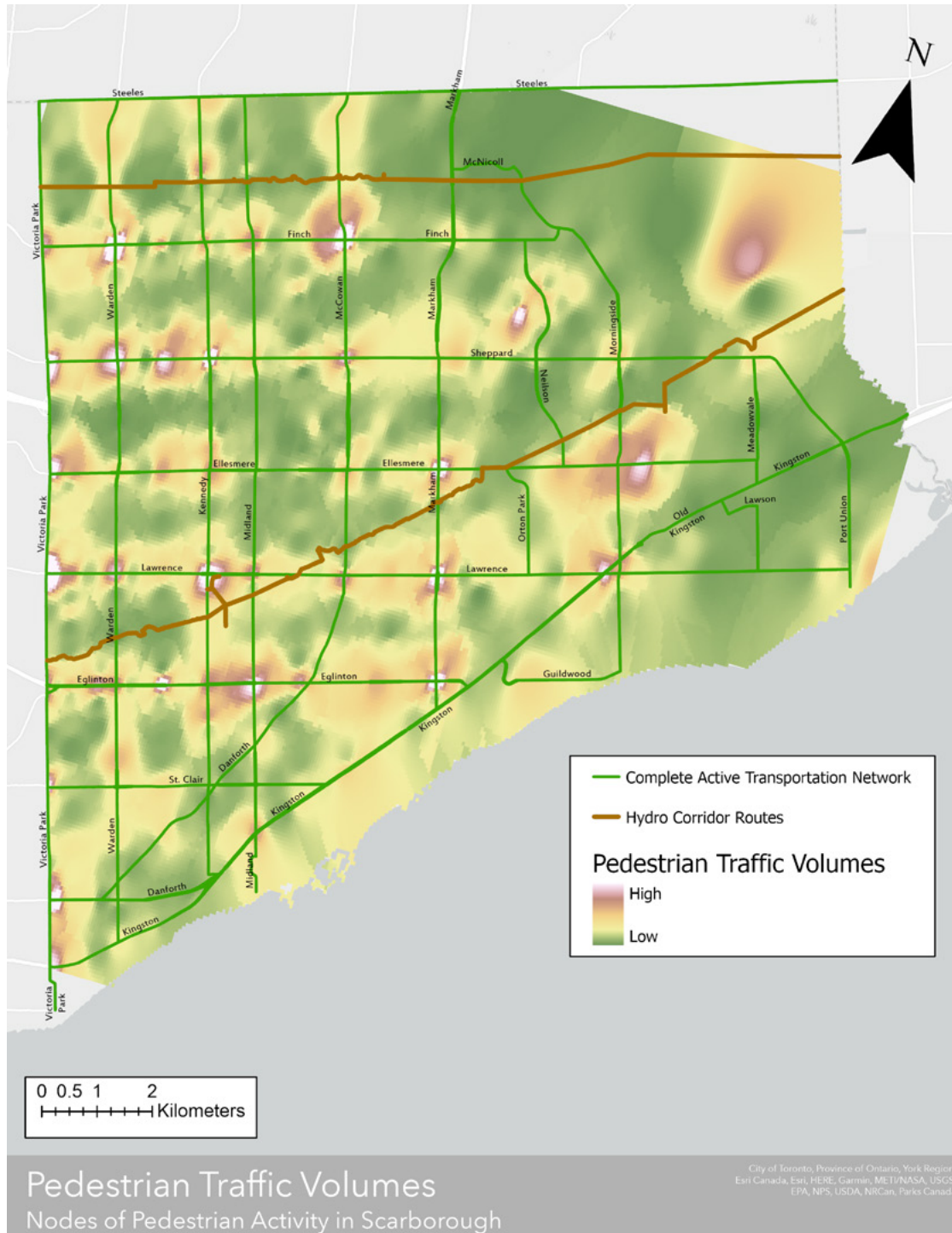


Fifth, the potential for a high-quality and usable pedestrian network already exists. Most streets have sidewalks on both sides, and considerable attention was paid during development to ensure that connections were made between local streets and arterial roads. Major improvements are readily achievable with attention to improved crosswalks, increased capacity near major

destinations and transit stops, better connections to the off-road network, and increased attention to safety and universal accessibility. Current pedestrian activity is significantly clustered at nodes in the public transit system and at arterial road intersections, as well as at the Toronto Zoo, as shown in Figure 3.5.

Figure 3.5: Scarborough Pedestrian Traffic Volumes (2016)

