

SCARBOROUGH CENTRE TMP

PROGRESS MEMO NO. 1

JANUARY 2017



The Planning Partnership PERKINS+WILL

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Scarborough Centre

1.0 Introduction

Over the past several decades, Scarborough Centre has grown into a hub for population, employment and transportation for the Greater Toronto Area (GTA). The Scarborough Centre Secondary Plan and subsequent detailed planning documents have laid out the guiding vision for the anticipated growth, as more than 40,000 residents and 23,000 jobs are expected to be accommodated in the Centre over the next 30 years.

Building upon the completed planning work, the Scarborough Centre on the Move is the Transportation Master Plan (TMP) that will provide the detailed transportation infrastructure and land-use policies, initiatives, strategies and implementation plan necessary to develop the Scarborough Centre into a mixed-use urban hub, with a focus on moving people via all modes of transportation.

This document is the first progress memo for the Scarborough Centre on the Move Transportation Master Plan (SCTMP), which summarizes the existing conditions of Scarborough Centre, specifically highlighting:

- Historical Context;
- Stakeholder Consultation;
- Policy Framework;
- Travel Trends and Behavior;
- Transportation Assessment (Traffic, Transit, Pedestrian and Cycling);
- Urban Form;
- Collision Analysis;
- Environmental Assessments (Stage 1 AA & Phase 1 ESA);
- Draft Vision Statement;
- Draft Problem/Opportunity Statement; and,
- Draft Evaluation Criteria and Method.

The SCTMP will be conducted to satisfy the requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment (Class EA) process in accordance with the Environmental Assessment Act. The Class EA process provides for public input at key stages and involves the identification of the problem/opportunity statement, developing and evaluating a reasonable range of alternative solutions, and selecting a preferred alternative solution. The findings of this document were presented to the public at a Public Consultation Meeting on November 29, 2016. The intent of the first public meeting was to gain feedback on existing conditions in the Scarborough Centre, before the development of alternative solutions. Details of the public meeting can be found in Appendix A.

2.0 Study Area

The Scarborough Centre Secondary Plan Area is approximately 180 hectares. It extends from Ellesmere Road to Highway 401, almost 1 kilometre. East-west, it stretches from just west of Brimley Road to the north terminus of Bellamy Road, a length of just under 2 kilometres. Within its boundaries are several larger-scale developments, transit infrastructure and a supporting street network. Much of the infrastructure in place has been in response to the key developments in the area: Scarborough Town Centre, a regional shopping mall, and Scarborough Civic Centre. The resulting urban landscape is vehicle-dominant and inhospitable to pedestrians and cyclists.

For the purposes of the SCTMP a core study area and a broad study area, as illustrated in Figure 2 on the next page, were established. The core study area is bounded by Midland Avenue to the west, Markham Road to the east, Ellesmere Road to the south, and Highway 401 to the north. The broader study area captures the surrounding areas and is bounded by Midland Avenue to the west, Markham Road to the east, Sheppard Avenue to the north, and Lawrence Avenue to the south. The study area of the Scarborough Centre Secondary Plan (2008) is also illustrated in Figure 2.

Land uses in the area are in a state of transition, slowly moving from industrial-based uses to a mix of commercial, retail and residential uses. The street network has not kept pace with these changes. This study will develop Transportation Master Plan that provides a clear vision for transforming the street system into a finer-grained street network that comfortably accommodates pedestrians and cyclists as well as motorists.

A summary of existing attributes in the Scarborough Centre is summarized in Figure 1:

