



Prepared for  
CentreCourt Developments Inc.

# TRANSPORTATION IMPACT STUDY

PROPOSED RESIDENTIAL  
DEVELOPMENT

**5 & 15 Tangreen Court,  
City of Toronto**

March 2023  
23268

## Disclaimer

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March 16, 2023

**Reference Number:** 23268

**Mitchell Sobie**

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Dear Mr. Sobie:

**RE: Transportation Impact Study  
Proposed Residential Development  
5 & 15 Tangreen Court, City of Toronto**

LEA Consulting Ltd. is pleased to present the findings of our Transportation Impact Study for the proposed residential development located at 5 and 15 Tangreen Court in the City of Toronto. This study has been prepared for CentreCourt Developments Inc. in support of the Official Plan Amendment (OPA), Zoning By-law Amendment (ZBA) and Site Plan Control (SPA) applications for the subject site.

This report concludes that the traffic associated with the proposed development does not present a significant impact to traffic conditions within the area when compared to future background conditions, and signal timing plan modifications have been recommended to optimize future conditions in the area.

From a parking perspective, the proposed development will meet applicable requirements and will support multi-modal travel and a shift away from single-occupant vehicle dependency given the subject site context with respect to planned transit network improvements and intensification of the surrounding area.

Please do not hesitate to contact the undersigned should you have any additional questions or concerns at (905) 470-0015.

Yours truly,

**LEA CONSULTING LTD.**

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Encl. Transportation Impact Study – 5 & 15 Tangreen Court, City of Toronto (March 2023)

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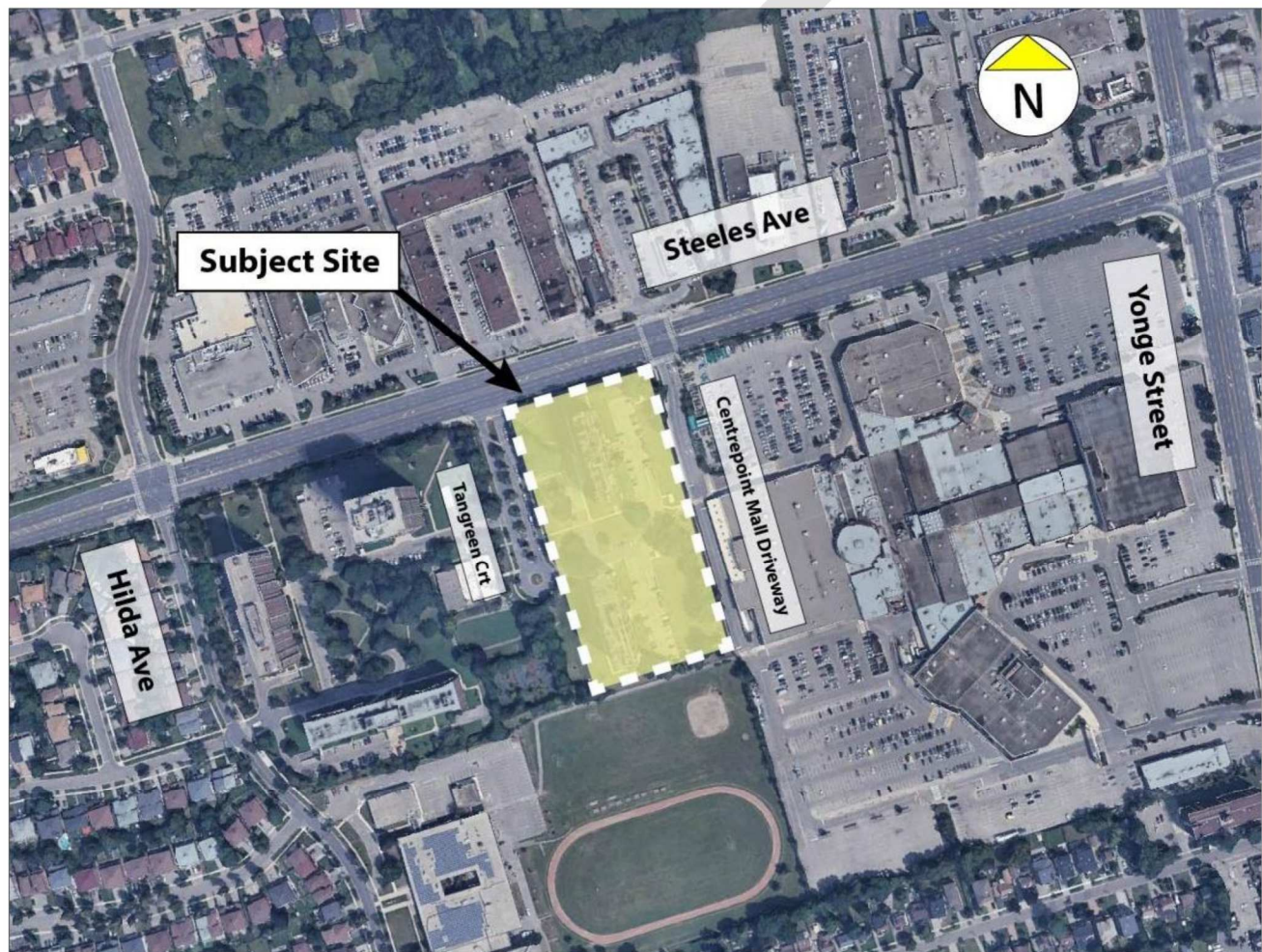
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# 1 INTRODUCTION

LEA Consulting Ltd (LEA) has been retained by CAPREIT 2 Limited Partnership on behalf of CentreCourt Developments Inc. to undertake a Transportation Impact Study (TIS) in support of the Official Plan Amendment (OPA), Zoning By-law Amendment (ZBA), and SPA application for the proposed residential development located at 5 and 15 Tangreen Court (herein referred to as the subject site) in the City of Toronto. The site is situated south of Steeles Avenue West and west of Yonge Street and Centrepont Mall in the City of Toronto, as illustrated in **Figure 1-1**.

**Figure 1-1: Subject Site Context**



Source: Google Earth, February 2023

The subject site is currently occupied by two (2) 18-storey high-rise residential towers with surface and underground parking lots situated adjacent to and below each building. The development proposes seven (7) new residential building blocks ranging from 25-55 storeys and which include residential and retail uses.

It is understood that the site will evolve in three (3) phases. Phase 1 & 2, which includes the construction of Buildings A, B, C and D will be realized before the demolition of 5 Tangreen Court, and Phase 3, which includes





## 2 EXISTING CONDITIONS

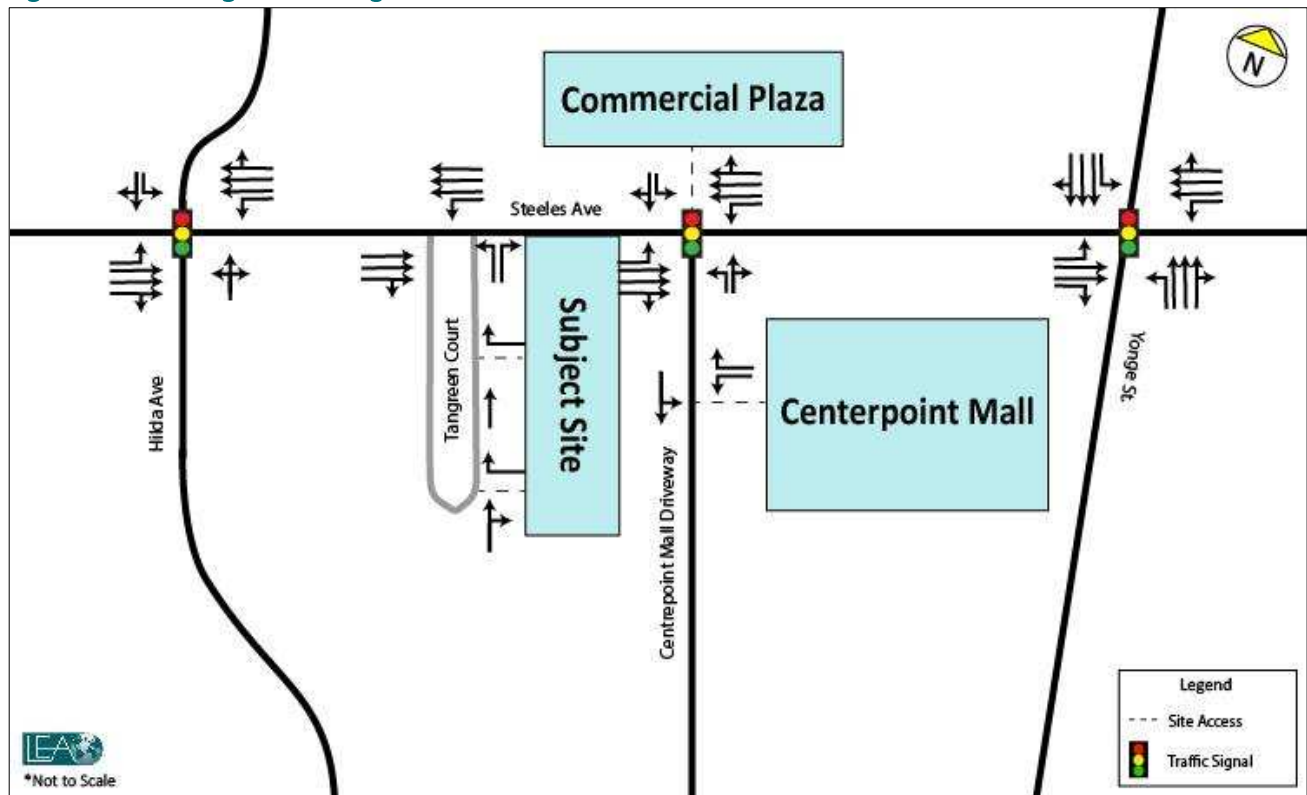
This section identifies and assesses the existing transportation conditions within the study area, including the road, transit, cyclist, and pedestrian networks. The study area was determined by the size of the redevelopment and its anticipated transportation impact to the surrounding area, as well as to be consistent with other studies undertaken in the area. The study area includes the following intersections:

- ▶ Hilda Ave & Steeles Ave W (Signalized),
- ▶ Tangreen Ct/180 Steeles Ave W Driveway & Steeles Ave W (Unsignalized),
- ▶ Centrepont Mall Driveway/100 Steeles Ave W Driveway & Steeles Ave W (Signalized),
- ▶ Yonge St & Steeles Ave W (Signalized),
- ▶ Tangreen Ct & Existing North Site Access (Unsignalized), and
- ▶ Tangreen Ct & Existing South Site Access (Unsignalized).

### 2.1 ROAD NETWORK

The following section provides a description and classification of the roadways within the study area. **Figure 2-1** illustrates the intersections and lane configuration contained within the study area.

**Figure 2-1: Existing Lane Configuration**



**Hilda Avenue** is a north-south collector road with a four (4) lane cross section (two lanes per direction) north of Steeles Avenue, and a two (2) lane cross-section (one lane per direction) south of Steeles Avenue and is under the jurisdiction of the City of Toronto south of Steeles Avenue. It operates with a posted speed limit of 50 km/h north of the Steeles intersection, and a speed limit of 40 km/h south of the intersection. At the intersection of Steeles Avenue, it provides an exclusive left-turn lane in the southbound direction.

**Tangreen Court** is a north-south local road with a two (2) lane cross section (one lane per direction) which connects to Steeles Avenue and is under the jurisdiction of the City of Toronto. The road ends in a roundabout to the south and provides access to the subject site and operates with an assumed speed limit of 30km/h in compliance with YSNMP. The road is bisected by landscaping with one-way single lanes.

**Yonge Street** is a north-south major arterial road with a seven (7) lane cross section (three lanes per direction, and a dedicated two-way left-turn lane) that is under the jurisdiction of the City of Toronto south of Steeles Avenue. At the Steeles Avenue intersection the center turn lane becomes a left-turn lane in both the eastbound and westbound directions. It operates with a posted speed limit of 50 km/h.