Mapping: Isaac Bortolussi



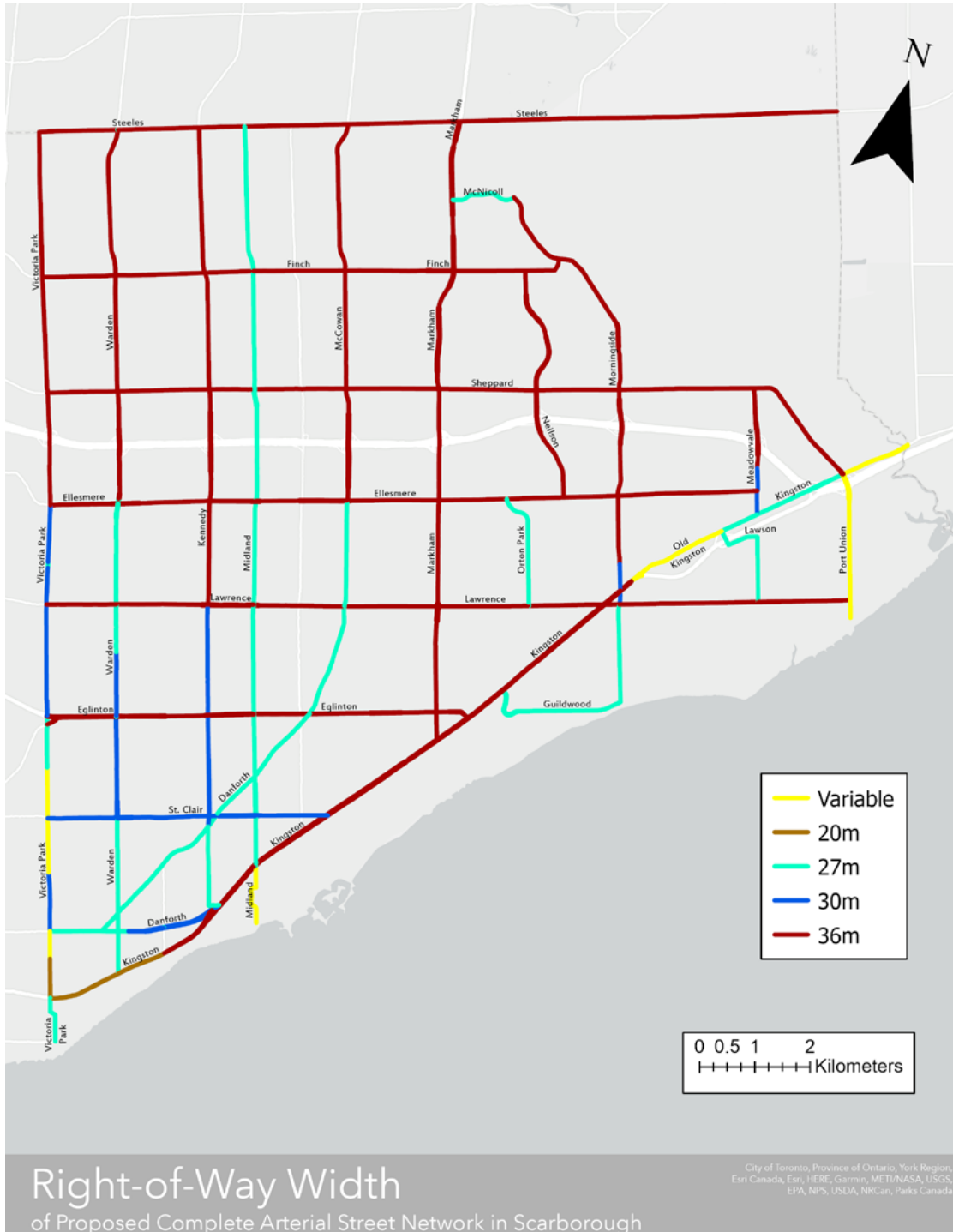


Finally, when the arterial road network was being planned, road allowances were designed to be consistently very wide. Most of Scarborough's arterial roads are a minimum of 36 metres wide, so in most cases there is in fact a lot of space in the existing right-of-way to build better cycle lanes and sidewalks without needing to cut into the road space for motor vehicles. This situation is very different

from downtown, where rights-of-way are much narrower, so that adding space for pedestrians or cyclists almost always requires reducing the space for motor vehicles. In Scarborough, there is space for high-quality pedestrian and cycle networks on almost all the arterial roads, as shown in Figure 3.6.

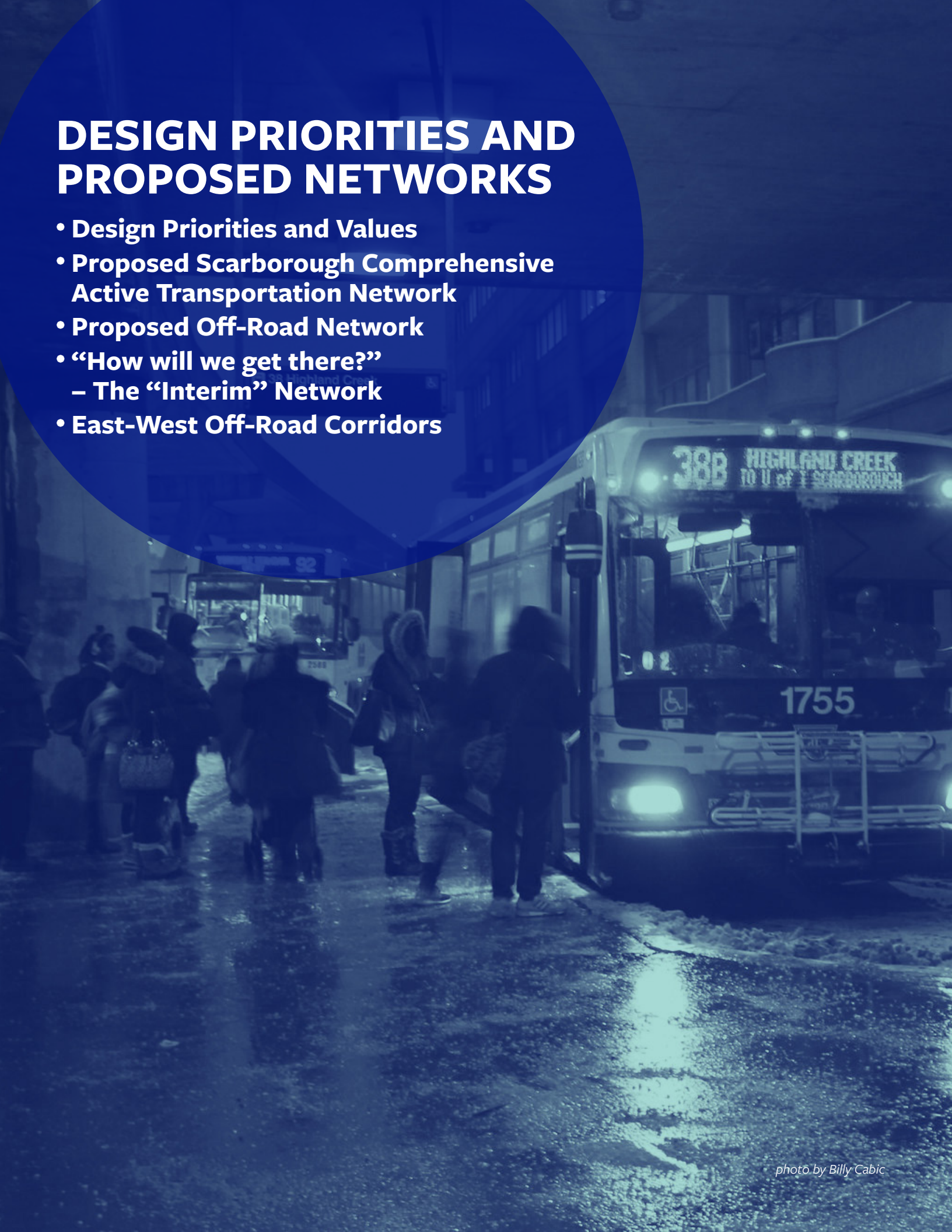
Figure 3.6: Scarborough Arterial Right-Of-Way Widths

Mapping: Isaac Bortolussi



# DESIGN PRIORITIES AND PROPOSED NETWORKS

- Design Priorities and Values
- Proposed Scarborough Comprehensive Active Transportation Network
- Proposed Off-Road Network
- “How will we get there?”
  - The “Interim” Network
- East-West Off-Road Corridors



## Design Priorities & Values

This proposal reflects and builds on the vision for streets outlined in the City of Toronto’s Official Plan, Complete Streets Guidelines, Vision Zero 2.0 framework, and Green Streets Technical Guidelines as a starting point for setting design priorities and objectives in transforming Scarborough. This proposed network also responds to

the Official Plan goal of ensuring cycle facilities within 1km of every Toronto resident. In designing this proposal we started with the following priorities, which inform a “complete streets” approach that is context-specific and responsive to the needs of those who live, work, and play in Scarborough.