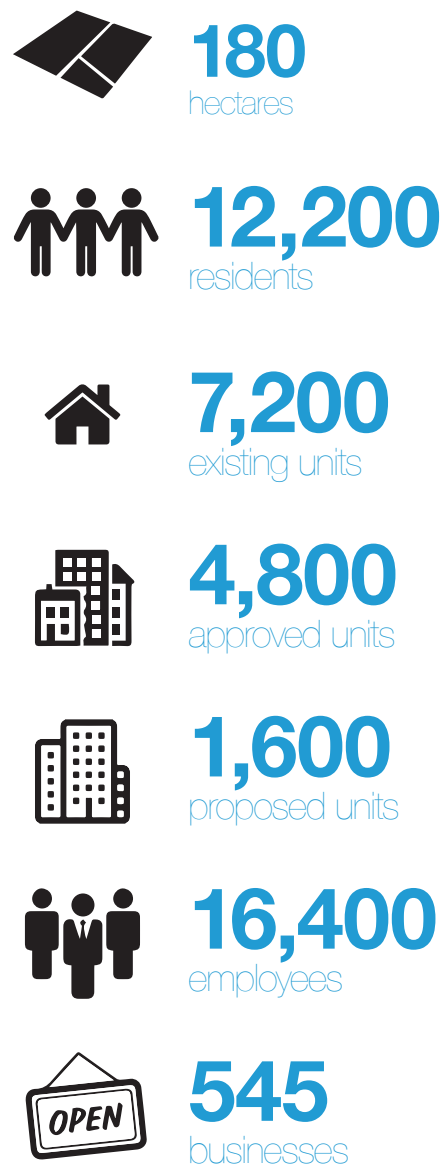


Figure 1: Scarborough Centre Facts

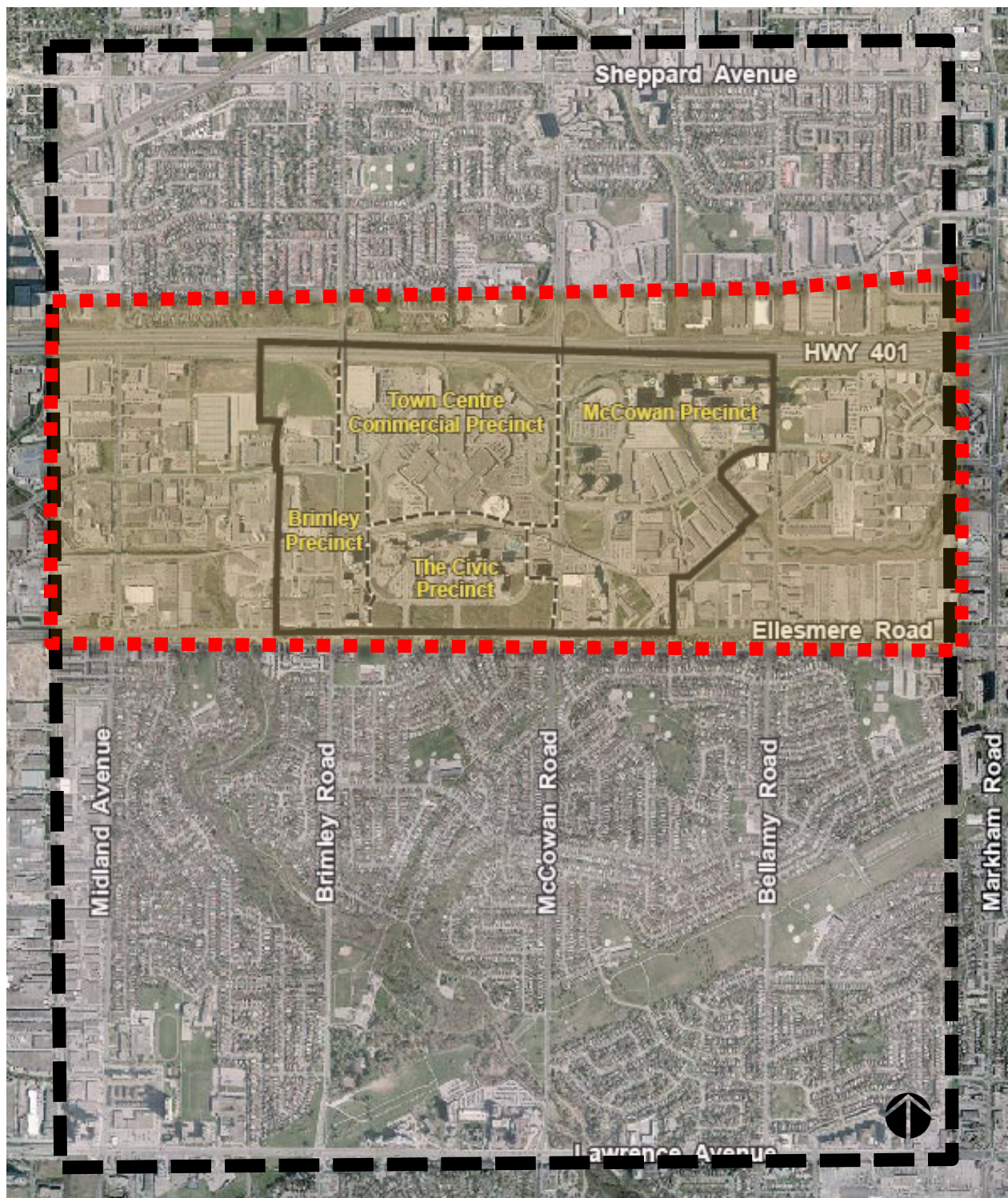


Figure 2: Study Area

- Broad Study Area
- Core Study Area
- Scarborough Centre Secondary Plan

2.1 Comparable Centres

In order to appreciate the extent and development potential of the Scarborough Centre, a number of scale comparisons with other urban areas is appropriate. Each of the comparisons share a number of similar attributes with Scarborough Centre:

- Area size is comparable;
- Adjacent to highway network;
- Inclusion of higher order transit (including mobility hub);
- Framework of streets comprised of orthogonal streets and blocks;
- Presence of civic institutions; and
- Transition from monolithic land use to a more balanced mix of uses.

The street pattern of the Scarborough Centre is overlaid on the air photo of comparable centres described in the following sections.

2.1.1 Scarborough Centre

There is an opportunity in the Scarborough Centre to create an urban place that is comprised of a tighter block structure defined by a fine-grained street network that accommodates a range of movement choices. This evolution to a more complex urban environment will be supported by the extension of the Bloor Danforth Subway to Scarborough Centre and associated secondary transit feeders to the new station.

Overall Area: 180 hectares

Population: 10,000 residents + 13,400 jobs

Density: 50 people + 66.7 jobs/hectare

Projected Population: 40,000 people + 23,000 jobs

Source: Metrolinx Scarborough Centre Mobility Hub Profile (December 2015)

2.1.2 Markham Centre

The emerging centre is situated between Highway 407 and Highway 7. Between the two major roadways lies the Rouge River Valley, a protected and continuous ecosystem. A mixed-use community is planned for the area, bookended by the City Civic Centre to the west and the Unionville mobility hub to the east. Higher order transit, in the form of VIVA BRT, links major assets. A network of finer-grained streets, blocks and open spaces will support the range of land uses envisioned for the area with dedicated bicycle lanes integrated into network planning.

Area: 400 hectares

Projected Population: 41,000 residents + 39,000 jobs

Density: 200 people + jobs/hectare

Source: www.markham.ca/Business & Development/Markham Centre/Statistics at a Glance. 2016.



Scarborough Centre



Markham Centre

2.1.3 Downtown Toronto

Overlaid on an aerial of the City's downtown core, the Scarborough Centre stretches from Simcoe Street to Sherbourne Street and from Wellington Street to north of Dundas Street. Within these boundaries are civic institutions and a regional shopping centre with a transit hub located nearby. The area is structured around a tight orthogonal block structure containing a diverse range of uses and open spaces serviced by an extensive transit system. A number of streets have been transformed from dedicated motor vehicle corridors to complete streets with pavement demarcated for cyclists as well as motorists..

Overall Area: 1,700 hectares
Population: 200,000 residents + 446,000 jobs
Density: 380 people + jobs/hectare

Source: Downtown Toronto: Trends Issues Intensification. City of Toronto, City Planning (Toronto and East York District). 2014.

2.1.4 Vaughan Metropolitan Centre (VMC)

The VMC is located at Highways 407 and 400 and is planned to include a regional transit hub with a TTC subway station. The future road network is to be fine-grained, accommodating a range of uses including a new civic centre.