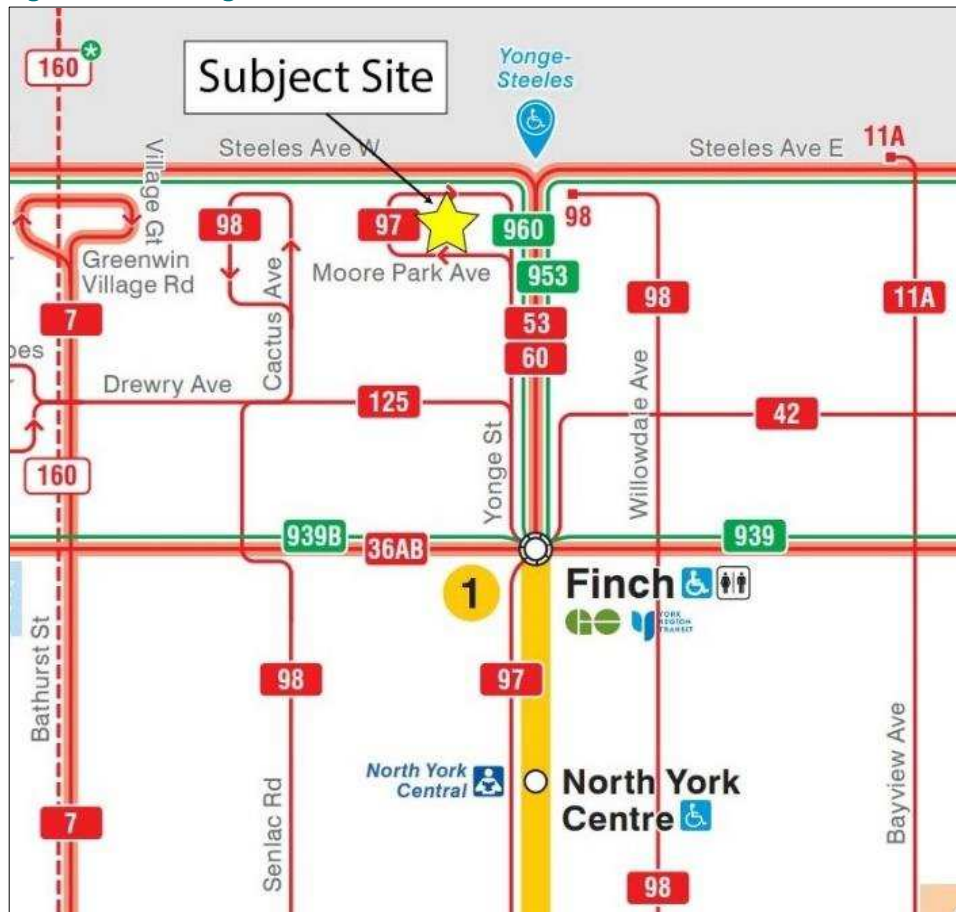
**Steeles Avenue** is an east-west major arterial road with a six (6) lane cross section (three lanes per direction) and a dedicated center turn lane, and a six (6) lane cross section (four lanes westbound and two lanes eastbound) east of the intersection with Yonge Street. The road is under the jurisdiction of the City of Toronto. At the Hilda Avenue and Yonge Street intersections the center turn lane becomes a left-turn lane in both the eastbound and westbound directions. It operates with a posted speed limit of 50 km/h.

## 2.2 EXISTING TRANSIT NETWORK

The subject site is well serviced by the Toronto Transit Commission (TTC) transit network with nearby bus stops along Yonge Street. GO Transit service stops are also within walking distance of the subject site along with several bus stops. The existing bus network in the immediate study area provides higher-order transit connections such as subway service along TTC Line 1 at Finch Station. **Figure 2-2** shows the existing transit network in proximity to the subject site.

It should also be noted that the subject site will benefit from planned expansions to transit within the longer-term planning horizon, including an expansion of the existing TTC Subway Line 1 from Finch Station into York Region and the implementation of higher-order transit along Steeles Avenue. Additional details are provided in **Section 3**.

Figure 2-2: Existing Transit Network



Source: Toronto Transit Commission, Accessed January 2023

**Route 97 Yonge** is a regular service bus route that operates from Finch station to Davisville Station in a north-south direction. The service operates on a regular schedule all day, every day until 1 am, with headways of around 30 minutes.

*Access Locations:* Route 97 is accessible in the study area at the intersection of Steeles Avenue and Tangreen Court approximately 50 m from the site and within a 1-minute walk.

**Route 98 Willowdale-Senlac** is a bus route that operates between Sheppard-Yonge Station, the area of Peckham Avenue and Cactus Avenue, and the area of Willowdale Avenue and Steeles Avenue East, generally in an east-west direction. The service operates on a regular schedule all day, every day until 1 am.

*Access Locations:* Route 98 is accessible in the study area east of the intersection of Steeles Avenue and Yonge Street approximately 610 m from the site and within a 10-minute walk.

**Route 960 Steeles West Express** is an express route that operates between Finch Station and Pioneer Village Station generally in an east-west direction. The service operates during peak periods from Monday to Friday only and serves only select stops as it is an express service. Frequency of service varies by route.

*Access Locations:* Route 960 is accessible in the study area at the intersection of Steeles Avenue and Yonge Street approximately 400 m from the site and within a 10-minute walk.



**Route 953AB Express** is an express bus route that operates between Finch Station and Morningside Avenue in an east-west direction. The 953B branch operates during peak periods from Monday to Friday only and serves only select stops as it is an express service. Frequency of service varies by route.

*Access Locations:* Route 953 is accessible in the study area at the intersection of Steeles Avenue and Yonge Street approximately 400 m from the site and within a 10-minute walk.

**Route 53 Steeles East** is a bus route that operates between Finch Station on the Line 1 Yonge-University, the area of Steeles Avenue East and Staines Road, generally in an east-west direction. The service operates as part of the 10 -minute network and has 10 minute or better service at peak hours from Monday to Saturday, and operates on regular schedule all day, every day until 1 am.

*Access Locations:* Route 53 is accessible in the study area at the intersection of Steeles Avenue and Yonge Street approximately 400 m from the site and within a 10-minute walk.

**Route 60 Steeles West** is a bus route that operates between Finch Station on Line 1 Yonge-University and the area of Steeles Avenue West and Highway 27, generally in an east-west direction. It also serves Pioneer Village Station on Line 1 Yonge-University. The service operates as part of the 10 -minute network and has 10 minute or better service at peak hours from Monday to Saturday, and operates on regular schedule all day, every day until 1 am.

*Access Locations:* Route 60 is accessible in the study area at the intersection of Steeles Avenue and Tangreen Court approximately 50 m from the site and within a 1-minute walk.

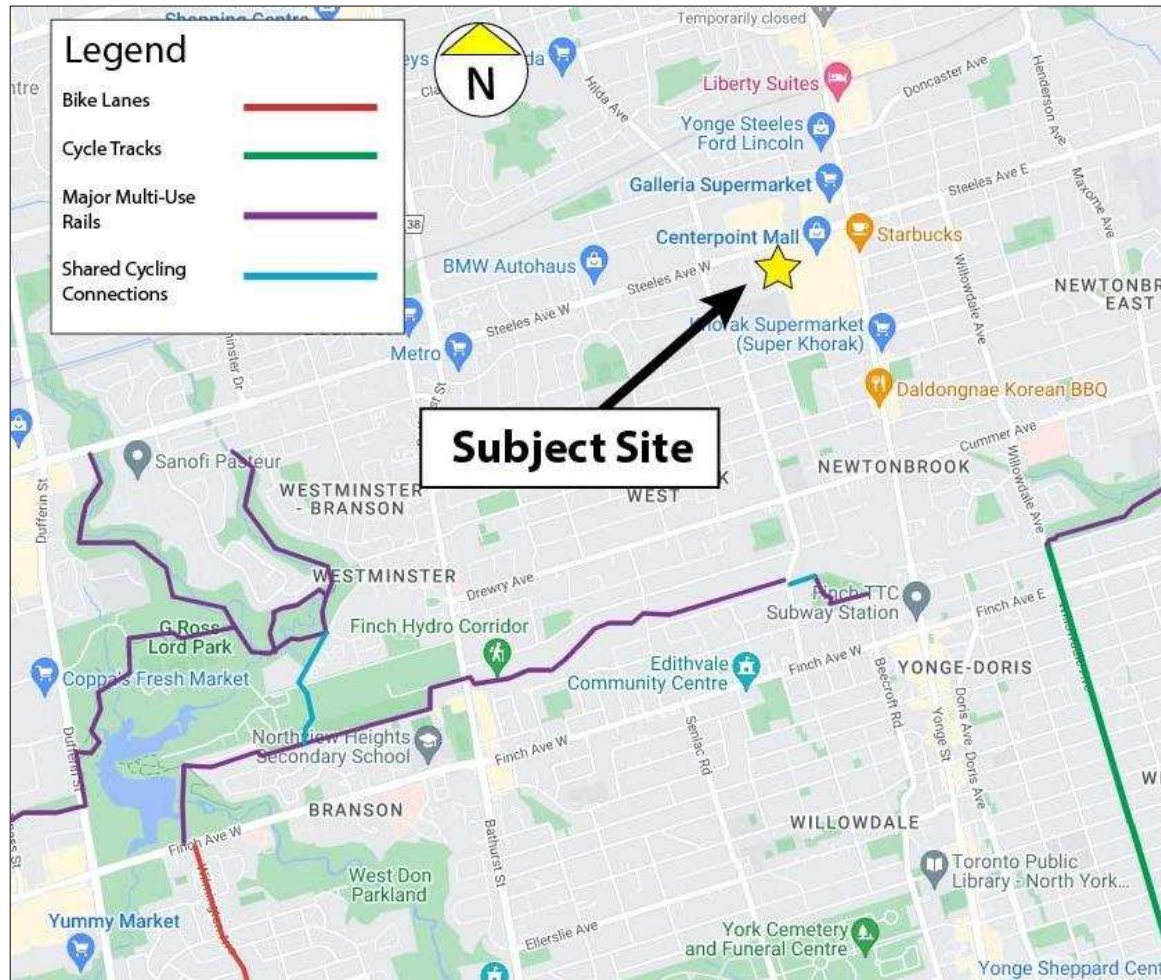
## 2.3 CYCLING NETWORK

Currently, there is no cycling infrastructure within the immediate study area. The nearest cycling facilities to the subject site are provided in the form of trails in G. Ross Lord Park, East Don Parkland, and the Finch Corridor Trail south of Drewry Avenue and north of Finch Avenue. Access to these trails are facilitated by TTC and GO transit as well as walking and/or cycling within shared lanes along the local road network. No cycling facilities or bike lanes currently exist along Steeles Avenue and Yonge Street within the study area. **Figure 2-3** illustrates the existing cycling network.

While the existing cycling network accessible to the subject site is relatively limited, Yonge Street has been recommended as a modified multi-modal street in the Yonge Street North Transportation Master Plan (YSNTMP), dated 2020, for improving on the City's transportation network, indicating future plans to implement cycling facilities along Yonge Street and Steeles Avenue as described in **Section 3.1**.



Figure 2-3: Existing Cycling Network



Source: City of Toronto, Access February 2023

## 2.4 PEDESTRIAN NETWORK

In the area immediately surrounding the subject site, continuous sidewalks are available along both sides of all streets, with the exception of Centrepoint Mall Driveway/100 Steeles Ave W Driveway, which has sidewalks available on the west side south of the Steeles intersection only. Pedestrian crosswalks are also available on all approaches with protected pedestrian phases at each signalized intersection. Tangreen Court is not signalized, but signed with pavement markings to indicate pedestrians travelling east-west parallel to Steeles Avenue.

To verify the land uses that support the area's walkability, the subject site was entered as a testable address in the Walk Score website. The address of the subject site, 5 and 15 Tangreen Court, received a Walk Score of 79/100 – Very Walkable, which indicates that most errands can be accomplished on foot.

Several amenities and commercial establishments such as restaurants, retail and commercial shops, grocery stores and supermarkets, schools, a Canada Post outlet, and pharmacies are within an approximate 20-minute walk from the subject site.

## 2.5 TRAFFIC DATA COLLECTION

Existing traffic conditions in the study area will be analyzed using the Highway Capacity Manual (HCM) methods with the aid of Synchro 11 software. Turning movement counts (TMC) for the weekday AM and PM peak periods will be the source of traffic data for this study.

Traffic counts were obtained through surveys undertaken by LEA on January 10, 2023, and signal timing plans were obtained from the City of Toronto. **Table 2-1** summarizes the traffic data utilized in this study, with detailed TMCs and signal timing plans provided in **Appendix A**.