<b>Network Connectivity</b>	The network must connect all places in Scarborough and enhance access to transit networks, neighbourhoods, stores, restaurants, jobs, schools, parks, and green space.
<b>Accessibility &amp; Convenience for Active Transportation</b>	The network must make the choice of active travel modes easier and more intuitive. The more people using the network the better. Capacity increases are not expensive compared to adding capacity for cars.
<b>Equity</b>	Active transportation infrastructure must increase access and improve the experience of the street for all, especially for people belonging to historically marginalized groups and those living in poverty.
<b>Safety</b>	The network must enhance everyday safety for all road users, regardless of age, mobility, or mode of transportation.
<b>Enhance Multi-Modal Mobility</b>	The network must enhance mobility options for all road users, including pedestrians, cyclists, transit riders, and those in motorized vehicles, while encouraging active and sustainable transportation as a viable travel mode.
<b>Climate Change</b>	The network must contribute to the City’s climate change goal of having over 75% of short trips (<5km) conducted by walking or cycling.
<b>Destinations</b>	The network should connect to appealing destinations to encourage residents to shop, use services, and engage in recreation locally instead of travelling outside of the community.
<b>Commuting</b>	The network must make it easier for a growing share of residents to commute from home to work/school by active transportation and public transit.
<b>Liveability &amp; Quality of Life</b>	The network must help residents to experience Scarborough as a place that is enjoyable and easy to get around without an automobile.
<b>Attractive &amp; High-Quality Public Realm</b>	The network must incorporate a high-quality, attractive public realm (including street furniture and green infrastructure) to encourage opting for sustainable modes of transportation.

In alignment with these priorities, our project is informed by the following objectives for Scarborough:<sup>30</sup>

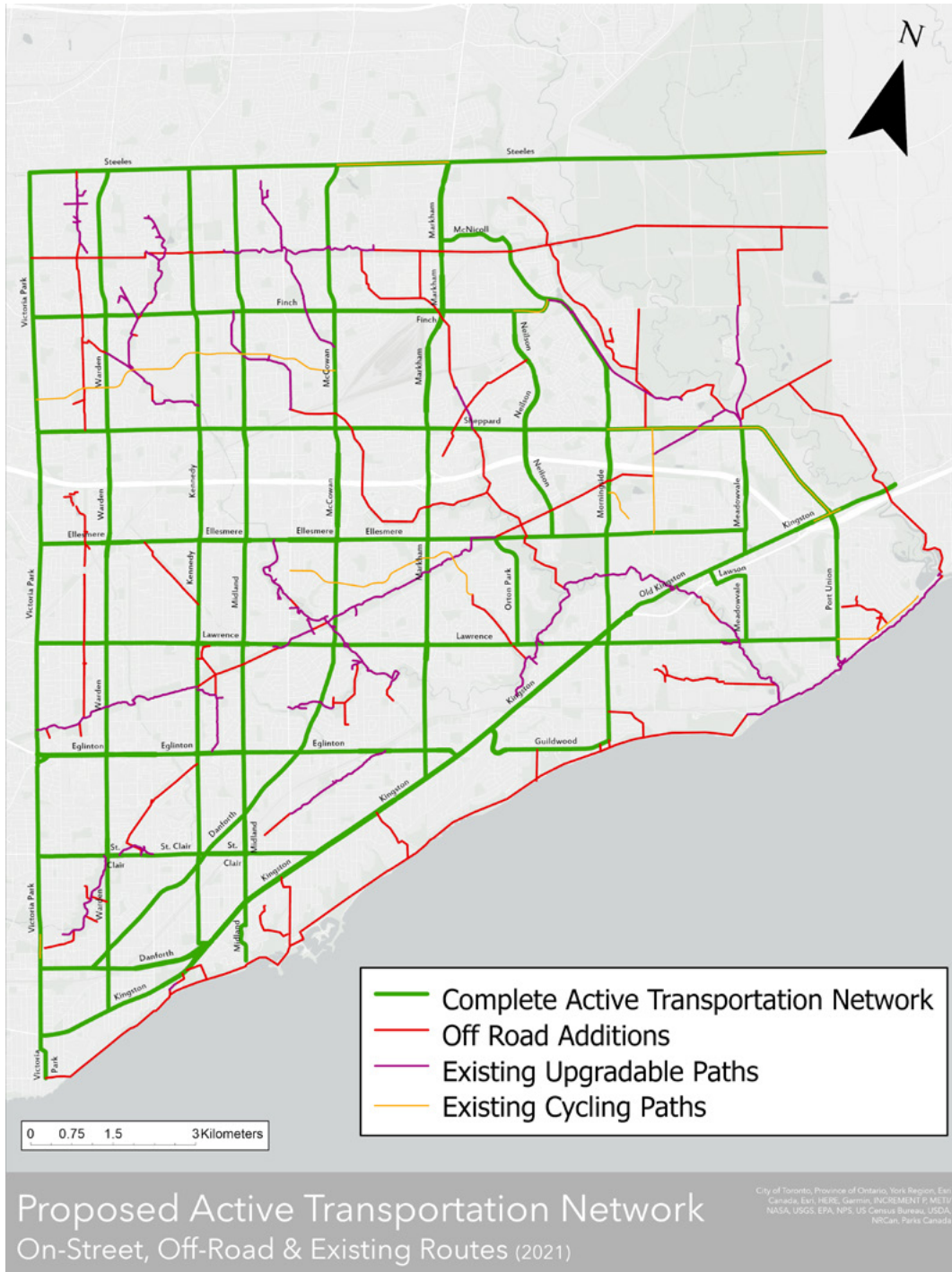
- Increased safety for all user groups (including pedestrians, cyclists, transit users, and motor vehicle occupants) and populations regardless of class or ability (age groups, income levels, gender, etc.)
- Increased active and sustainable transportation
- Improved levels of mobility
- Improvements to the public realm and surrounding contexts

<sup>30</sup> City of Toronto. RapidTO. <https://www.toronto.ca/services-payments/streets-parking-transportation/transportation-projects/rapidto/>.

Figure 4.1 shows our proposal for a comprehensive active transportation network for Scarborough. The suggestion is not that this is the only possible configuration, but that this is the scale of intervention that is necessary to achieve the City of Toronto Official Plan goal of providing cycle facilities within 1km of all residences. A comprehensive network such as this will also be necessary to achieve

the TransformTO goal of 75% of short trips being made by walking or cycling. We now have less than 29 years to achieve this transformation, and we are convinced that if the City does not develop and approve a comprehensive long-term plan such as this relatively soon, and fails to set targets for its completion well before 2050, neither of these key policy goals will be met.