Area: 179 hectares
Projected Population: 12,000 residents + 24,000 jobs
Density: 201 people + jobs/hectare

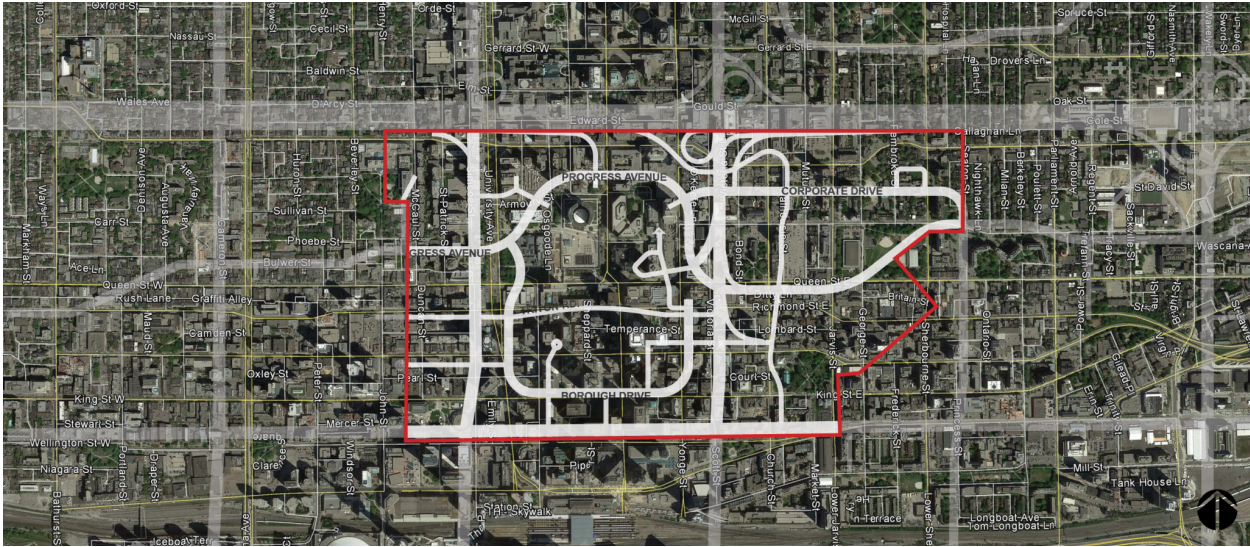
Source: "Vaughan rising: Master-planning a downtown from scratch" by Merideth Macleod. Globe & Mail. December 23, 2015.

2.1.5 Mississauga Centre

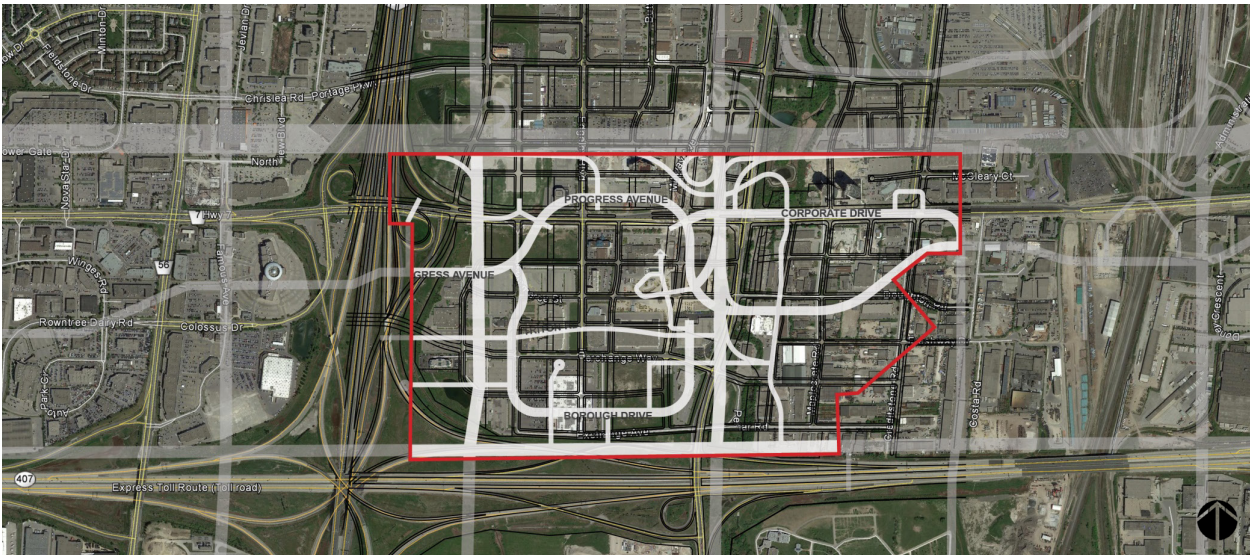
Located south of Highway 403, the downtown for Mississauga is emerging from a transformed regional shopping centre. A mix of residential and commercial developments is forming around a civic core that includes City Hall, a central library, a YMCA facility and a theatre. A street network of rectangular blocks will frame new development blocks and accommodate a major transit hub.

Area: 255 hectares
Projected Population: 32,820 residents + 20,850 jobs
Density: 210 people + jobs/hectare

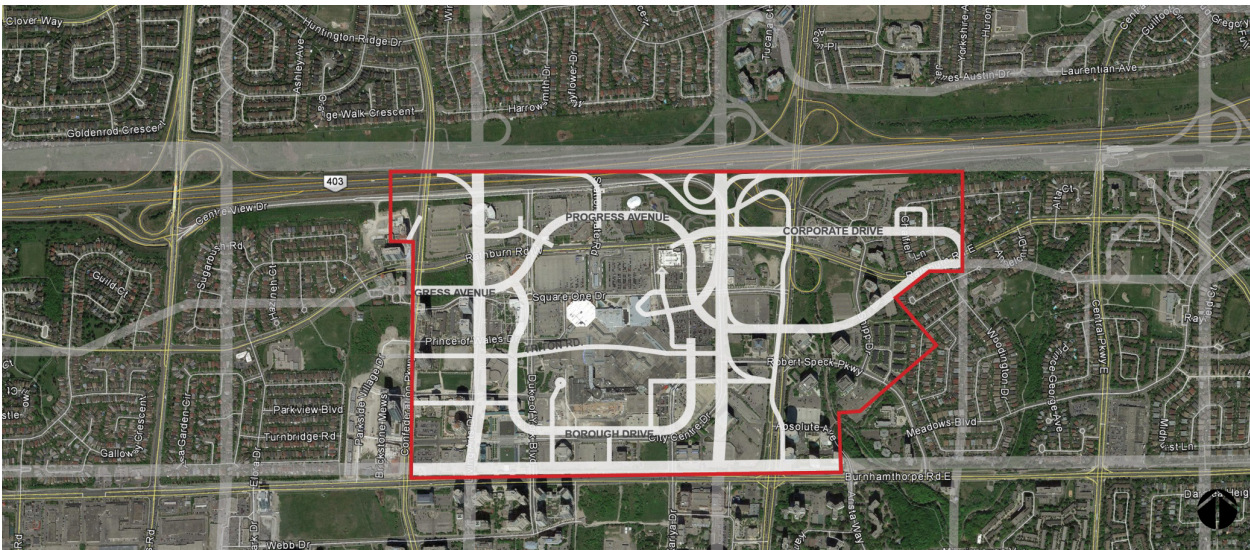
Source: Focus on Mississauga 2012: Atlas of the Downtown, Major Nodes and Community Nodes. Downtown Core. City of Mississauga. 2012.