Table 2-1: Summary of Data Collection

Intersection	TMC Date	Source
Steeles Ave W & Hilda Ave	Tuesday, January 10, 2023	LEA Consulting Ltd.
Steeles Ave W & Tangreen Ct		
Steeles Ave W & Centrepont Mall Access		
Yonge St & Steeles Ave		
Tangreen Ct & 5 Tangreen Ct		
Tangreen Ct & 15 Tangreen Ct		

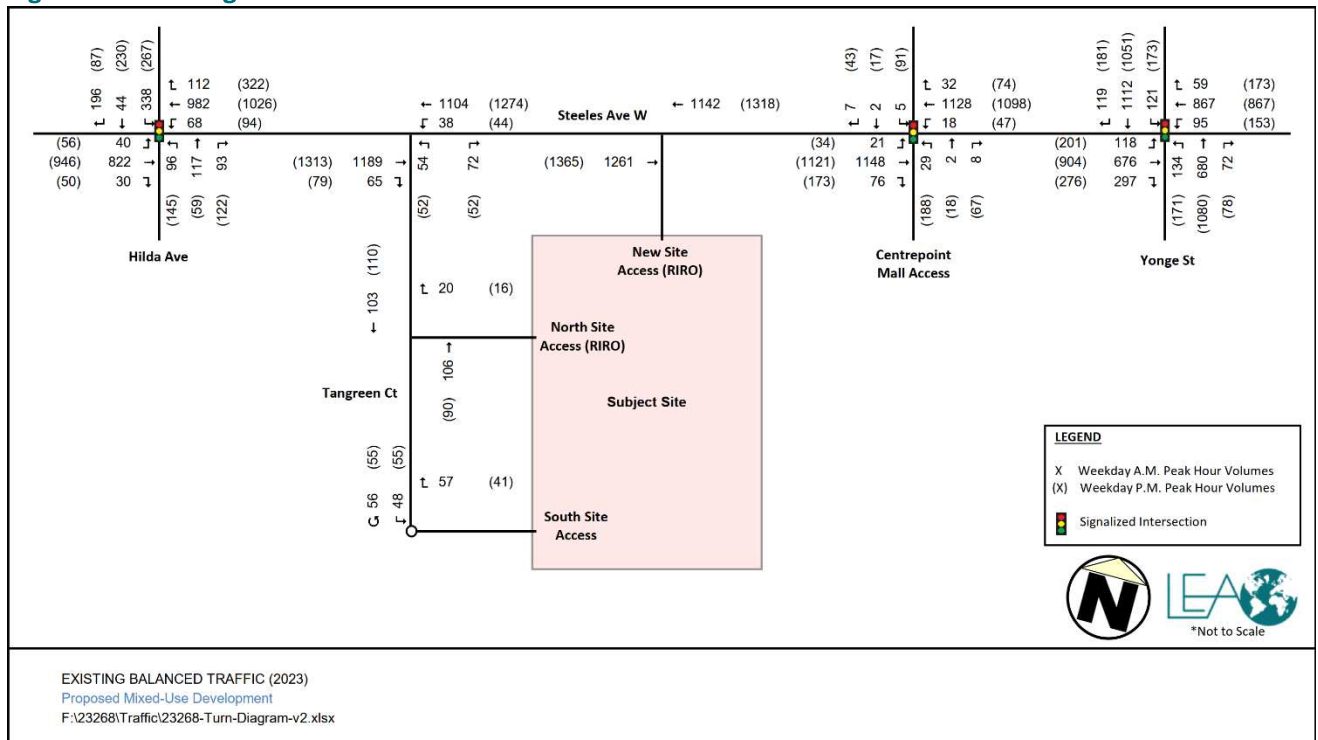
Given the TMCs were collected following the lifting of most Covid-19 restrictions and during the typical school year, no adjustments to the existing traffic counts were undertaken. Volume balancing was undertaken between adjacent intersections that exhibited a difference greater than 10%. Peak Hour Factors (PHFs) were calculated based on the surveyed volumes for each intersection.

Additionally, it is noted that the northbound and southbound curb lanes along Yonge Street are an HOV/bus lane. During the survey period, the lane usage was also surveyed, and the resulting Lane Utilization Factor (LUF) applied in Synchro was calculated based on the results of the lane utilization survey. As the curb lanes also accommodate all right-turns along Yonge Street, the right-turn volumes were included in this calculation and the LUF was applied to the right-turn movement as well.

## 2.6 EXISTING TRAFFIC VOLUMES

The existing study area traffic volumes during the weekday AM and PM peak hours are shown in **Figure 2-4**.

Figure 2-4: Existing Traffic Volumes



### 3 FUTURE BACKGROUND TRAFFIC CONDITIONS

For the analysis of future background traffic conditions, this study considers a five-year horizon to the year 2028. Future background traffic includes the traffic added to the road network from other future developments within the surrounding study area, projected corridor growth, as well as planned transportation infrastructure improvements. The PHF parameters used for models have been set to 1.00 for all future horizons.

Given the subject site's location near Steeles Avenue and Yonge Street, which borders Toronto, Vaughan, and Markham, a number of planning and transportation documents have been reviewed to establish the future background condition in a manner that is consistent with area plans, particularly as established by the City of Toronto and Vaughan, which borders the subject site to the north. This includes the Yonge Street North Secondary Plan and associated Transportation Master Plan undertaken by the City of Toronto and approved by Toronto City Council in July 2022, as well as the Yonge-Steeles Corridor Secondary Plan undertaken by the City of Vaughan, and which was the subject of a 2022 appeal before the Ontario Land Tribunal (OLT). It is acknowledged that the Yonge-Steeles Corridor Secondary Plan was approved by the OLT in September 2022.

#### 3.1 FUTURE TRANSPORTATION CONTEXT

##### 3.1.1 Future Road Expansions

###### City of Toronto Yonge Street North TMP

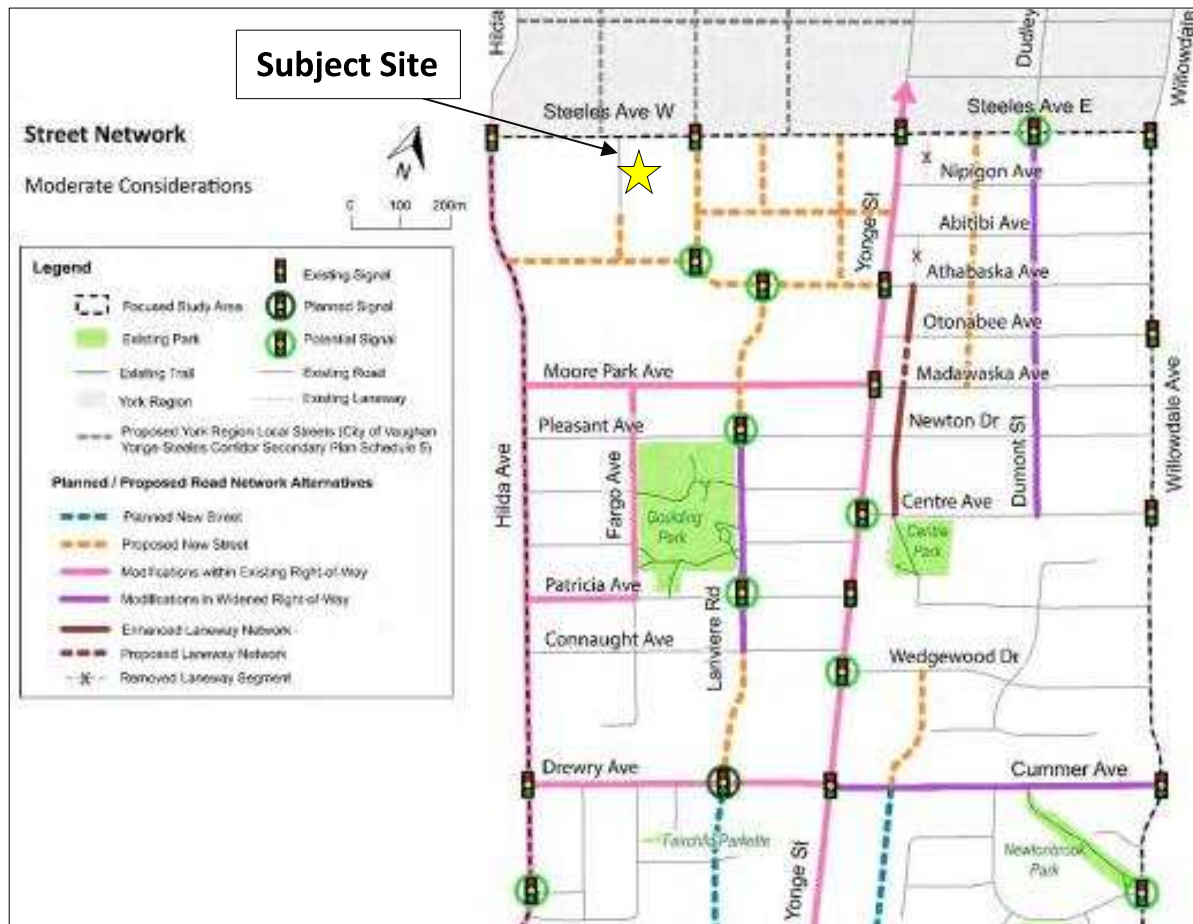
The subject site is located within the Yonge Street North Transportation Master Plan (YSNTMP) completed in April 2022 as part of the broader Yonge Street North Secondary Plan undertaken by the City of Toronto. The Yonge Street North Secondary Plan was adopted by Toronto City Council in July 2022. The Secondary Plan establishes the planning framework for the area, while the TMP recommends a future street, pedestrian, and cycling network, as well as shared mobility services/facilities, to support future growth of the area.

The TMP therefore recommends a large number of future transportation network and infrastructure projects for the area within the medium and long-term planning horizon (5-10+ years). Particular to the subject site, an eventual extension of Tangreen Court to a new east-west street to the south, which will connect to the Centrepont Mall property and Hilda Avenue, is recommended. As these changes are expected to occur outside of the planning horizon for this study, they have not been reflected in the future road network for this study.

Overall, the subject site's location within the YSN Secondary Plan and TMP area indicate that the multi-modal transportation networks accessible to the subject site will improve as the area continues to undergo development in select areas, particularly in response to the planned expansion of TTC Subway Line 1 as further discussed in **Section 3.1.3** below. The future road network is expected to improve connectivity for vehicles in the north-south and east-west directions and will provide more route choices for drivers in the area. The future road network recommended by the YSNTMP is shown in **Figure 3-1**.



Figure 3-1: Future Recommended Street Network - YSNTMP



Source: City of Toronto, April 2022

### City of Vaughan Yonge-Steeles Secondary Plan

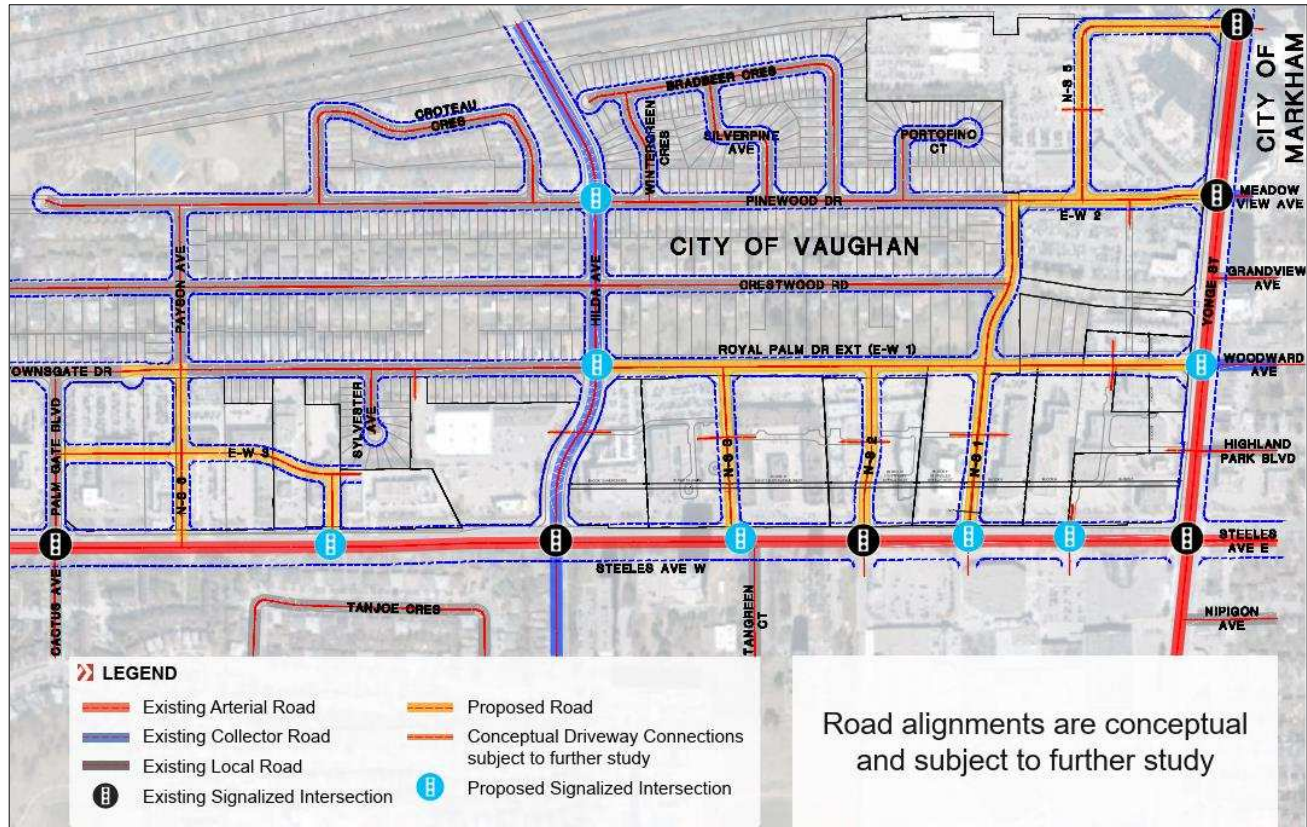
The Yonge-Steeles Secondary Plan undertaken by the City of Vaughan establishes the planning vision and framework for development of the area to the northwest of the Yonge Street and Steeles Avenue intersection. As part of this Secondary Plan, a number of changes to the transportation network are recommended/anticipated. Within the study area for this TIS, the Secondary Plan identifies a new street in the City of Vaughan opposite Tangreen Court. This street would operate north-south. This change has been reflected in the future road network for this study as it is expected to occur within the study horizon.