Figure 4.1 Proposed Scarborough Complete Active Transportation Network Mapping: Isaac Bortolussi



Our proposed comprehensive active transportation network scores highly on many metrics. For instance, over 97% of residents, jobs, and businesses are within 1km of the on-street and hydro corridor routes alone (see Appendix B). Including the off-road network not only expands the opportunity to encourage utilitarian and recreational trips, but also increases these metrics to close to 100% accessibility.

The proposed comprehensive active transportation network has been selected to maximize the opportunities presented by Scarborough to create an excellent on-street and off-street network. Fundamentally, this proposal ensures that the most appropriate arterial roads and off-road routes are selected to promote the uptake of active transportation and multi-modal mobility.

The proposed comprehensive active transportation network was selected by focusing on the following criteria:

- Routes that offer a clear opportunity for expanding an interconnected network that avoids isolated segments or “islands” of infrastructure;
- Routes that create an approximate 2km grid, to ensure that all residents and employees have access to the comprehensive network within 1km of where they live or work;
- Routes that build on, or take advantage of, existing dedicated or potentially upgradable city-recognized paths;
- On-street routes that service the nodes of: major and minor destinations and points-of-interest, employment and business activity, high-density residential developments, transit activity (bus and higher order transit), and high-volume pedestrian activity;
- Off-road routes that take advantage of existing public lands, including corridor lands or natural features, that link major on-street arterials and residential enclaves; and,
- Routes that avoid, or minimize, intersection with obstacles such as inaccessible slopes, highway and rail corridors, and nodes of high-volume vehicular traffic.

The proposed comprehensive network, which totals approximately 437km of dedicated active transport infrastructure, greatly increases the service area for safe travel by people walking and cycling. Currently, less than 25km of dedicated cycling facilities exist, and less than a quarter of residents in Scarborough currently live within 1km of cycle routes.

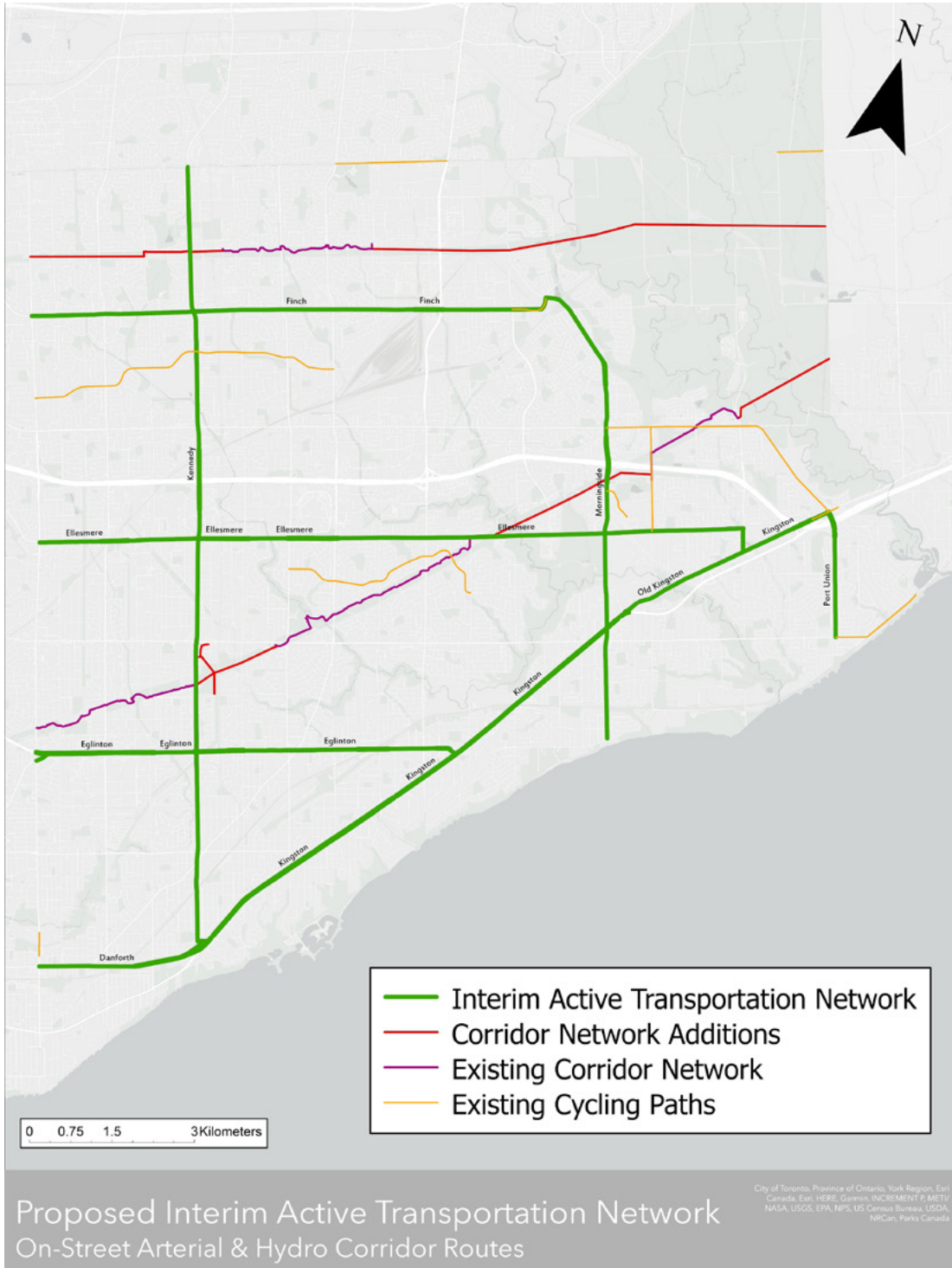


# “How will we get there?” – The “Interim” Network

To achieve the proposed comprehensive active transportation network, an interim step is recommended. This step will begin laying the framework and bridging the significant discrepancies between existing infrastructure and the comprehensive active mobility goals. This interim network expands the existing routes by a factor of six, to around 150km.

Figure 4.3: Proposed Scarborough Interim Network

Mapping: Isaac Bortolussi



## East-West Off-road corridors

For the purposes of this proposal, the priorities for the interim network are as follows:

- Provide the most meaningful and immediate network access between significant residential communities, commercial and retail destinations, public transit, and recreational spaces;
- Begin to establish the foundation for a network of complete streets;
- Focus on streets that are in the process of developing, or already contain, complete streets design principles, including dedicated active transportation corridors;
- Focus on routes that could allow for construction to begin expeditiously, due to already completed suitability, environmental, or implementation studies; partially completed existing networks; or locations where disruption to residents and road users would be minimal; and
- Avoid routes that present significant obstacles to implementation, such as those requiring raised or tunneled infrastructure, bypasses, or significant right-of-way widening.