Downtown Toronto



Vaughan Metropolitan Centre



Mississauga Centre

3.0 Stakeholder Consultation

The SCTMP involves an extensive community consultation program. A public engagement and consultation plan was developed by The Planning Partnership (TPP), which can be found in Appendix B. The plan includes a wide range of communication methods and opportunities for public involvement. On-line, social media and paper notifications will be used to ensure that all members of the public can stay informed and participate in events, with or without internet access.

3.1 PiPS & Roving Information Stations

Planners in Public Spaces (PiPS) and Roving Information Stations were held throughout the summer of 2016, at key areas in the Centre to engage the public and to understand areas of concern/focus. These events were tailored to understand the public perspective with respect to the problems/opportunities in the Centre and their travel patterns to/from/within the Centre. Table 2 summarizes the feedback obtained from PiPS.

Table 2: PiPS Consultation Summary

PiPS Event Name	Date	Time	Location	Attendance	Key Messages
Taste of Lawrence Festival	July 10, 2016	11am - 6pm	Lawrence Avenue East / Warden Ave	194	Scarborough community is strong and residents want to make it a better place / The support from area councillors generally strong / Transit improvements are needed.
Scarborough Multi-Cultural Festival	August 5, 2016	4pm - 9pm	Albert Campbell Square	94	The many amenities in the area are an asset that can still be improved / Parks and green spaces are an asset to be protected, provide a good balance with development / Improvements to transit are needed / Non-existent cycling infrastructure needs to be addressed / Multi-cultural nature of the community is one of its best assets / Opportunities exist to beautify and improve the image of Scarborough Centre
	August 6, 2016	12pm - 6pm	Albert Campbell Square	47	
Scarborough Civic Centre Library / Civic Green	August 18, 2016	1pm - 5pm	SCC Library	26	Wayfinding improvements are required / Improvements to the area's transportation networks (pedestrian, cycling, transit) are needed / Area's parks and green spaces are assets to be protected and enhanced / The many amenities in the area are an asset that can still be improved
Consilium Place	August 24, 2016	9am - 5pm	100 Consilium Place	110	Better transit connections required with surrounding areas, often cheaper and more convenient to drive / Need for better cycling infrastructure / Lack of continuous pedestrian infrastructure / Better wayfinding required / Area has numerous amenities nearby (i.e. mall) but accessing them safely and conveniently is an issue
Scarborough Centre TTC Station	September 13, 2016	3pm - 7pm	Scarborough Centre TTC Station	150	Better wayfinding required / Need for continuous and safe active transportation infrastructure / Hwy 401 is a huge barrier for those walking and cycling / Transit system improvements needed (fare integration, less transfers) / Future use of SRT corridor needs to be considered
Consilium Place	September 15, 2016	9am - 5pm	100 Consilium Place	105	Strong demand for cycling but infrastructure needed / Improvements to road system (wayfinding, conditions) are necessary / Transit service is adequate but can be improved / Connecting to surrounding area locations is key
McCowan TTC Station	September 20, 2016	3pm - 7pm	McCowan TTC Station	42	Accessibility issues at McCowan station / non-continuous sidewalks and insufficient bicycle parking are an issue throughout the Centre
Scarborough Town Centre (STC) Shopping Mall	October 15, 2016	10am - 4pm	STC Shopping Mall	111	Public input key to study success / Area is extremely difficult to safely navigate for people with strollers and mobility devices / Intersection of Brimley Rd and Progress Ave currently very unsafe for all users / Transit and pedestrian (i.e. Brimley/ Hwy 401) systems need to improve as area continues to grow / Need to consider mitigating long-term impact of the area's industries
	October 19, 2016	10am - 6pm	STC Shopping Mall	88	Pedestrian and cycling environment is sorely lacking and in need of improvement (i.e. shorter crossings, safer infrastructure, continuous network) / Improve efficiency of transit system by minimizing transfers / Future growth cannot be accommodated without improved transit and active transportation systems / Many amenities nearby but accessibility is a key concern
Scarborough Centre YMCA	October 29, 2016	9am - 3pm	230 Town Centre Court	135	Improving pedestrian and cycling networks should be main priority / Connect future cycling network to existing cycling infrastructure in surrounding community / Need more reliable transit service and better bus connections to and from Scarborough Town Centre Mall / Need to create a more "main street", fine-grained feel for the future street network / Better lighting and wayfinding required
	November 1, 2016	4pm - 7pm	230 Town Centre Court	65	Difficult to access area's many amenities when utilizing transportation options other than driving / Need more frequent and reliable bus service to and from Scarborough Town Centre / A more urban street network is needed
Total:				1167	

3.2 Technical Advisory Committee (TAC) #1

The first Technical Advisory Committee (TAC) meeting was held on September 12th, 2016 from 1:00 pm to 4:00 pm at the Scarborough Civic Centre. The “Visioning Workshop” with the TAC included a City-led walking tour of Scarborough Centre followed by a presentation of the team’s work in progress and two workshop sessions to identify key words to be captured in a vision statement and design principles.