### Yonge-Steeles Secondary Plan Appeal

An appeal of the Yonge-Steeles Secondary Plan was undertaken in December 2021 by a landowner's group representing property owners of lands within the Secondary Plan with the goal of increasing density within the Secondary Plan area. A study titled, *Appeal of the Yonge Steeles Corridor Secondary Plan – Urban Transportation Considerations Summary Report*, undertaken by BA Group was conducted to study the transportation impacts of the appeal. This study accounted for the majority of the background developments noted in **Section 3.3** above, as well as the planned north-south street opposite Tangreen Court. The study also indicated a new signal would be required for the Steeles Avenue and Tangreen Court intersection. Through

movements would also not be accommodated. An image of the proposed road network showing the recommended signal at Tangreen Court and Steeles Avenue is shown in **Figure 3-2**.

**Figure 3-2: Appeal of the Yonge Steeles Corridor Secondary Plan Proposed Road Plan**



To account for this, the future background horizon includes the north leg and signalization at the study area intersection of Tangreen Court and Steeles Avenue. For the volumes on the north leg, the Secondary Plan Appeal Study future total traffic volumes were used. These volumes were applied as diverted volumes as additional traffic is already being added onto Steeles Avenue as a result of the background developments listed in **Section 3.3** below, which were also included in the Secondary Plan Appeal Study.

### 3.1.2 Future Active Transit Expansions

In addition to public roads, a number of improvements to the pedestrian and cycling networks are also planned as part of the YSNTMP. This includes implementation of on-street cycling facilities along new and existing streets, as well as priority sidewalk twinning to address gaps in the existing sidewalk network.

Specifically, the YSNTMP recommends modifications to Hilda Avenue and Yonge Street that add on-street bike lanes with buffers between vehicle traffic to the streets. Bike lanes are also identified for Lariviere Road and the future street network east and south of the subject site.

The City of Toronto has also completed a Cycling Network Plan (CNP), which serves as a comprehensive roadmap and work plan outlining the city's planned investment in the near-term and intentions for the long

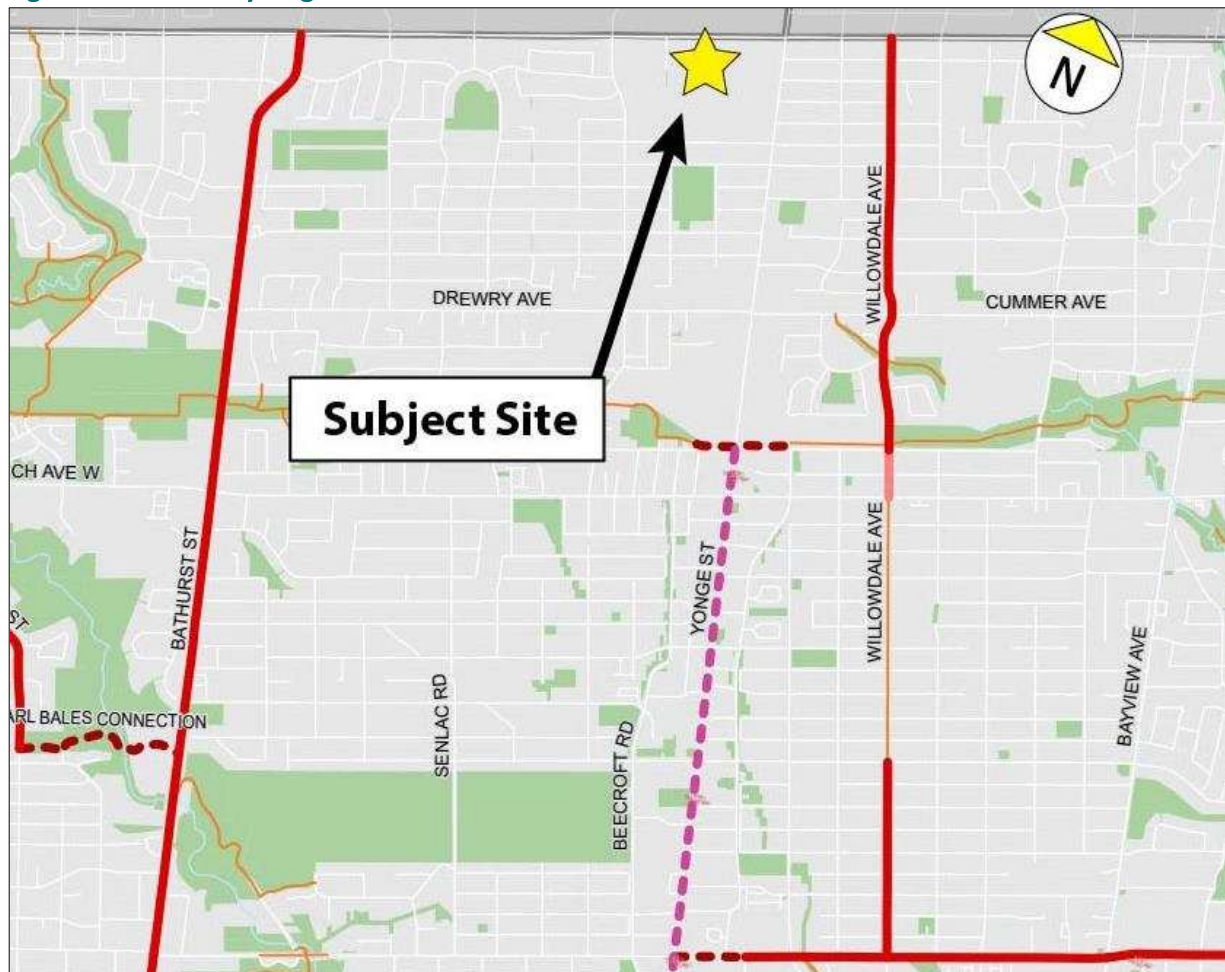


term with respect to expanding the City's cycling network. The proposed cycling network in the vicinity of the site is illustrated in **Figure 3-3** and includes Yonge Street as a major corridor study, as well as Hilda Avenue.

The long-term future cycling network as outlined in the YSNTMP is illustrated in **Figure 3-4**. The YSNTMP expands on the CNP and confirms plans for cycle tracks along Yonge Street and aims to provide continuous cycling facilities in the YSN Secondary Plan area.

As additional work will be required to confirm the details of each project, and as timeline for each is expected to occur over the longer-term as the area develops, no changes to the study area road network have been undertaken to reflect the identified cycling projects.

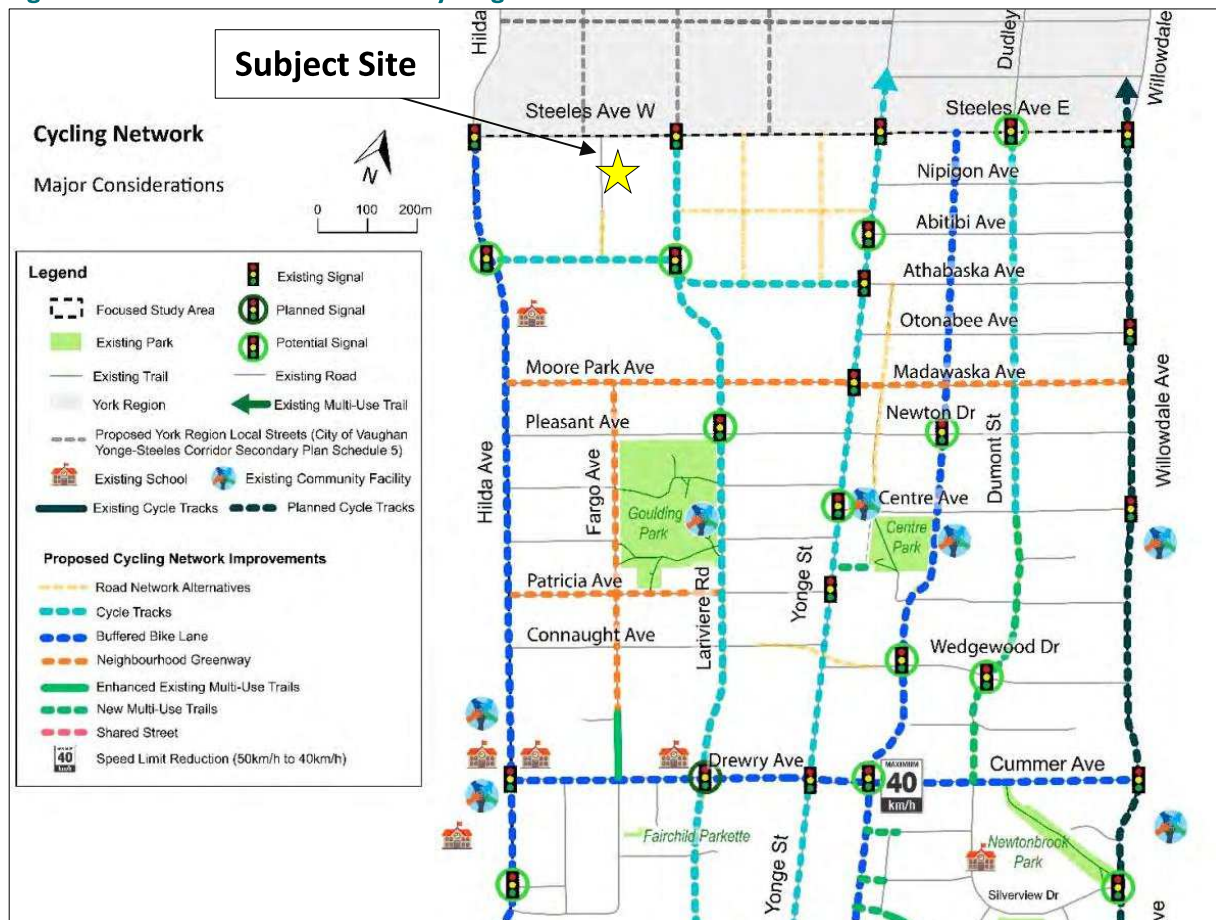
**Figure 3-3: Future Cycling Network - CNP**



Source: City of Toronto, Obtained February 2023



Figure 3-4: Future Recommended Cycling Network – YSNTMP



Source: City of Toronto, April 2022

### 3.1.3 Future Transit Expansions

#### Steeles Avenue Rapid Transit

Steeles Avenue West of Yonge Street is identified as a corridor included in the RapidTO program. The RapidTO program is part of the TTC's 5-Year Service Plan and 10-Year Outlook and aims to improve reliability, speed, and capacity on busy surface transit routes by providing bus-only travel lanes. Steeles Avenue west of Yonge Street is one of the top 20 roadways identified to move forward in the next 10 years for further study, design, and implementation. As no timeline is given and Steeles is identified within a 10-year horizon, no changes to the road network have been made for RapidTO in this study.

Steeles Avenue is also identified as a rapid transit corridor in the Metrolinx 2041 Regional Transportation Plan and City of Toronto Official Plan. The Ultimate Condition on Steeles Avenue would include a BRT within a newly constructed centre median. The BRT would operate both east and west of Yonge Street. The ultimate BRT design would require a separate Environmental Assessment involving Metrolinx, City of Toronto, City of Vaughan, City of Markham, and York Region. Similar to above, no changes have been made to the road network to reflect a future Steeles Avenue BRT in this study.