Building out the Finch Hydro Transmission Corridor and the Gatineau Hydro Transmission Corridor offers the opportunity to significantly expand active transportation “highways” along existing, very wide right-of-way corridors. For portions of this off-road network, particularly in central Scarborough, the infrastructure already exists, and merely needs to be upgraded to support an increase in usage. Establishing and expanding these corridors is a preliminary step in creating the active transportation network, and is subject to some obstacles including the ownership of the lands by Hydro One and the presence of Hydro One assets. Given that active transportation corridors have already been established in much of these corridors, however, these obstacles should be resolvable.



# PEDESTRIAN NETWORK

- Existing Pedestrian Network in Scarborough
- The Pedestrian Context in Scarborough
- Intersections
- Recommendations

A comprehensive pedestrian network offers the most efficient, sustainable, and accessible form of active transportation, one that can serve the first and last mile of anyone's trip. The fundamental principles of a pedestrian network include safety for pedestrians of all ages and abilities, connectivity to places of interest, accessibility through addressing existing barriers, and an inviting and pleasant sidewalk environment for pedestrians that features well-designed intersections, reasonably-spaced crosswalks, good connections to local streets, extensive street tree coverage, and appropriate street furniture.

The Vision Zero 2.0 framework supports the implementation of a comprehensive pedestrian network to ensure a safe experience for all road users regardless of age and abilities. Vision Zero's context in Scarborough is

concerning because the rate of fatalities per capita due to traffic collisions is the highest amongst the four districts in Toronto, at 3.04 per 100,000 population. The urban form of Scarborough is uninviting for pedestrians. Residents in Scarborough must walk an additional six minutes to use a safe pedestrian crossing, because Scarborough has the longest walking distance (870m) in the city between protected pedestrian crossings. The infrequent protected crossings push pedestrians to cross at uncontrolled midblock locations, which increases pedestrians' exposure to risk of collisions.<sup>31</sup> Moreover, pedestrians bear a disproportionate share of road injury risks in comparison to motorists, according to a report from the Chief Coroner for Ontario.<sup>32</sup> In Scarborough, two-thirds of traffic fatalities are pedestrians, while they only make up 5% of the travel mode share.<sup>33</sup>



photo by Billy Cabic

31 City of Toronto (2019). "Scarborough District Safety Action Plan."

32 Office of the Chief Coroner of Ontario (2012). Pedestrian Death Review. <https://www.mcscs.jus.gov.on.ca/sites/default/files/content/mcscs/docs/ec161058.pdf>.

33 City of Toronto (2019). "Scarborough District Safety Action Plan."

## Existing Pedestrian Network in Scarborough

Scarborough is well-supplied with sidewalks on arterial roads, with over 90% of the arterials listed in the proposed active transit network having sidewalks on both sides. These sidewalks connect to most points of interest, such as big box grocers, schools, parks, places of worship, community and recreation centres, libraries, and public transit stops. Meanwhile, 2% of the arterial road network contains no sidewalks at all, with the majority of these segments existing along Steeles Avenue.

On the other hand, 24% of local roads in Scarborough do not have sidewalks, which are necessary to connect to the wider pedestrian network on the arterial roads and to serve the last mile of many trips to points of interest.<sup>34</sup> This absence of sidewalks undermines safety, comfort, and accessibility for pedestrians, while discouraging the use of active transportation.

Sidewalks and safe crossings are the bare minimum of a comprehensive pedestrian network, and these deficits must be rectified. But to encourage walking, it is not enough to simply ensure the safety of pedestrians; the City needs to create an environment where walking is joyful and pleasant. Doing so means making sure there is shade (for example, through trees), benches, beauty, places of interest along the way, and a comprehensive network of routes that allow walking to be a better option for more short trips.

Despite the presence of sidewalks, the quality of most of the pedestrian network is poor due to the limited width of these sidewalks. Their width is usually 1.5m, which is too narrow for streets with increasingly large numbers of pedestrians (and less than the minimum width of a 2.1 metre pedestrian clearway standard in Toronto's Complete Streets Guidelines). In addition, many sidewalks are adjacent to fast-moving traffic, without any physical barriers to ensure the safety of pedestrians, creating a hostile environment that discourages walking (see Figure 5.1). Furthermore, the lack of protected crossings for long stretches of wide arterial roads pushes pedestrians to cross at uncontrolled midblock locations; missing links and discontinuous sidewalks in Scarborough also create the need to cross midblock to continue trips on the opposite sidewalk (see Figure 5.2). These midblock crossings increase the risk of pedestrians being hit by vehicles. For example, 40% of collisions with pedestrians resulting in death or serious injury happen when pedestrians are crossing midblock at uncontrolled locations.<sup>35</sup> The posted speed limits on arterials of 50 km/hr or more mean that the impact of a collision at full speed is usually fatal for pedestrians.<sup>36</sup>

Overall, the existing pedestrian network presents opportunities to improve the safety, comfort, accessibility, and beauty of Scarborough's arterials to create an inviting atmosphere for pedestrians, which will also benefit all road users. Ultimately, reimagining the arterials in Scarborough with "complete street" features will enhance the quality of the pedestrian network.

Figure 5.1: Narrow Sidewalk Abutting Fast-Moving Traffic, Eglinton Avenue East near Markham Road



Photo by Jamila Gowie

Figure 5.2: Missing Crossing at Middlefield Road near Steeles Avenue East



Photo by Ivan Chong

<sup>34</sup> City of Toronto (2019). "Scarborough District Safety Action Plan."

<sup>35</sup> Hess, P. and Farrow, J. (2010). Walkability in Toronto's High-rise Neighbourhoods.

<sup>36</sup> Office of the Chief Coroner for Ontario. Pedestrian Death Review.

## The Pedestrian Context in Scarborough

The automobile-oriented urban form was based on the assumption that residents would own a motor vehicle to get around the city. However, the changing socioeconomic context of Scarborough now hinders car ownership, hence the relatively low level of car ownership, given the area's urban form, of 0.44 cars per person.<sup>37</sup> As a result, many residents rely heavily on public transit to get to places; but the growing transportation poverty in Scarborough due to the lack of access to a motor vehicle, low levels of public transit services, and limited facilities for active transportation such as walking or cycling further exacerbates the social disadvantages of residents in Scarborough.<sup>38</sup>

Active transportation is an equitable, affordable, and accessible form of transportation that enhances the mobility of individuals who do not have access to a motor vehicle, particularly school-aged children, people with disabilities, low income individuals and families, and the elderly. As a result, walking has become the primary mode of transportation to connect older adults with public transit nodes. For instance, for the Toronto Seniors Strategy 2.0, the City conducted a survey and observed a strong reliance on walking for seniors, with 58% of the respondents using public transit and 48% of the respondents walking to get to points of interest. In addition, it found that for older adults the main concerns regarding active transportation are pedestrian safety and the lack of age-friendly street furniture such as benches to allow for rest stops. These are particularly significant issues in Scarborough, where distances to destinations are further because of the dispersed and low-density urban form.<sup>39</sup> Addressing safety concerns would increase the confidence of pedestrians while the addition of age-friendly street furniture would enhance the comfort of the network for all pedestrians on the sidewalks.