Table 3 highlights some of the output of the TAC workshop from which key words are used to formulate the vision statement. Further details on the TAC workshop and walking tour can be found in Appendix C.



TAC Visioning Workshop (September 12 2016)

Table 3: TAC Workshop Outputs

Broad, higher level directions for implementing the vision	Network functionality	Meeting the needs of all street users	Linking to the wider network	Finer scale implementation
<input type="checkbox"/> Context-sensitive <input type="checkbox"/> Character <input type="checkbox"/> Scale <input type="checkbox"/> Natural environment <input type="checkbox"/> Intuiting <input type="checkbox"/> Diverse scale (local + regional function) <input type="checkbox"/> Community <input type="checkbox"/> Hub <input type="checkbox"/> Safe <input type="checkbox"/> Ownership <input type="checkbox"/> Investments	<input type="checkbox"/> Connectivity <input type="checkbox"/> Choice <input type="checkbox"/> Linkages <input type="checkbox"/> Integration <input type="checkbox"/> Balanced <input type="checkbox"/> Permeable	<input type="checkbox"/> Multi-modal <input type="checkbox"/> Transit supportive <input type="checkbox"/> Multi modal mobility and accessibility <input type="checkbox"/> Cycling <input type="checkbox"/> Active <input type="checkbox"/> Slow traffic speed on “local” roads <input type="checkbox"/> New street hierarchy <input type="checkbox"/> Complete (balanced) streets <input type="checkbox"/> Right-sizing roads <input type="checkbox"/> Finer-grained <input type="checkbox"/> Enhanced accessibility <input type="checkbox"/> Accessibility <input type="checkbox"/> Inter-modal relationship <input type="checkbox"/> Pedestrians scaled street grid <input type="checkbox"/> Pedestrian flow <input type="checkbox"/> Better sidewalks	<input type="checkbox"/> Goods movement <input type="checkbox"/> Local + regional transit connections <input type="checkbox"/> Good transit coverage <input type="checkbox"/> Integrated parking strategy <input type="checkbox"/> Expanding network plan for expansion in phases <input type="checkbox"/> Active transportation network	<input type="checkbox"/> Wayfinding (all modes) <input type="checkbox"/> Operational needs <input type="checkbox"/> Asset operation

4.0 Policy Context

The SCTMP is guided by the regulatory framework of various policy documents, standards, and guidelines. Scarborough Centre has been identified by different levels of government as a population, employment, and transportation hub in the regional transportation network. This section provides an overview of the policy context guiding the SCTMP. A detailed review of the Policy Framework is in Appendix D. Table 4 summarizes the various policies relevant to the project.

Documents that were reviewed include:

- Mobility Hub Guidelines for the Greater Toronto and Hamilton Area;
- Feeling Congested? (Official Plan Review);
- Toronto Cycling Network Plan;
- Toronto Walking Strategy;
- Toronto Pedestrian Charter;
- Complete Streets Guidelines;
- Vibrant Streets Guidelines;
- Accessibility Design Guidelines; and,
- Toronto Green Standard.

The SCTMP will also adhere to the following design and implementation plans that were established after the Scarborough Centre Secondary Plan (and which are described further in this document):

- The Civic Precinct Implementation Plan
- The Scarborough Centre Public Space and Streetscape Master Plan
- McCowan Precinct Plan

In general, the plans are consistent in defining the context and regional importance of Scarborough Centre, with objectives to provide transit infrastructure improvements. However, there is a need for more specific plans identifying strategies and initiatives to improve connections to, from and within Scarborough Centre. Clarification is also required regarding how the transit plans will fulfil the transportation needs of the Scarborough Centre with an understanding of the existing capacity and future demand of the street and transit networks.

Table 4: Policy Relevance

Policy Document	Policy Description	Relevance to SCTMP
Provincial Policy Statement (PPS)	The strategic vision for regulating land use and development within the province, with an emphasis on healthy communities, active modes of transportation, clean environment and a strong economy. The transportation infrastructure system should be sustainable, multi-modal, and linked with land use considerations.	The PPS promotes land use and transportation policies which increase choices for all modes of transportation. Contained in the PPS are mandates pertaining to land use, built form, cycling, walking and transit, which will be used to govern the development of similar policies and recommendations in the SCTMP.
Growth Plan for the Greater Golden Horseshoe	The plan guides decisions on a wide range of issues (land use, urban form, housing, environment, resource protection, transportation, and infrastructure) in the interest of economic prosperity. The plan encourages intensification of development via transit-supported growth, active modes of transportation over private transportation, and creation of mixed-use communities that feature commercial centres and surrounding communities.	The plan, which aims to reduce motor vehicle reliance, will shape the growth vision for the SCTMP. The Growth Plan designates Scarborough Centre as an "Urban Growth Centre" and a "Major Transit Station, and indicates that Scarborough Centre should achieve, at minimum, a gross density target of 400 residents and jobs per hectare by 2031, within 500 metres, or a 10-minute walk, of any existing or planned higher-order transit station.
Metrolinx's The Big Move	The Big Move is a regional transportation plan for an integrated, multi-modal transportation network. It sets out and prioritizes several initiatives and projects to improve mobility within the region.	In The Big Move, Scarborough Centre has been identified as an Anchor Hub, which has a strategic importance in the region. There are also several Top Transit Priorities in the plan that directly affect the study area: <ul style="list-style-type: none"> □ Eglinton rapid transit from Pearson Airport to Scarborough. □ Sheppard East Rapid Transit □ Upgrade and extend the Scarborough Rapid Transit line □ Durham Scarborough BRT
City of Toronto Official Plan	The plan contains policies that aim to manage growth within the jurisdictional boundaries of the city, with the focus on moving people rather than vehicles. Transportation Demand Management (TDM) is also identified as an important tool to ensure that the city is growing sustainably.	The Official Plan designates Scarborough Centre as a key location that will play a significant role in managing growth in the city, via transit-oriented development in dense, mixed-used areas. The Secondary Plan for Scarborough Centre, described below, is included in the Official Plan.
Scarborough Centre Secondary Plan	The Scarborough Centre Secondary Plan mandates that the study area should accommodate 40,000 residents and 23,000 jobs. The plan also provides the detailed vision for achieving the above targets, with a vibrant mix of land uses, supported by effective transit facilities, a high quality public realm, and active transportation infrastructure.	The SCTMP will detail transportation initiatives and policies necessary to achieve the vision of the Secondary Plan. This includes the guiding principles for the Secondary Plan's four Precincts: <ul style="list-style-type: none"> □ Town Centre Commercial Precinct □ McCowan Precinct □ Civic Precinct □ Brimley Precinct