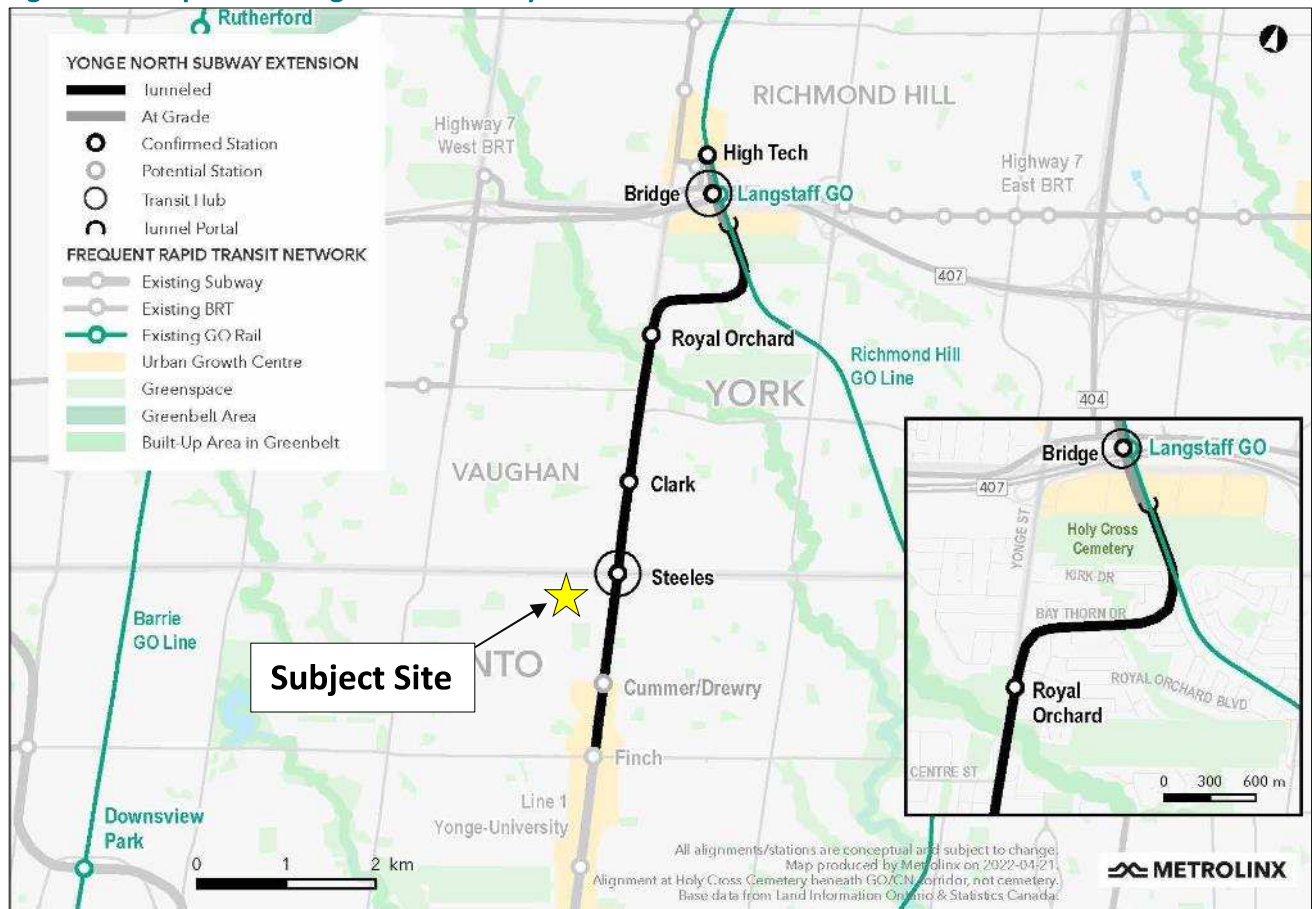
## Yonge North Subway Extension

An expansion of TTC Subway Line 1 from its existing terminus at Yonge Street and Finch Avenue into Richmond Hill Centre is planned. The subject site is located south-west of the future Metrolinx Yonge North Subway Extension (YNSE) station/stop planned for Steeles Avenue as part of this project. The YNSE will add a minimum of five additional stations north of Finch (with a potential sixth station at Yonge Street and Cummer/Drewry) and will improve access to transit for residents at the subject site.

The YNSE is planned to become operational following the completion of the Ontario Line subway project underway further south in the City of Toronto. It is estimated that the Ontario Line will be complete in 2031, thus no modifications to the study area road network have been undertaken based on the YNSE as its operation falls outside the planning horizon for this study.

A map of the YNSE planned route in relation to the subject site is shown in **Figure 3-5**.

**Figure 3-5: Map of the Yonge North Subway Extension**



Source: Metrolinx, Accessed February 2023

## 3.2 CORRIDOR GROWTH

Comparing 2023 traffic counts to historical traffic counts, a consistent decreasing or steady traffic pattern was observed along Steeles Avenue at Hilda Avenue, Centrepont Mall, and Yonge Street. To be conservative, no

growth rate was applied to the study. An analysis of corridor growth is provided in **Appendix B**. The majority of growth in the area is expected to be driven by extensive development, as noted in **Section 3.3** below.

### 3.3 BACKGROUND DEVELOPMENTS

Nineteen background developments were identified within the immediate study area. The background development traffic volumes were extracted from their respective traffic studies. The site statistics for each background development is summarized in **Table 3-1** with excerpts from the study provided in **Appendix C**. These include background developments located in the City of Vaughan and the City of Toronto.

Table 3-1: Background Developments

#	Location	Proposed Development	Source of Traffic Volumes
Vaughan			
1	7200 Yonge St (Phase 1 only)	937 residential units	TIS dated January 2022 (Figure 8-7)WSP
2	434 Steeles Ave W	4,385 m <sup>2</sup> Auto dealership	TIS dated August 2021 (Figure 4-1)Nextrans
3	212 Steeles Ave W (Phase 1 only)	385 residential units; 1,301 m <sup>2</sup> retail space	TIS dated April 2022 (Figure 6-1)TMIG
4	180 Steeles Ave W (Phase 1 only)	818 residential units; 1,689 m <sup>2</sup> retail space	TIS dated February 2020 (Figure 17)BA Group
5	100 Steeles Ave W	1,765 residential units; 1,203 m <sup>2</sup> retail space; urban format auto dealership	TIS dated December 2019 (Figure 13)BA Group
6	88 Steeles Ave W	1,077 residential units; 637 m <sup>2</sup> retail space	TIS dated October 2021 (Figure 14)R.J. Burnside
7	7080 Yonge St	652 residential units; 1,795 m <sup>2</sup> retail space	TIS dated September 2020 (Figure 15)BA Group
8	7040 Yonge St (Phase 1 only)	735 residential units; 541 m <sup>2</sup> retail space	TIS dated November 2020 (Figure 13)Nextrans
9	7028 Yonge St (Phase 1 only)	1,330 residential units; 228 hotel units; 1,546 m <sup>2</sup> retail space	TIS dated June 2019 (Figure 9-1)Cole Engineering
Toronto			
10	150 Cactus Ave	467 residential units	TIS update dated October 2022 (no figure)BA Group
11	6979 Yonge St	427 residential units; 240 m <sup>2</sup> retail space	TIS dated August 2022 (no net traffic generated)Crozier
12	18 Athabaska Ave	544 residential units	TIS dated August 2022 (Figure 9)Nextrans
13	6200 Yonge St	347 residential units; 738 m <sup>2</sup> day care (52 children)	TIS dated December 2021 (Figure 11)BA Group
14	6167 Yonge St	549 residential units; 997 m <sup>2</sup> retail space	TIS dated January 2022 (Figure 4-2)WSP
15	6150 Yonge St	546 residential units;	TIS update dated November 2021

#	Location	Proposed Development	Source of Traffic Volumes
		798 m <sup>2</sup> retail space	(no figure)BA Group
16	6125 Yonge St	394 residential units; 461 m <sup>2</sup> retail space	TIS dated December 2021 (Figure 10) Traffic+ Engineering
17	16 Centre Ave	453 residential units	TIS dated September 2022 (Figure 2-2)WSP
18	33 Centre Ave	118 residential units	TIS dated July 2022 (Figure 7)BA Group
19	6080 Yonge St	262 residential units; 808 m <sup>2</sup> retail space	TIS dated June 2020 (Figure 8)Trans-Plan

### 3.4 FUTURE BACKGROUND TRAFFIC VOLUMES

The future background traffic conditions were determined by adding the background development traffic to the existing traffic volumes, as no growth rate was applied. The future background traffic volumes are also reflective of the planned road network changes within the TIS study horizon, which include a north leg at the intersection of Tangreen Court and Steeles Avenue and signalization of this intersection as a result of the Yonge-Steeles Secondary Plan. The future background road network is shown in **Figure 3-6**, and the future background traffic volumes for 2028 during the AM and PM peak periods is illustrated in **Figure 3-7**.

**Figure 3-6: Future Background Lane Configurations**

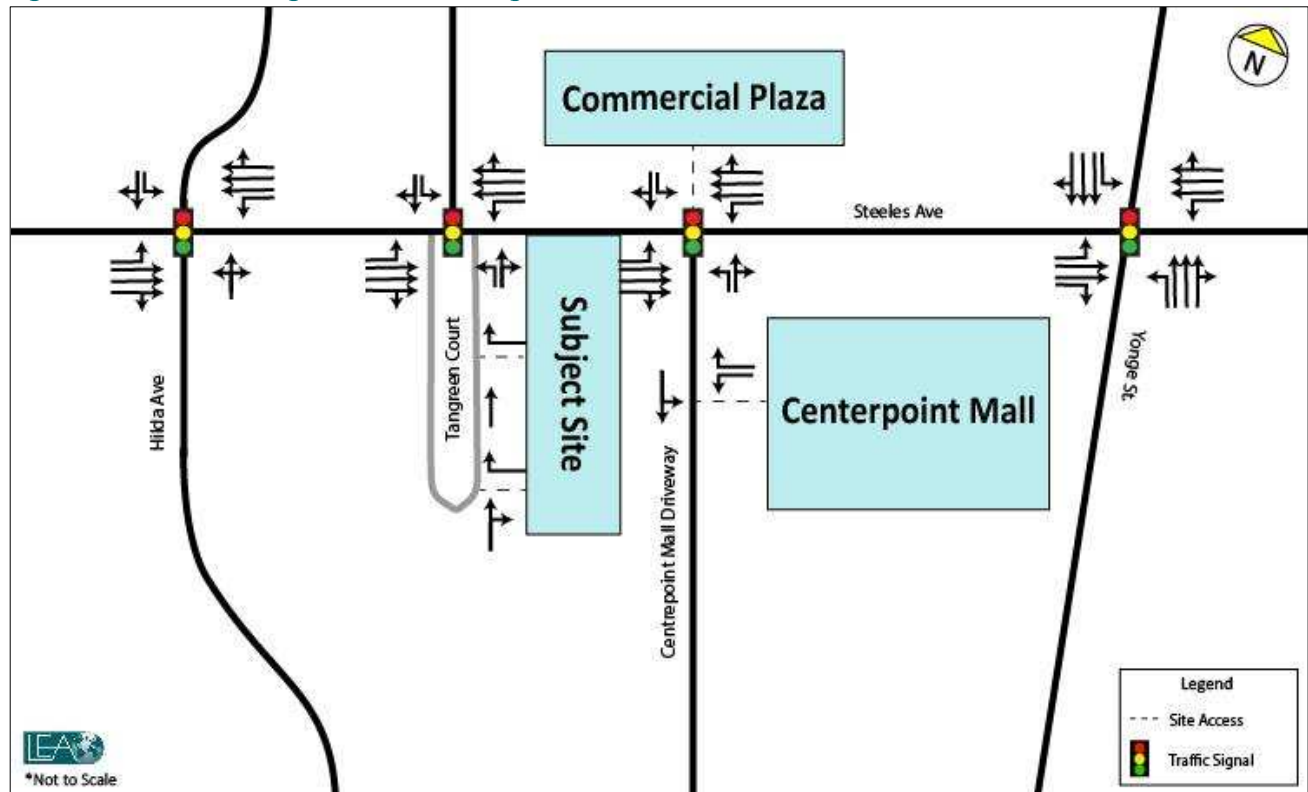
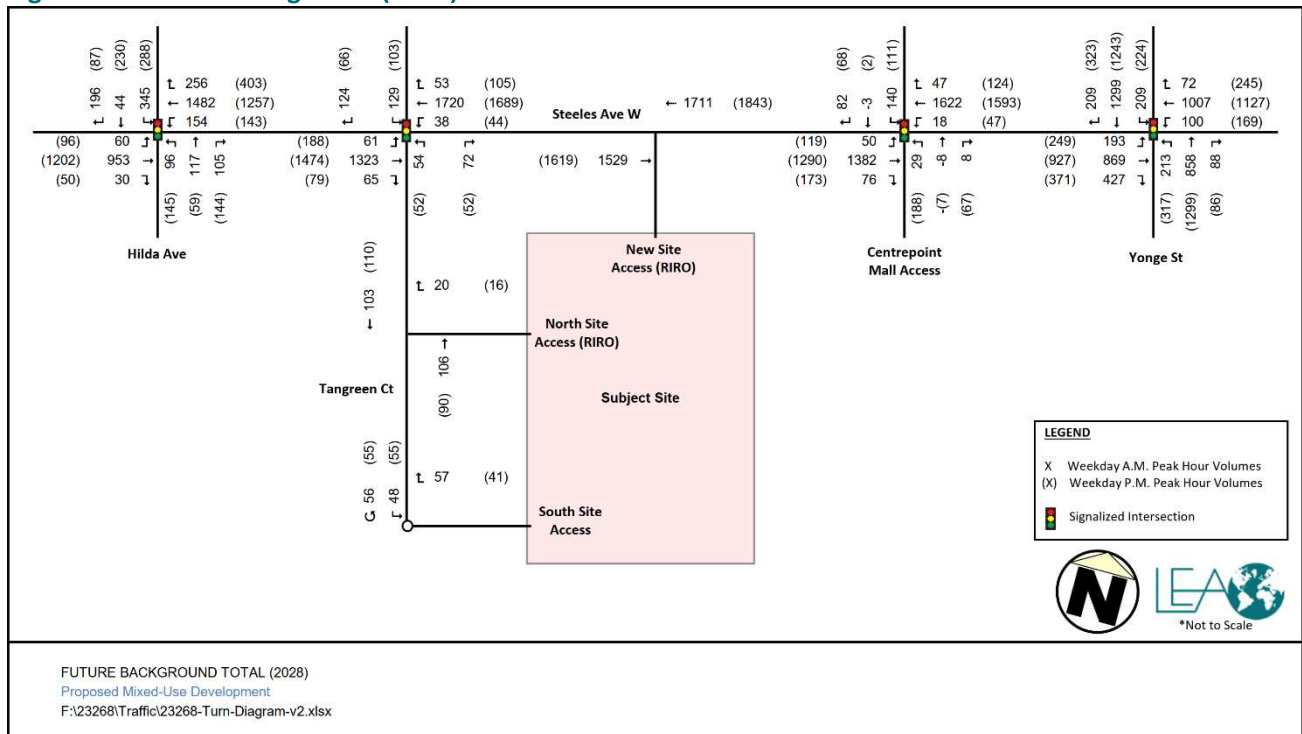