## Intersections

Most collisions happen on wide arterial roads that carry high volumes of traffic, and the current designs of intersections fail to ensure the safety of all road users, as evidenced by KSI (killed and serious injured) rates. As an illustration, 22% of collisions involving pedestrians were at signalized intersections and were caused by a left- or right-turning motor vehicle, with a significant number of fatalities being pedestrians 65 and older.<sup>40</sup> Many intersections feature a wide curb corner radius, which allows motorists to make right turns at a high speed, endangering the safety of pedestrians. Moreover, the wider widths of the intersections in Scarborough decrease the visibility of pedestrians to motorists, and increase the exposure of pedestrians to risk due to a longer crossing distance. The lack of a pedestrian refuge island on wide intersections (more than 6 lanes) and short pedestrian signal timing endanger vulnerable road users such as school-aged children (4-19) and older adults (age 65 and over).

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37 Ledsham. "The twisted myth of car ownership in Scarborough."

38 Allen, J. and Farber, S. (2021). "Suburbanization of Transport Poverty." <https://doi.org/10.1080/24694452.2020.1859981>.

39 City of Toronto (2018). Toronto Seniors Strategy 2.0. <https://www.toronto.ca/wp-content/uploads/2019/02/93cd-CoT-seniors-strategy2.pdf>.

40 City of Toronto (2019). "Vision Zero 2.0 Road Safety Plan Update." <https://www.toronto.ca/legdocs/mmis/2019/ie/bgrd/backgroundfile-134964.pdf>.

## Recommendations

The pedestrian network should ensure connectivity, convenience for pedestrians, safety, accessibility, comfort, enhanced mobility options for everyone, and an attractive public realm to make all trips more interesting and enjoyable. Since sidewalks serve everyone and are essential for the first and last mile of many trips, the need for improvements to the quality of sidewalks is pressing. The City can provide a safer and more pleasant experience for pedestrians by:

- Widening the width of all sidewalks in the comprehensive network to a minimum of 2.1m to ensure comfort and safety;
- Tightening corner radii to discourage right turns at high speed;
- Creating pedestrian refuge islands for wide intersections with six lanes or more;
- Installing midblock crosswalks to reduce midblock collisions;
- Implementing age-friendly street furniture (e.g. benches) to support walking for older adults;
- Greening arterial roads with trees and landscaping; and
- Leveraging off-road trails by installing lighting and implementing winter maintenance, to improve access and provide better options.

This is not an exhaustive list of elements to improve the quality of the network, as each intersection and sidewalk is unique. Therefore, there is no silver bullet for addressing the existing inadequacy in the pedestrian network. It requires sustained effort and careful analysis of each intersection to ensure the appropriate interventions are implemented to resolve the elements that put pedestrians at risk.

# CONCLUSIONS

In this report, we have argued that the current infrastructure for pedestrians and cyclists in Scarborough is inadequate and unsafe. Scarborough is designed for automobile travel, with walking and cycling treated as residual modes. Scarborough's current infrastructure restricts people's mobility choices, as walking and cycling are not attractive modes of mobility for most trips. Sidewalks are inadequate, intersection designs are dangerous, and a nearly complete absence of cycle infrastructure makes cycling difficult and dangerous. This situation is unsafe, uncomfortable, and unfair. It is time to fix these problems.

The proposed comprehensive active transportation network has been designed to capitalize on the opportunities that exist in Scarborough and to help transform it into a community that supports walking and cycling as everyday modes of travel.

Our analysis suggests that the proposed network scores highly on many metrics, with over 97% of residents, jobs, and businesses being within 1km of the on-street and hydro corridor routes alone. The off-road network not only expands the potential uptake by utilitarian and recreational users alike, but also increases these metrics to approach 100% accessibility.

In our view, it is essential that the City design and adopt a long-term plan comparable in ambition to that proposed in this report. The City of Toronto currently relies primarily on the implementation of other development projects such as street rebuilds to implement streetscape improvements. Unfortunately, without a long-term plan for cycle and pedestrian networks, it is highly unlikely that an adequate active transportation network will ever be achieved in Scarborough, as witnessed by the recent installation and removal of the Brimley Road ActiveTO bike lane pilot.

Scarborough needs greatly improved active transportation infrastructure, with a focus on creating a comprehensive network that will offer a safe and connected pedestrian and cycling network that will meet the City of Toronto's already-established goals for safety, transportation, and addressing climate change. It is past time to get to work on building better active transportation facilities throughout Scarborough.

# APPENDIX A

## EVALUATING THE CURRENT, INTERIM, AND COMPREHENSIVE NETWORKS

	Current	Interim	Comprehensive (On-street/Corridor Only)	Comprehensive Combined (Including Off-Road))
<b>Total length of all facilities</b>	23.54km	150.57km	301.73km	437.49km
<b>Population within 1km, and %</b>	148,650 23.6%	483,440 76.7%	623,810 98.9%	628,500 99.7%
<b>Area of networked land within 1km, and %</b>	38.48 <sup>2</sup> 20.5%	123.35km <sup>2</sup> 65.8%	161.95km <sup>2</sup> 86.3%	173.45km <sup>2</sup> 92.48%
<b>High-rise/mid-rise residential within 1km, and 1%</b>	90 15.3%	504 85.9%	587 100%	587 100%
<b>Transit stops within 1km, and %</b>	407 26.3%	1,269 82.1%	1,539 99.5%	1,546 100%
<b>Major Destinations within 1km, and %</b>	91 30.5%	258 86.8%	294 98.7%	298 100%
<b>Businesses within 1km, and %</b>	5,480 19.6%	21,330 76.2%	27,330 97.6%	27,680 98.9%
<b>Employment within 1km, and %</b>	25,920 15.2%	124,420 73.0%	166,250 97.5%	168,620 98.9%
<b>Population in an NIA within 1km, and %</b>	40,340 22.4%	146,580 81.4%	178,530 99.1%	180,100 100%

### Raw values

**Area:** 187.7km<sup>2</sup>

**Population:** 630,660

**# of high-rise buildings:** 587

**# of major destinations:** 298

**# of transit stops:** 1,546

**Businesses:** 28,000

**Employment:** 170,450

**NIA population:** 180,100

**BIA businesses:** 1,370;

**BIA jobs:** 7,730

# APPENDIX B

## PERSONAL NARRATIVES

### Jamila's Story

“When I had access to a car, all those problems seemed to fade away momentarily. I could reach my destination faster and more safely as long as everyone on the road practiced safe driving.”