4.1 Provincial Policy Statement (2014)

The Provincial Policy Statement (PPS) provides the strategic and overarching framework for Ontario's policies on all land-use planning decisions. With a holistic, integrated and long-term approach, the PPS represents the minimum standards that will guide planning authorities and decision-makers in developing and implementing specific plans. With respect to the Scarborough Centre Transportation Master Plan, the PPS outlines policies that encourage the safe and efficient movement of people and goods, facilitated via a multi-modal transportation system that aims to increase the use of active transportation and transit over other transportation modes.

4.2 Growth Plan for the Greater Golden Horseshoe (2006)

In southern Ontario, the Growth Plan for the Greater Golden Horseshoe guides decisions on a wide range of issues (land use, urban form, housing, environment, resource protection, transportation, and infrastructure) in the interest of economic prosperity. The plan addresses specific issues faced by the region through policy directions that encourage the intensification of existing and future urban development, the promotion of transit-supportive growth, and the development of a balanced, multi-modal transportation system. The Growth Plan designates Scarborough Centre as an "Urban Growth Centre" and focal area for significant high-density employment and population growth, which will require major transit infrastructure to connect with major regional and cross-jurisdictional destinations. The 2016 Proposed Growth Plan also identifies Scarborough Centre as a "Major Transit Station" and part of a "Priority Transit Corridor".

4.3 The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area (2008)

The Big Move is the regional transportation plan intended to guide transportation and associated land-use decisions for the next 25 years. It sets out policies and priority projects that aim to achieve an integrated, multi-modal transportation system. The plan further recognizes that the transportation system should be developed to enhance equity and social cohesion in the region by improving mobility options for people in "vulnerable and disadvantaged communities". In The Big Move, Scarborough Centre has been identified as an Anchor Hub, with strategic importance due to the strong relationship with other urban growth centres and international gateways, such as Pearson Airport and Union Station.

4.4 City of Toronto Official Plan (2015)

Based on the mandates of the PPS and Growth Plan, the recently updated City of Toronto Official Plan provides a vision for managing growth within the City's jurisdictional boundaries. The Official Plan emphasizes the efficient use of street space with a focus on moving people instead of vehicles. It also provides clear objectives to reduce car dependency and encourage more transit, walking and cycling as attractive alternatives. To achieve its comprehensive goals, the Official Plan encourages transit-oriented development in intensive, mixed-use, targeted growth areas, such as Scarborough Centre. The Official Plan designates Scarborough Centre as one of four centres that will play a significant role in managing growth in the City. The Official Plan also identifies Scarborough Centre as the main transit hub for communities in the eastern part of the city.

4.5. Feeling Congested? (Transportation Policies - Official Plan Review)

The City consulted on draft policy changes to the Official Plan transportation policies. These policies were officially adopted by Council at their meeting on August 25-28, 2014 with three amendments which consists of policies regarding the integration with land use, complete streets, active transportation, TDM and parking measures. The final Official Plan Amendment, as adopted by Council, was approved by the Minister of Municipal Affairs and Housing on December 31, 2014. It is in force and effect with the exception of the 'Complete Streets' policies, which have been appealed to the Ontario Municipal Board.

4.6 Cycling Network Ten-Year Plan

On June 9, 2016 Toronto City Council approved a Cycling Network Ten-Year Plan to Connect, Grow and Renew infrastructure for Toronto's cycling routes over the next ten years. The Cycling Network Plan will serve as a comprehensive roadmap and workplan, outlining the City's planned investments in cycling infrastructure between 2016-2025. The plan identifies opportunities for cycling infrastructure investments in every part of Toronto. It includes recommendations for cycle tracks or bike lanes on fast, busy streets and recommendations for traffic calmed routes with cycling wayfinding on quiet streets. The Cycling Network Plan also includes recommendations for new boulevard trails, adjacent to fast busy streets where cycling may be less comfortable on the roadway. The Plan identified areas where tunnels or bridges may be beneficial to cross major barriers. Within the core study area the plan identifies cycling facilities on Progress Avenue, Borough Drive, Bellamy Road North, and portions of Ellesmere Avenue.

4.7 Other City-wide Guidelines

The following is a summary of City-wide policies, resources and guidelines that provide direction in the formulation of the Transportation Master Plan:

4.7.1 Accessibility Design Guidelines

The Accessibility Design Guidelines address the needs of people with disabilities. These guidelines are currently being updated to align with the Accessibility for Ontarians with Disabilities Act and include best practices for barrier-free development.

4.7.2 Toronto Walking Strategy

Provides direction in achieving the Toronto Official Plan objectives for walking and the public realm. The strategy presents a number of guidelines for encouraging walking, including features such as enhanced streetscaping, creating pedestrian links, and consolidating building entrances to give priority to pedestrians.

4.7.3 Toronto Pedestrian Charter

Provides principles adhered to by the City of Toronto, such as accessibility, equity, health and well-being, environmental sustainability, personal and community safety, and community cohesion and vitality. The document provides a number of policies that encourage and support walking in Toronto.

4.7.4 Complete Streets Guidelines

The groundwork for designing streets that are safe and accommodating for all street users, this document considers items such as street furniture, sidewalk design, transit amenities, parking facilities for vehicles and bicycles, intersection and roadway design, traffic calming and transportation demand management measures.

4.7.5 Vibrant Streets Guidelines

The Vibrant Streets Guidelines aim to change how city streets look, function and meet the needs of users. This document also provides placement guidelines and goals ensuring pedestrian comfort and mobility.

4.7.6 Toronto Green Standard

A guideline for the private and public sector, with measurable, action-oriented strategies to achieve sustainable development. These strategies include parking policies, bicycle parking, signage and wayfinding.