Figure 3-7: Future Background (2028) Traffic Volumes



## 4 SITE-GENERATED TRAFFIC

The proposed redevelopment includes the construction of seven new (7) residential building blocks, as well as one (1) residential tower retained from the previous development, for a total of eight (8) buildings. The proposed blocks will include a total of 3,539 residential units plus 852 m<sup>2</sup> commercial GFA across a total site GFA of 23,881 m<sup>2</sup>. Access to the site will be provided via a new east-west street connecting to Tangreen Court, as well as a new right-in/right-out (RIRO) driveway onto Steeles Avenue.

The sections below discuss the calculation, distribution, and assignment of site-generated single-occupant vehicle (SOV) trips. Trip generation was only undertaken for the proposed residential units. Due to the nature of the proposed ground floor retail units with respect to size and functionality, it is expected that the proposed retail space will serve the surrounding neighbourhood and site development as opposed to being destination retail use. Thus, the majority of trips to and from the proposed retail use are expected to be undertaken by active modes and no dedicated retail parking spaces have been proposed for the subject site. Accordingly, the assessment of residential site trips is provided in the following sections.

### 4.1 VEHICLE TRIP GENERATION

Trip generation for the proposed residential uses was estimated using baseline person trip rates from the *ITE Trip Generation Manual 11<sup>th</sup> Edition*. The average trip rates from ITE Land Use Code (LUC) 222 – High-Rise were used for residential trips, with the filters for City Centre, close to rail transit applied due to the site's proximity to existing and planned rail (subway) transit infrastructure. The baseline person trips were subsequently converted to auto trips based on the mode split for the subject site, which was obtained from the 2016 Transportation Tomorrow Survey (TTS) data as detailed in **Section 4.2** below.

Trip generation for the existing residential uses on-site was estimated based on the surveyed vehicle volumes at the existing site accesses, which were collected in the TMC surveys undertaken by LEA for this study.

The site trip generation for the proposed development is outlined in **Table 4-1** and includes the trips generated by the existing uses to be removed, existing trips to remain, trips to be generated by the new proposed buildings, and overall future total site trips.

Table 4-1: Subject Site Vehicle Trip Generation

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Existing: High-Rise Residential	Total Auto Trips (*Surveyed)	48	77	125	55	57	112
	Existing Trips Removed	-24	-39	-63	-28	-29	-57
	<b>Remaining Existing Trips</b>	<b>24</b>	<b>38</b>	<b>62</b>	<b>27</b>	<b>28</b>	<b>55</b>
High-Rise Residential (ITE LUC 222) 3,325 Units	Person Trip Rate (/Unit)	0.11	0.35	0.46	0.25	0.18	0.43
	Total Person Trips	352	1178	1530	815	615	1430
	Site Interaction	0	0	0	0	0	0
	<b>Total External Trips</b>	<b>352</b>	<b>1178</b>	<b>1530</b>	<b>815</b>	<b>615</b>	<b>1430</b>
	External Auto Trips	99	330	429	228	172	400
<b>Net Site Auto Trips</b>		<b>75</b>	<b>291</b>	<b>366</b>	<b>200</b>	<b>143</b>	<b>343</b>
<b>Future Total Site Trips</b>		<b>123</b>	<b>368</b>	<b>491</b>	<b>255</b>	<b>200</b>	<b>455</b>

The new residential buildings proposed are expected to generate a total of 429 two-way single-occupant vehicle trips in the AM peak hour (99 inbound and 330 outbound), and 400 two-way single-occupant trips in the PM peak hour (228 inbound and 172 outbound).

The future total site trips, including the existing trips to remain, are expected to total 491 two-way single-occupant vehicle trips in the AM peak hour (123 inbound and 368 outbound), and 455 two-way single-occupant trips in the PM peak hour (255 inbound and 200 outbound).

## 4.2 MULTI-MODAL TRIP GENERATION

To estimate the modal split of the trips generated by the new proposed dwelling units, 2016 TTS modal split data was reviewed for home-based work and school trips undertaken by residents living in apartment dwellings. The mode split was undertaken for trips originating from and around the study area for analysis zones 446 and 444 specifically. **Table 4-2** below summarizes the TTS modal split data for the proposed development. Detailed TTS data is provided in **Appendix D**.

Table 4-2: Subject Site Multi-Modal Trip Generation

Land Use	Description	Modal Split	Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
All	External Person Trips	100%	352	1178	1530	815	615	1430
	Auto Driver Trips	28%	99	330	429	228	172	400
	Passenger Trip	11%	39	130	169	90	68	158
	Transit Trips	50%	176	589	765	408	308	716
	Pedestrian trips	10%	35	118	153	82	62	144
	Cycling Trips	1%	4	12	16	8	6	14

The subject site has a high non-auto driver mode split, which accounts for 61% of residential trips. Half of the trips are expected to be undertaken as transit trips based on existing travel behaviour.

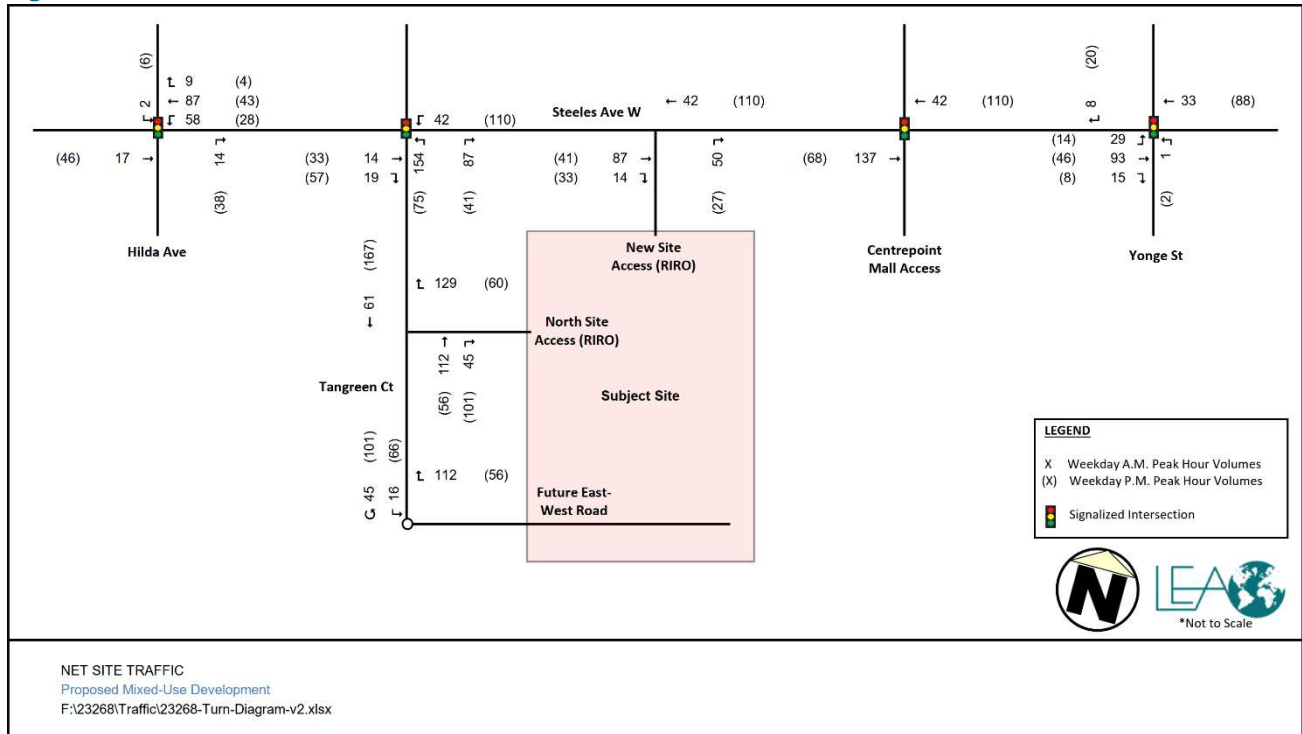
## 4.3 TRIP DISTRIBUTION AND ASSIGNMENT

Directional trip distribution of the site traffic for the various land use trips was derived using TTS 2016 data for zones 446 and 444. For the residential uses, in/out distribution was based on the results of the peak hour and peak direction (i.e., inbound distribution based on PM inbound behaviour, outbound distribution based on AM outbound behaviour).

The site traffic was assigned to the road network based on trip patterns in the study area, logical routing, and the location and configuration of the site accesses. A new right-in/right-out (RIRO) site access is proposed onto Steeles Avenue for the subject site. Traffic assignment to this access was limited to residents using the northeast block (Towers A & B) due to the location of the garage entrance for this block. **Figure 4-1** outlines the trip distribution for the proposed development. Detailed TTS calculations are provided in **Appendix D**.



Figure 4-1: Site Traffic Volumes



## 4.4 FUTURE TOTAL TRAFFIC VOLUMES

Future total transportation conditions will include the addition of site trips to future background volumes on the future road network. The future total road network also includes an additional right-in/right-out (RIRO) site access from Steeles Avenue West proposed for the subject development. The north RIRO site access off Tangreen Court will be maintained, while the second site access off Tangreen Court will be provided as an east-west road. In the future, it is expected that this roadway would be converted to a public road and could connect to the adjacent Centrepont Mall property as part of the YSNTMP. As this is expected outside of the horizon for this study, the roadway has been modelled as a site access off Tangreen Court only. The future total road network is shown in **Figure 4-2**.

As outlined in the initial scope of this study, one future horizon year of 2028 was assessed for the analysis of Future Total Traffic, with the 2028 future total traffic volumes shown in **Figure 4-3**.