Living in Scarborough has always been something I could be proud of. I grew up here and resided in the same house in Malvern for 17 years. I lived in a multicultural environment where my friends and colleagues could share and celebrate traditions and customs together. Everything I needed was available in Scarborough — my schools, my job, my doctors were all within a few kilometres of each other. When it came to reaching my destinations, the travel mode always made the biggest impact on my day. I often chose to use public transit, to bike, or to walk for many reasons:

- **Financial reasons:** A monthly bus pass is cheaper than a car. The one-time purchase of a bicycle is cheaper than paying bus fares every day. Walking is free.
- **Health reasons:** Combining these modes was also a great source of physical activity. I would bike down the Finch hydro corridor then hop on the bus when I got tired. I would walk to get my dinner and to local appointments.

But using these modes is easier said than done.

Scarborough was designed to transport people by automobiles. This has always been apparent. When I walk to a local plaza I cannot help but notice that buildings are set at the back of the lot, and parking spaces are pushed forward. Anytime I was without a car, I felt that the roads were not meant for me. I would feel a loss of time. I had to arrive at the station almost an hour earlier in case buses were late, then force myself onto crowded buses so I wouldn't be late to work. I would also feel unsafe.

While trying to go to class, I slipped on an icy sidewalk, and hurt my back and my head. The roads had been plowed but the sidewalks were untouched. I fell with so much force that the only thing that saved me from a severe injury was my backpack. In terms of cycling, my mother banned me from taking my bike on the main roads, especially near highway entrances. I would always cut into the neighbourhoods wherever I could to feel more at ease.

When I had access to a car, all those problems seemed to fade away momentarily. I could reach my destination faster and more safely as long as everyone on the road practiced safe driving.

However, 24/7 access to a car was not feasible for me, and it is not feasible for many residents in Scarborough. Moreover, if the region had the proper infrastructure for active transportation and ensured it was maintained, then I would not feel like I needed an automobile. I would finally feel a sense of place on the road, and I know that other residents would feel the same.



## Nadhiena's Story

“Scarborough has been left out of important conversations concerning how we can build a better, integrated system of active transportation that is connected (both within the community and to major employment and cultural “hubs”) and equitable (accounting for systemic barriers that obstruct Scarborough’s racialized, marginalized, and most vulnerable communities).”

### The Toronto-born, Scarborough-bred, GTA vagabond.

This is the (quite cheeky) axiom I find myself drawing upon when asked to describe my own positionality and lived experience of life, work, and play through every inch of a place I call home — Scarborough.

“But why the ‘GTA vagabond?’” As the saying goes, you don’t know what you’re missing out on (read: FOMO or “Fear Of Missing Out” for my fellow Millennials and Gen-Z’ers) until you’ve actually seen what exists on the “other side.” For me, this “other side” was a clear gap vis-a-vis what existed (or rather, what didn’t).

By means of my deep-seated love affair with Scarborough and a mind entwined with the academic lens and policy-speak afforded by my education at the University of Toronto, I have used this space to share what I see as an absolutely insult to the active transportation situation here, if any.

Since amalgamation in 1998, Scarborough has been sidelined, under-served, and kept at the fringes of decision-making concerning all realms of city planning and policy.

Scarborough has been left out of important conversations concerning how we can build a better, integrated system of active transportation that is connected (both within the community and to major employment and cultural “hubs”) and equitable (accounting for systemic barriers that obstruct Scarborough’s racialized, marginalized, and most vulnerable communities).

## Kelly's Story

“The problem is that public transit hasn't kept up with population growth, and residents face a daily challenge on overcrowded bus lines and an inadequate subway network that some believe is too expensive to ride.”

I attend university at the University of Toronto's Scarborough campus. There are many factors related to why I think “complete streets” should be present in Scarborough. I am not a resident of the area, however during the past three years I have been commuting to Scarborough almost every day due to school.

One major problem I encounter while travelling is the long commutes and crowded buses. Given that I live all the way in Vaughan, north of Toronto, it is difficult to endure commuting for almost 2 hours every day. In the first few years of school, there were times I wanted to skip school because I could no longer bear the travel. Having to travel all the way to Finch station from my house, then taking the 939 bus route that took me to Scarborough Town Centre, then finally waiting for the 38 bus that took me to school, was a long ride.

The problem is that public transit hasn't kept up with population growth, and residents face a daily challenge on overcrowded bus lines and an inadequate subway network that some believe is too expensive to ride.

It is really important that transit services are improved. I really think that having rapid transit in the suburbs would also have a big impact in the local communities.

During the commute, sometimes I would witness individuals cycling on the road. There is no designated cycle lane, so this is extremely dangerous and unsafe for individuals who cycle around the city to get to their destinations.

While thinking about complete streets, the idea of equity really struck me. There are times where I think about what it's like in a place like Scarborough, if I didn't travel there every day. I question why that city is so poorly served, unlike here in Vaughan where the city has its own bus lanes, own cycling lanes, multiple road lanes, and wider sidewalks. This city also has enough space for planter boxes and other green infrastructure. It's extremely unfair that Scarborough continues to be neglected given that its neighborhoods contain the most marginalized groups. When I think about these things, I tell myself that I am really fortunate to be living in an area like Vaughan where public transit and infrastructure are well maintained. But then, how about the residents of Scarborough? Despite multiple transit plans and policies, why has there been no changes? Like the areas of Vaughan and Toronto's downtown core, Scarborough should have equal access to adequate pedestrian and cycling facilities.

**Streets and roads play a vital role in the lives of many individuals. They serve as a space for daily interactions amongst people and should create a sense of space where people feel safe and secure. Having complete streets in Scarborough would be a significant benefit for residents, commuters, and communities.**

## Isaac's Story

“Access to a private vehicle shouldn't be a life-altering goal, or a gateway to improved quality of life and ease of mobility — and yet it is.”

Through travelling, working, and studying in Scarborough, I have had some profound exposure to the limited multi-modal capabilities of Toronto's streets. When I chose to study at the University of Toronto, a key factor in my decision was the environment I wished to surround myself with. I wanted to be in the “big city,” even if the Scarborough campus was on the fringes of Toronto's institutional boundaries. I expected to bring my bicycle, several pairs of running shoes, and a Presto card, and that would be all I needed to conveniently get around while being financially responsible.

I learned that it wasn't quite so simple, and that urban mobility, even within the suburb of Scarborough, wasn't all that it could be. Not a single time did I take my bike onto the fast-moving streets, mostly because of the high speed of traffic right beside where bikes travel, the lack of cycle lanes, and the way those who did cycle looked uncomfortable breathing fumes (particularly next to hot engines on humid summer days). I never walked to get groceries or for my essentials — the closest commercial complex was about an hour's walking distance, yet 7 minutes to drive. Like many students, I took transit — uncomfortably busy at times, unpredictable, and “not very rapid” transit. I quickly learned that a private vehicle was necessary to lead half a life of extracurricular activities, sports commitments, and dependable employment. I signed up for car-sharing services, and used hundreds of dollars in ride-sharing in my first year of university alone. It's difficult to think about individuals with far less flexibility in their lives, some with no other option than to walk or cycle on streets not designed for their safe and effective use.