4.8 Scarborough Centre Secondary Plan (2009)

Scarborough Centre is a focal point for growth. The Secondary Plan contemplates a projected population upward of 40,000 residents and 23,000 jobs. It is the City's intent that Scarborough Centre become a mixed-use urban hub for eastern Toronto where jobs, homes, services, cultural and recreational amenities and transit are concentrated. Objectives of the Secondary Plan are to:

- Create a vibrant mix of employment, cultural, institutional, educational, recreational, commercial and residential uses;
- Ensure effective provision and use of transportation facilities and services;
- Promote a high-quality urban form and a comfortable and safe environment;
- Improve open spaces, parks and linkages;
- Protect adjacent residential neighbourhoods; and,
- Strengthen community identity.

The Secondary Plan divides Scarborough Centre into four (4) Precincts, as shown in Figure 3, to plan for the intensification and evolution of Scarborough Centre:

- The Town Centre Commercial Precinct is centered on the existing mall (Scarborough Town Centre), and is intended to retain its commercial function as it intensifies over time.
- The Civic Precinct is centered on the Scarborough Civic Centre and is intended to retain a focus on institutional and recreational uses as it redevelops.
- The McCowan Precinct (for which a Precinct Plan was recently approved) promotes a vision for creating a “vibrant, mixed-use community with urban characteristics”.
- The Brimley Precinct is envisioned as a mixed-use district that accommodates new residential and employment development, with supporting retail amenities and community facilities.

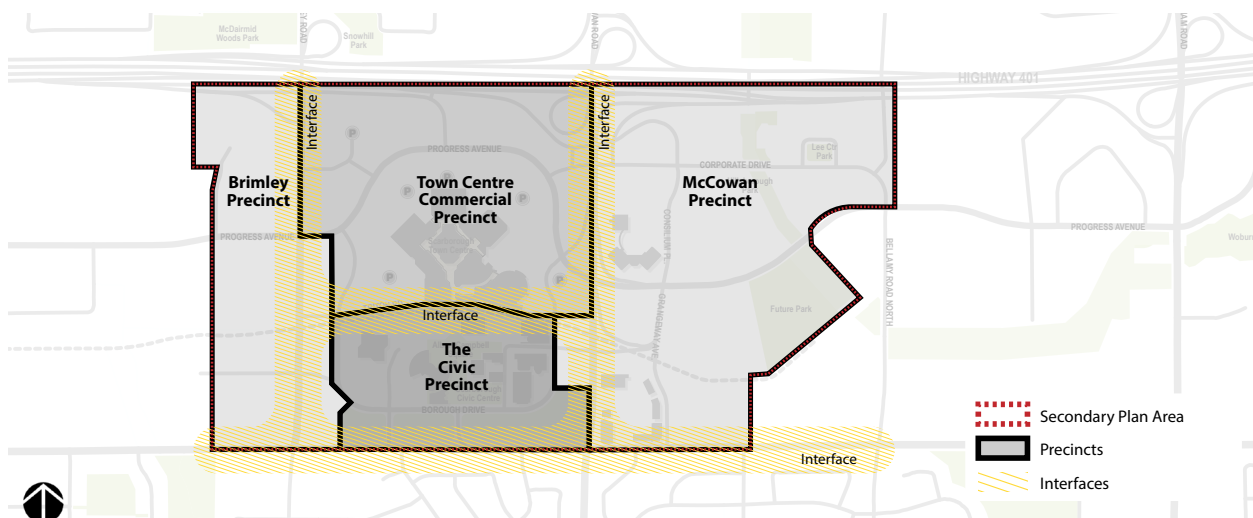


Figure 3 : Precincts in the Study Area

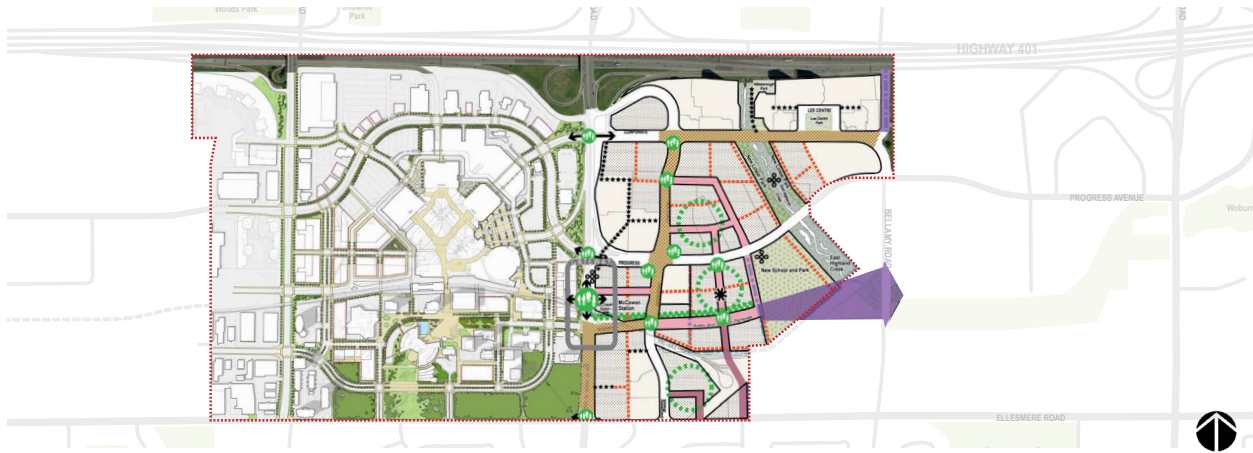


Figure 4 : Precinct Plans in the Study Area

4.9 The Civic Precinct Implementation Plan (2009)

The Civic Precinct Implementation Plan (2009) identifies a number of improvements, including City-led developments such as the new library, intersection improvements at Ellesmere Road, and public realm initiatives. The initiatives are focused on accelerating the revitalization of the Precinct as a focal point in Scarborough Centre

4.10 Scarborough Centre Public Space and Streetscape Master Plan (2012)

The Scarborough Centre Public Space and Streetscape Master Plan (2012) focuses on making the Civic and Commercial Precincts more pedestrian-friendly through the introduction of a permeable block pattern and street network, new public spaces, and a pedestrian-oriented built form (e.g. a consistent and active street wall with appropriately-scaled podiums). The proposed street network reinforces the importance of Progress Avenue and Borough Drive, which create a ring road and are identified as “Main Streets”. The proposed street network also includes new local streets, lanes and walkways through existing parking lots.