Figure 4-2: Future Total Lane Configurations

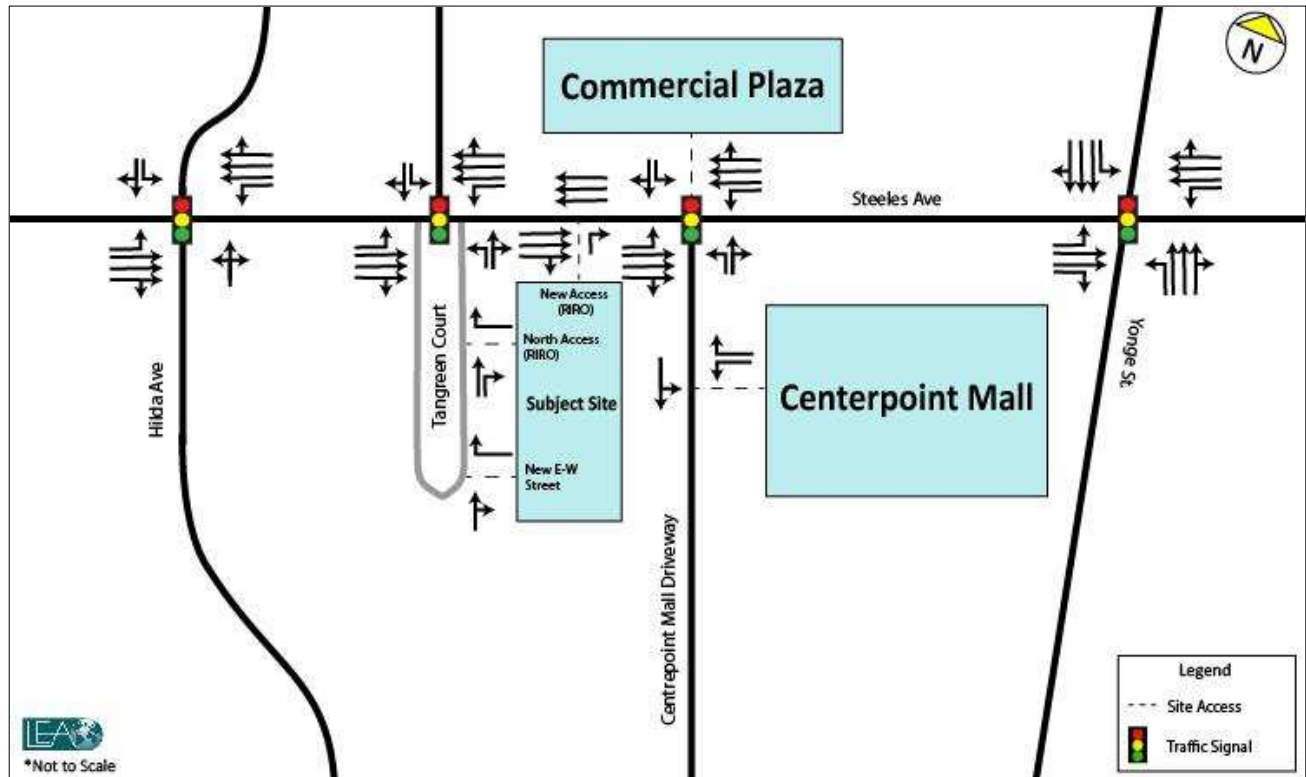
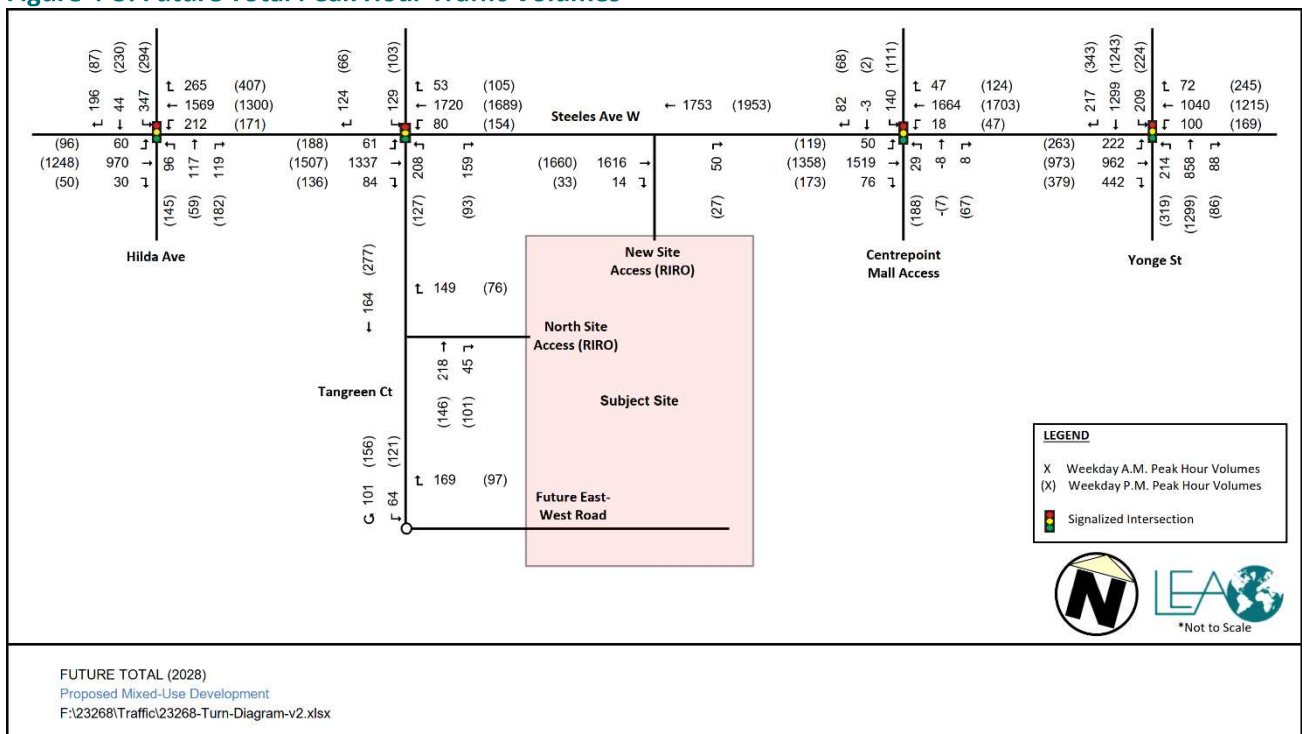


Figure 4-3: Future Total Peak Hour Traffic Volumes



## 5 INTERSECTION CAPACITY ANALYSIS

The following sections provide an analysis of the intersection operations under existing, future background, and future total scenarios. The intersection capacity analysis for the study area was undertaken using Synchro version 11.0, which is based on the Highway Capacity Manual 2000 methodology, with the exception of the Tangreen Court roundabout, which was analyzed using Junction 8. Critical movements are defined as movements with level-of-service (LOS) F or worse or volume-to-capacity (v/c) ratio greater than 1.00 for through, left-turn movements, and right-turn movements.

### 5.1 SYNCHRO MODEL INPUTS AND ASSUMPTIONS

As noted in **Section 3**, modifications to the road network have been undertaken to reflect the anticipated road network under Future Background and Future Total Conditions.

Under Future Background, the addition of a north leg and signalization at the Steeles Avenue and Tangreen Court intersection has been assumed based on the Yonge-Steeles Corridor Secondary Plan and associated traffic study undertaken by BA Group as discussed in **Section 3**. Additionally, signal timing optimization and an increase in cycle length to 130 seconds was required for the intersection of Yonge Street and Steeles Avenue as a result of constraints observed during Future Background conditions. As this signal is not coordinated with adjacent signals and uses SCOOT with a variable cycle length, this increase to mitigate future background traffic impacts should be able to be accommodated without impact to adjacent signals.

Under Future Total conditions, a new east-west road will be added to accommodate the site. It is expected that this new east-west road will connect to the Centrepont Mall property in the future once the existing Centrepont Mall access is converted to a public road as part of the YSNTMP. As this conversion is expected in the longer term, it was not reflected as part of this analysis. The north RIRO site access will be maintained, and a new RIRO access for the site off Steeles Avenue West is proposed, as discussed in **Section 4.4**.

Additionally, the PHF values have been set to 1 for all future horizons.

### 5.2 FUTURE TOTAL (2028) ANALYSIS RESULTS

The following sections summarize the results of the intersection capacity analysis for each intersection, for both signalized and unsignalized intersections. Only the critical movements are shown. Full Synchro outputs can be found in **Appendix E**.

#### 5.2.1 Signalized Intersections

The results of the intersection capacity analysis for the signalized intersections in the study area are summarized in **Table 5-1** to **Table 5-4**. Detailed results are provided in **Appendix E**. Critical movements are bolded for each intersection.

Table 5-1: Intersection Capacity Analysis (Signalized) — Hilda & Steeles

Hilda Ave & Steeles Ave												
AM	Existing				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	26	C	-	-	38	D	-	-	42	D
EBL	40	0.22	34	C	60	0.62	77	E	<b>60</b>	<b>0.68</b>	<b>87</b>	<b>F</b>

PM	Existing				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	30	C	-	-	23	C	-	-	42	D
EBL	56	0.40	47	D	96	0.60	52	D	96	0.96	131	F

**Existing Conditions:** Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity with an overall v/c ratio of less than 1.0, which indicate the intersection is operating within capacity with no constraints identified under either peak hour.

**Future Conditions:** The EBL movement approaches capacity and operates with an LOS F in the PM peak hour under the future total scenario but remains under capacity with an overall v/c ratio of less than 1.0. As shown in the table, the volumes do not change between the future background and future total scenarios with the addition of site traffic. The increased delay for this movement is largely attributed to the addition of westbound traffic, largely attributed to future background traffic. For the AM peak hour, a WBL turning phase was added, as this phase already exists in the PM peak hour thus the infrastructure is in place.

Table 5-2: Intersection Capacity Analysis (Signalized) — Centrepont Mall & Steeles

Centrepont Mall Driveway & Steeles Ave												
AM	Existing				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	9	A	-	-	8	A	-	-	13	B
EBT	1148	0.39	10	B	1382	0.46	1	A	1519	0.50	13	B
SBL	5	0.02	36	D	140	0.40	38	D	140	0.40	38	D
PM	Existing				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	17	B	-	-	11	B	-	-	18	B
EBL	34	0.13	15	B	119	0.63	18	B	119	0.69	53	D

**Existing Conditions:** Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity with an overall v/c ratio of less than 1.0, which indicate the intersection is operating within capacity with no constraints identified under either peak hour.

**Future Conditions:** Future AM and PM peak hour conditions remain under capacity with an overall v/c ratio of less than 1.0 and there are no issues expected for this intersection. The spacing to the adjacent future signal at Tangreen & Steeles is approximately 100m, which is longer than the anticipated queues. Thus, no issues are anticipated.

Table 5-3: Intersection Capacity Analysis (Signalized) —Yonge & Steeles

Yonge St & Steeles Ave												
AM	Existing				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	32	C	-	-	45	D	-	-	47	D
SBR	119	0.79	37	D	209	0.93	61	E	217	0.94	63	E
PM	Existing				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	38	D	-	-	69	E	-	-	75	E
EBL	201	0.74	38	D	249	1.12	131	F	263	1.24	174	F
NBL	171	0.74	38	D	317	1.63	337	F	319	1.67	358	F
SBL	173	0.68	33	C	224	0.97	80	E	224	0.97	82	F

**Existing Conditions:** Under existing weekday AM and PM peak hour conditions, all movements are operating within capacity with an overall v/c ratio of less than 1.0, which indicate the intersection is operating within capacity with no constraints identified under either peak hour.

**Future Conditions:** Under future background weekday PM peak hour conditions, the intersection of Yonge Street and Steeles Avenue is expected to exceed capacity, with constraints identified for the EBL and NBL movements and the SBL movement approaching capacity. All other movements are expected to operate within capacity, with no additional constraints identified at any of the signalized intersections.

It is noted that these capacity constraints continue into the future total condition with the addition of site traffic, however the additional volumes attributed to the subject site are minimal compared to the future background traffic volumes (e.g. 3 site trips are added to the NBL movement compared to 146 additional future background trips). Given the larger planning framework and additional density anticipated for this area, the intersection is expected to experience added pressures as a result. Improvements to the transit and active transportation networks, particularly through the YNSE, are expected to alleviate some constraints as travel behaviour shifts in the longer-term.

Table 5-4: Intersection Capacity Analysis (Signalized) —Tangreen & Steeles

Tangreen Ct & Steeles Ave												
AM	Existing (Unsignalized)				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	2	-	-	-	6	A	-	-	20	B
NBL	54	0.44	53	F	54	0.28	47	D	208	0.68	48	D
PM	Existing (Unsignalized)				Future Background				Future Total			
Mvmt	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS	Vol	V/C	Delay (s)	LOS
Overall	-	-	3	-	-	-	19	B	-	-	21	C
EBL	-	-	-	-	188	0.72	23	C	188	0.70	23	C
SBL	-	-	-	-	103	0.47	48	D	103	0.47	48	D

**Existing Conditions:** Under existing weekday AM and PM peak hour conditions, the intersection is unsignalized and is experiencing constraints to the NBL movement, which operates with an LOS F. This can largely be attributed to the higher east-west traffic volumes along Steeles Avenue resulting in delays to NBL vehicles. As the intersection is three-legged under existing conditions, there are no EBL nor SBL movements.

**Future Conditions:** : Under future background weekday AM and PM peak hour conditions, the intersection of Tangreen and Steeles is expected to operate within capacity with an overall v/c ratio of less than 1.0, which indicate no additional constraints at any of the signalized intersections.

## 5.2.2 Unsignalized Intersections

The results of the intersection capacity analysis for the unsignalized intersections in the study area are summarized in **Table 5-5** to **Table 5-8**. Detailed results are provided in **Appendix E**.