Access to a private vehicle shouldn't be a life-altering goal, or a gateway to improved quality of life and ease of mobility — and yet it is.

But these issues don't exist in isolated incidents in the past. While completing field work for this project, I witnessed poor street design in action. A very young man had his bike tire slip off of the sidewalk curb while he tried to squeeze past a mother walking with a double stroller. The situation was unfair no matter which way you look at it. The “safer” option to travel on the sidewalk got him nowhere but wedged between a 1.2 metre sidewalk and a convoy of buses honking inches away on a one-lane residential road. I'm sure that these encounters do the same for others as they do for me: re-affirm that walking or cycling isn't a convenient, safe, efficient option. It is a last resort, but it shouldn't be this way.

When I lived in Scarborough, complete streets would have been invaluable to me. They would have given me the option to travel safely, and efficiently, without the use of a private vehicle. It would have given those around me with vehicles healthy, engaging options for short trips and utilitarian uses.

All things being considered, it should be noted and understood that the complexities of suburban roads are important. Drive lanes on roads aren't the enemy and...

**...this isn't the war on the car driver who has no other choice.**

Traffic and arterial roads are indicators of a properly functioning city. Complete streets aren't always about trade-offs.

Instead, roads can be adjusted to build useful mobility network options for users of all ages and abilities without always eradicating or impeding drive lanes. As cities continue to grow, complete streets are just as much about changing a culture of mobility as the investment in the infrastructure itself.

## Ivan's Story

“Oftentimes, it’s taboo to even think about riding our bikes on the road as it’s unsafe and undesirable, as cyclists have to negotiate space with motorists on the fast-moving arterials due to the absence of demarcated space for cyclists.”

Walking and cycling around Scarborough has always felt uninviting, since the public right-of-way is used mostly for cars; the lack of consideration for human-powered mobility is disappointing. There were many awkward encounters trekking around Scarborough with stingy 1.5m sidewalk widths abutting fast-moving traffic, poor connectivity with no direct route to destinations, low levels of public transit service, an absence of cycling facilities, and long stretches of arterial roads without midblock crossings, which encourages jaywalking and endangers road users. Moving forward, a complete street network in Scarborough is important to ensure road safety for all road users, connectivity, and accessibility.

I remember, during high school, walking and cycling around the neighbourhood was necessary to get to school, to parks, and to the library. Unfortunately, my friends and I soon found out that there was no place for cycling.

Oftentimes, it’s taboo to even think about riding our bikes on the road as it’s unsafe and undesirable, as cyclists have to negotiate space with motorists on the fast-moving arterials due to the absence of demarcated space for cyclists.

The lack of safe cycling facilities in Scarborough saw cyclists prompted to use the sidewalk for a safer ride to our destinations, ultimately creating conflicts with pedestrians. In fact, as a pedestrian, I have had many encounters with cyclists on the sidewalk where I have to yield the right-of-way to them, where the narrow sidewalk was inadequate to support both pedestrians and cyclist activity. Thus, a complete network should improve walking and cycling facilities to allow for a safer experience for both cyclists and pedestrians.

The connectivity of the network is important to ensure easy access to destinations in Scarborough, along with connection to the rest of the city. In addition, the network should support connectivity for all mobility options; hence, fundamental active transport infrastructure (wider sidewalks and separated bike facilities) on arterials is necessary to support multimodal mobility given the low car ownership in Scarborough, since the ownership of cars is often financially difficult for many individuals and households there.

Accessibility to the network is important to accommodate users of all ages and abilities while improving the experience of active transportation users through ease of access and convenience. Oftentimes, I have experienced the lack of accessibility to commuter rail around Scarborough, as commuter rail is seemingly designed for suburbanites with cars, given the large parking lots fronting the station.

**Overall, a complete street network in Scarborough will play an important role in addressing the existing gaps – safety, connectivity, and accessibility — in the vital infrastructure that people in Scarborough use on a daily basis.**

## Andre's Story

“The arterial road design eliminated opportunities for small shops and enterprises like hairdressers and dentists along arterial roads. So one of the goals for complete streets in Scarborough will have to be to enhance opportunities for small-scale destinations along existing corridors, and protect those that exist now as part of efforts to encourage a walking and cycling active mobility culture in Scarborough.”

I have worked at UTSC for the last 19 years, teaching urban geography in the Department of Human Geography. In that time, I only used public transit to travel to UTSC a few times, mostly because my trip by car is about 30-35 minutes, while my TTC commute is a minimum of 90 minutes — each way — and more if there are delays. I convinced myself that saving 120 minutes per day was a good enough excuse to use the car, even though I hated driving to work, especially as congestion has steadily gotten worse over the last two decades.

But that is not even the most important issue about automobile dependence in Scarborough. Certainly, even more important is the way development patterns and transport infrastructure shape everyday life. All professors at UTSC are also appointed to graduate programs at the St. George (UTStG) campus, so I also travel there every week at least once or twice, and there I always travel by bike. Cycling is fast and good exercise, though it took me several years to realize that I needed to bring an extra shirt on hot days in the summer. Most of my trip follows bike lanes and is reasonably safe even though Toronto drivers do seem to be getting more aggressive. Bike parking is free, and does not take much space, meaning that small side trips to pick up groceries or books are easy.

For me, the biggest difference between UTStG and UTSC is not that it is possible to bike there, it is the fact that UTStG is located in a dense urban area and is surrounded by lots of stores and restaurants. It is easy to meet a colleague for lunch at any of hundreds of restaurants that are a 10-minute walk away. At UTSC that is not the case, and it is not just that there are fewer options for what to eat, but that there are no places to go at all. That is unfortunate, and the limited numbers of nearby destinations shapes behaviour as much as the limited range of mobility options.

This lack of nearby destinations is a major difference between Scarborough and downtown and is the product of design that prioritized cars over people. The Metro Toronto planning goal for arterial roads was to limit the number of destinations and curb cuts on arterial roads to ensure a smooth traffic flow. The impact of Metro plans can be seen in the difference between Eglinton Ave. East, which is lined with commercial uses on both sides and was developed before Metro plans took effect, and Finch Ave. East, which was built to the new Metro standards and is mostly lined with residential backyards.

The arterial road design eliminated opportunities for small shops and enterprises like hairdressers and dentists along arterial roads. So one of the goals for complete streets in Scarborough will have to be to enhance opportunities for small-scale destinations along existing corridors, and protect those that exist now as part of efforts to encourage a walking and cycling active mobility culture in Scarborough.