Table 5-5: Intersection Capacity Analysis (Unsignalized) —Tangreen & North Access

Tangreen Ct & North Access															
AM	Existing					Future Background					Future Total				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	1	-	-	-	-	3	-	-
WBR	20	0.03	9	A	0	20	0.02	9	A	0	149	0.19	11	B	1

PM	Existing					Future Background					Future Total				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-
WBR	16	0.02	9	A	0	16	0.02	9	A	0	76	0.09	10	A	0

Table 5-6: New Access & Steeles (Future Total Conditions)

New Site Access & Steeles Ave					
AM	Future Total				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-
NBR	50	0.18	21	C	1
PM	Future Total				
Mvmt	Vol	V/C	Delay (s)	LOS	95th Queue
Overall	-	-	0	-	-
NBR	27	0.10	20	C	0

Under existing, future background, and future total weekday AM and PM peak hour conditions, all movements at the unsignalized intersections are operating within capacity, with an overall v/c ratio of less than 1.0, and at an acceptable LOS of D or better. No additional constraints were identified as a result of the added site traffic and no mitigation measures are required. The proposed development and site accesses can be accommodated within the existing road network.

### 5.2.3 Roundabout Intersections

The results of the intersection capacity analysis for the unsignalized site accesses facilitating access to the site in the study area are summarized in **Table 5-4** to **Table 5-8**. The results were obtained from Junction 8 in order to analyze the roundabout configuration of Tangreen Court. Detailed results are provided in **Appendix E**.

Table 5-7: Tangreen & South Access (Existing and Future Background Conditions)

Roundabout	Leg	Weekday AM Peak Hour						
		Queue (PCE)	95% Queue (PCE)	Delay (s)	V/C	LOS	Intersection Delay (s)	Intersection LOS
Tangreen Ct & Site Access	Westbound	0.10	~1	5	0.09	A	3	A
	Southbound	0.09	~1	2	0.08	A		
Roundabout	Leg	Weekday PM Peak Hour						
		Queue (PCE)	95% Queue (PCE)	Delay (s)	V/C	LOS	Intersection Delay (s)	Intersection LOS
Tangreen Ct & Site Access	Westbound	0.06	~1	5	0.06	A	3	A
	Southbound	0.08	~1	2	0.07	A		



Table 5-8: Tangreen & South Access Capacity Analysis (Future Total Conditions)

Roundabout	Leg	Weekday AM Peak Hour						
		Queue (PCE)	95% Queue (PCE)	Delay (s)	V/C	LOS	Intersection Delay (s)	Intersection LOS
Tangreen Ct & Site Access	Westbound	0.08	~1	5	0.08	A	3	A
	Southbound	0.07	~1	2	0.06	A		
Roundabout	Leg	Weekday PM Peak Hour						
		Queue (PCE)	95% Queue (PCE)	Delay (s)	V/C	LOS	Intersection Delay (s)	Intersection LOS
Tangreen Ct & Site Access	Westbound	0.06	~1	5	0.05	A	3	A

The measurements for this intersection were estimated using aerial imagery. Vehicles were measured in Passenger Car equivalents (PCEs), where normal light vehicles count as 1 PCE and heavy vehicles such as buses and trucks count as 2 PCEs. Pedestrians were not considered for this analysis as there is very little demand for pedestrians to be crossing at this roundabout, due to it being a dead-end road with only residential developments on the other side.

The future background condition is the same as the existing condition as no vehicles would be added to the roundabout during the future background condition (no background developments using this roundabout). Overall, there are no issues observed for the roundabout, with no significant queuing, LOS of A observed, and v/c ratios well below 1.0.



## 6 MULTI-MODAL LEVEL OF SERVICE ANALYSIS

An analysis of the multimodal levels of service for bicycle, and pedestrian modes was undertaken for non-vehicle modes in the study area. The assessment of the existing level of service for each mode, as well as the future conditions assessment, has been evaluated in accordance with the City of Ottawa Multi-Modal Level of Service (MMLOS) Guidelines to generate levels of service (LOS) to describe the convenience and comfort level for transit and active transportation users in the study area.

The results are presented on a scale of A to F, where A represents preferred conditions and F represents least preferred conditions, depending on the criteria of the mode. It should be noted that LOS is not always the desired target for all modes, rather each mode is considered independently, and the minimum LOS targets depend on the context of the street and surrounding area. Details of the multimodal level of service assessment can be found in **Appendix F**.

### 6.1 TRANSIT LEVEL OF SERVICE

The anticipated TLOS for the study area is summarized in **Table 6-1**. The proposed development is expected to generate 765 total AM transit trips and 716 total PM transit trips, which accounts for 50% of the trips generated by the development. Under existing conditions, both major intersections of Hilda and Steeles Avenue and Yonge Street and Steeles Avenue operate poorly due to congestion, and future conditions are expected to worsen the LOS at these intersections.

The intersections of Tangreen and Steeles Avenue, and Centrepont Mall and Steeles Avenue operate acceptably with the Tangreen and Steeles Avenue intersection notably decreasing in LOS under future total conditions. The major intersections are congested in general and will likely remain so until better service and alternative travel methods are implemented, in particular transit signal priority or bus-only lanes on Steeles Avenue in combination with the TTC Line 1 extension as discussed in **Section 3**.

Table 6-1: Multi-Modal Assessment – Transit Level of Service

Scenario	Intersection Evaluation	Criteria	Hilda Ave & Steeles Ave	Tangreen Cr & Steeles Ave	Centrepont Mall & Steeles Ave	Yonge St & Steeles Ave
Existing 2023	Transit LOS	Delay	F	A	C	F
Future Background 2028			F	E	C	F
Future Total 2028			F	D	C	F

### 6.2 PEDESTRIAN & BICYCLE LEVEL OF SERVICE

The anticipated PLOS and BLOS for each study area roadway segment is summarized in **Table 6-2**. The PLOS evaluation indicates the current LOS for pedestrians along Steeles Avenue and Centrepont Mall Driveway to be poor and is inadequate for serving the high number of expected walking trips for accessing nearby public transit stations. The existing connection between the 5 & 15 Tangreen property and the Centrepont Mall site has good PLOS and should be maintained in the future, and similar connections to adjacent properties should be attempted whenever possible.

The BLOS evaluation indicates a varying LOS along different study sections. The study indicates a good LOS for Tangreen Court and Centrepont Mall Driveway, but poor LOS for Steeles Avenue as it is a large and busy road.

Unless bicycle infrastructure is improved on a wider scale, this mode share is unlikely to grow. No major infrastructural changes are anticipated along the study roads.

Table 6-2: Multi-Modal Assessment – Pedestrian and Bicycle Level of Service

Segment Evaluation	Criteria	Segment	Existing 2023
Pedestrian LOS	Sidewalk width, Boulevard width, Motor vehicle volume (AADT/lane), Presence of on-street parking, Vehicle operating speed.	Tangreen Ct – Steeles Ave W to end of road	C
		Steeles Ave W – Tangreen Ct to Centrepoint Mall Access	E
		Centrepoint Mall Access – Steeles Ave W to 100 m south of Steeles	E
Bicycle LOS	Type of cycling facility, Street width, Vehicle operating speed, Width of bike lane (if present), Bike lane blockages (if present).	Tangreen Ct – Steeles Ave W to end of road	A
		Steeles Ave W – Tangreen Ct to Centrepoint Mall Access	F
		Centrepoint Mall Access – Steeles Ave W to 100 m south of Steeles	B

## 7 PARKING AND LOADING REVIEW

This section will review the vehicular and bicycle parking standards applicable to the subject site, as well as the required and proposed loading supply.

### 7.1 BICYCLE PARKING STANDARDS

The City of Toronto Zoning By-Law 569-2013 bicycle parking requirements for Bicycle Zone 2, where the subject site is located, were reviewed and applied to the proposed development. The bicycle parking requirements and proposed supply for the site as a whole are summarized in **Table 7-1**. As the proposed retail component is less than 2,000 m<sup>2</sup> interior floor area, which is the minimum threshold for bicycle parking to be required for non-residential uses, bicycle parking has been reviewed for the proposed residential units only.

Table 7-1: Zoning By-Law 569-2013 Bicycle Parking Standards

Building (Proposed)	Land Use	Units	City of Toronto Zoning By-law 569-2013 / TGS - Bicycle Zone 2			
			Parking Type	Min. Rate	Required Spaces	Proposed Supply
A+B	Residential	1,115	Long-term	0.68 / unit	759	759
			Short-term	0.07 / unit	79	79
C+D	Residential	619	Long-term	0.68 / unit	421	421
			Short-term	0.07 / unit	44	44
E+F+G	Residential	1,591	Long-term	0.68 / unit	1,082	1,082
			Short-term	0.07 / unit	112	112
		Total Bicycle Parking Spaces			2,497	2,497

The subject site will provide a total of 2,497 bicycle parking spaces, including 2,262 long-term and 235 short-term spaces, which will meet the by-law requirements applicable to the site. As the area is expected to benefit from improvements to the active transportation network through plans such as the YSNTMP, the provision of bicycle parking on-site will support future residents to cycle and take advantage of the existing and future planned networks.

#### 7.1.1 Electric Bicycle Parking Requirements

It is noted that, as per TGS V4, a total of 15% of the required long-term bicycle parking spaces must have access to an energized outlet to accommodate electric bicycles. This would equate to 399 spaces that must have access to energized outlet based on the proposed supply.

#### 7.1.2 Bicycle Parking Location

Long term bicycle parking should be provided in line with TGS V4 requirements within a convenient and secure location for residents to access. The proposed short term bicycle parking should be located at ground level or one level below the ground floor. Additional details regarding the location of bicycle parking on-site will be provided as the architectural plans progress.

### 7.2 VEHICLE PARKING STANDARDS

#### 7.2.1 City of Toronto By-Law 569-2013 Requirements

The site is subject to parking standards in the City of Toronto Zoning By-law 569-2013. It is noted that By-law 569-2013 was recently amended by By-law 89-2022, which removes the majority of minimum vehicle parking

requirements and introduces updated maximum vehicle parking requirements to avoid an oversupply of vehicle parking for new development in Toronto. These requirements permit a reduction of parking spaces for new developments as investments and trends in travel behaviour towards public transit and active transportation increases, developments seek to maximize GFA for more productive uses, and the City works to reduce greenhouse gas emissions through objectives such as the TransformTO Net Zero Strategy. These goals are particularly relevant for the subject site as it is located nearby transit improvements planned along Yonge Street and Steeles Avenue, as well as planned expansions to the local street and active transportation networks through the YSNTMP and Yonge-Steeles Secondary Plan.

Under the by-law, the subject site is located in “Parking Zone B” of the City. The minimum and maximum rates for new proposed buildings are set out in By-law 569-2013, as amended, are summarized in **Table 7-2**, along with the proposed rates per use and corresponding supply.

Table 7-2: Zoning By-Law 89-2022 Vehicle Parking Standards

Phase	Use	GFA/Unit	Zoning By-law 569-2013, as Amended				Proposed Supply
			Min. Rate	Max. Rate (Parking Zone B)	Min. Spaces	Max. Spaces	
Phase 1 (Buildings A & B)	1-Bed	810	-	0.8 sp/unit	-	648	93
	2-Bed	194	-	0.9 sp/unit	-	174	
	3-Bed	111	-	1.1 sp/unit	-	122	
	Visitor	1,115	2+0.05 sp/unit	1 sp for first 5 units + 0.1 sp/unit for 6 <sup>th</sup> & subsequent units	57	116	57
	Retail	272 m <sup>2</sup>	-	4.0 sp/100 m <sup>2</sup>	-	10	-
	Phase Total				57	1,070	150
Phase 2 (Buildings C & D & 15 Tangreen)	1-Bed	476	-	0.8 sp/unit	-	380	157
	2-Bed	275	-	0.9 sp/unit	-	247	
	3-Bed	128	-	1.1 sp/unit	-	140	
	Visitor	833	2+0.05 sp/unit	1 sp for first 5 units + 0.1 sp/unit for 6 <sup>th</sup> & subsequent units	43	87	43
	Phase Total				43	854	200
Phase 3 (Buildings E & F & G)	1-Bed	1,176	-	0.8 sp/unit	-	940	186
	2-Bed	251	-	0.9 sp/unit	-	225	
	3-Bed	164	-	1.1 sp/unit	-	180	
	Visitor	1,591	2+0.05 sp/unit	1 sp for first 5 units + 0.1 sp/unit for 6 <sup>th</sup> & subsequent units	81	163	81
	Retail	580 m <sup>2</sup>	-	4.0 sp/100 m <sup>2</sup>	-	23	-
	Phase Total				81	1,561	267
	Site Total				181	3,485	617

Under By-law 569-2013, the subject site is required to provide a minimum of 181 parking spaces to accommodate visitor parking demand. Additionally, up to 3,068 residential parking spaces, 366 visitor, and 33 retail spaces are permitted on-site, for a total of 3,485 vehicle parking spaces.

A total of 617 parking spaces are proposed for the site to accommodate all uses on site. The minimum visitor parking requirements will be met for each phase. Overall, the proposed supply will meet the latest by-law requirements without overproviding parking for the site.