4.11 McCowan Precinct Plan (2014)

More recently, the City completed the McCowan Precinct Plan (2014) and Conceptual Master Plan. The McCowan Precinct Plan promotes a vision for creating a “vibrant, mixed-use community with urban characteristics”. The Precinct is planned to include both high-rise residential and office uses, along with a full suite of community and retail uses, constituting a complete community. In anticipation of redevelopment, the Conceptual Master Plan identifies new connections, potential blocks/properties for redevelopment, as well as potential locations for new parks, urban spaces and public art.

Illustrations of the recommendations of the McCowan Precinct Plan and the Scarborough Centre Public Space and Streetscape Master Plan are synthesized in Figure 4.

5.0 Transportation Assessment

5.1 Travel Trends and Behaviour

Scarborough Centre is in transition. Line 3 Scarborough is being decommissioned with the introduction of the Scarborough Subway, which will have an impact on travel behaviour within and surrounding the Scarborough Centre. However, understanding existing travel behaviours and transportation conditions will help identify key opportunities and constraints. Detailed analysis of travel behaviour is in Appendix E. The key attributes of the transportation network within the core study area are illustrated in Figure 5.

On a typical weekday in Scarborough Centre, approximately 124,000 trips are made into, out of, and within the Centre, and by all modes of transportation. Figure 6 summarizes the modal split within the broader study area over a 15-year period (1996-2011).

Approximately 69,000 trips originate from within Scarborough Centre. Of these trips, approximately 4,400 trips are made internally (6%).

During the morning commute, approximately 11,310 people end their trip and 5,830 people commence their trip in Scarborough Centre.

In the past 15 years, there has only been minor changes in travel mode choices, with transit ridership increasing by only 3%, and auto trips remaining relatively dominant at 66%. Figure 6, on the next page, illustrates the changes in travel behavior, based on each mode of transportation.



Figure 5 : Transportation Overview

5.1.1 Opportunities in Travel Trends

Historically, there is a reduction in the number of vehicles per household between 1996 and 2011. In 2011, households in Scarborough Centre owned 0.95 vehicles per household, compared to 1.07 vehicles per household in 1996. The decreasing trend of auto ownership in Scarborough Centre is opposite to the trend observed across the GTA, which has had an increase in auto ownership, from an average of 1.66 vehicles owned per household in 1996 to 1.74 vehicles owned per household in 2011.

There is a decreasing trend in the proportion of the Scarborough Centre population that holds a driver's license, with a slight decrease from 68% to 65%.

Scarborough Centre has experienced a slight increase in those travelling to/from the Centre by transit, alongside a slight decrease in those driving. Specifically those aged between 16 and 25 years old are found to travel to/from Scarborough Centre predominantly by transit (40%), followed by driving (34%).

5.1.2 Constraints in Travel Trends

Active modes of transportation are more prominent across the GTA versus in the Scarborough Centre (4%). The harsh pedestrian environment and lack of cycling facilities throughout the Centre is likely a contributing factor behind this low percentage.

Of the internal trips conducted during a typical weekday, the most prominent mode of travel is driving. This is followed by passenger travel, then walking. However, walking is a comparatively small proportion of the modal split for internal trips. Despite the mix of land uses, and in some instances, the proximity of those land uses, those currently travelling internal to Scarborough Centre are found to dominantly drive.

All-Day Mode Split Travelling to/from Scarborough Centre

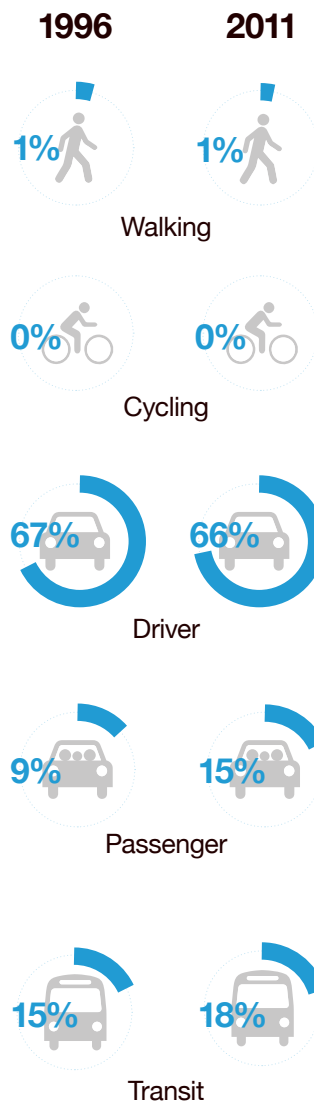


Figure 6 : Modal Split Historical Change (to/from the Centre)

5.2 Historical Street Network

Prior to the amalgamation of Toronto, Scarborough Centre was designated as a central business district for the former City of Scarborough. The 50-year old street network was initially relatively straightforward. In addition to the arterial roadways, Progress Avenue followed a direct east-west route until it terminated at Markham Road.

As shown in Figure 7, Scarborough Town Centre and Scarborough Civic Centre both opened in 1973. The street network between Brimley Road and McCowan Road developed thereafter. Progress Avenue was realigned to flow northbound around the new shopping mall while a new street (Borough Drive) ran from Progress Avenue at Brimley Road and continued around the southern edge of the Civic Centre before returning northward to rejoin with Progress Avenue west of McCowan Road. Secondary streets were added to facilitate connections between Ellesmere, Brimley and McCowan Roads and the Civic Centre.

In 1986, there was further expansion of both the shopping centre and the Civic Centre and with it the Scarborough Rapid Transit Line (SRT) connecting Scarborough Centre with Kennedy Station (1985). Parallel to the SRT is Triton Road which extends between Brimley and McCowan Roads and services both the Scarborough Centre station and Scarborough Town Centre.

Historically, the focus of the Centre has been the Scarborough Town Centre and civic buildings and the street network was designed to move vehicles to and from these destinations. As a consequence, pedestrian and cycling conditions were poor resulting in barriers and disincentives for active modes of transportation.

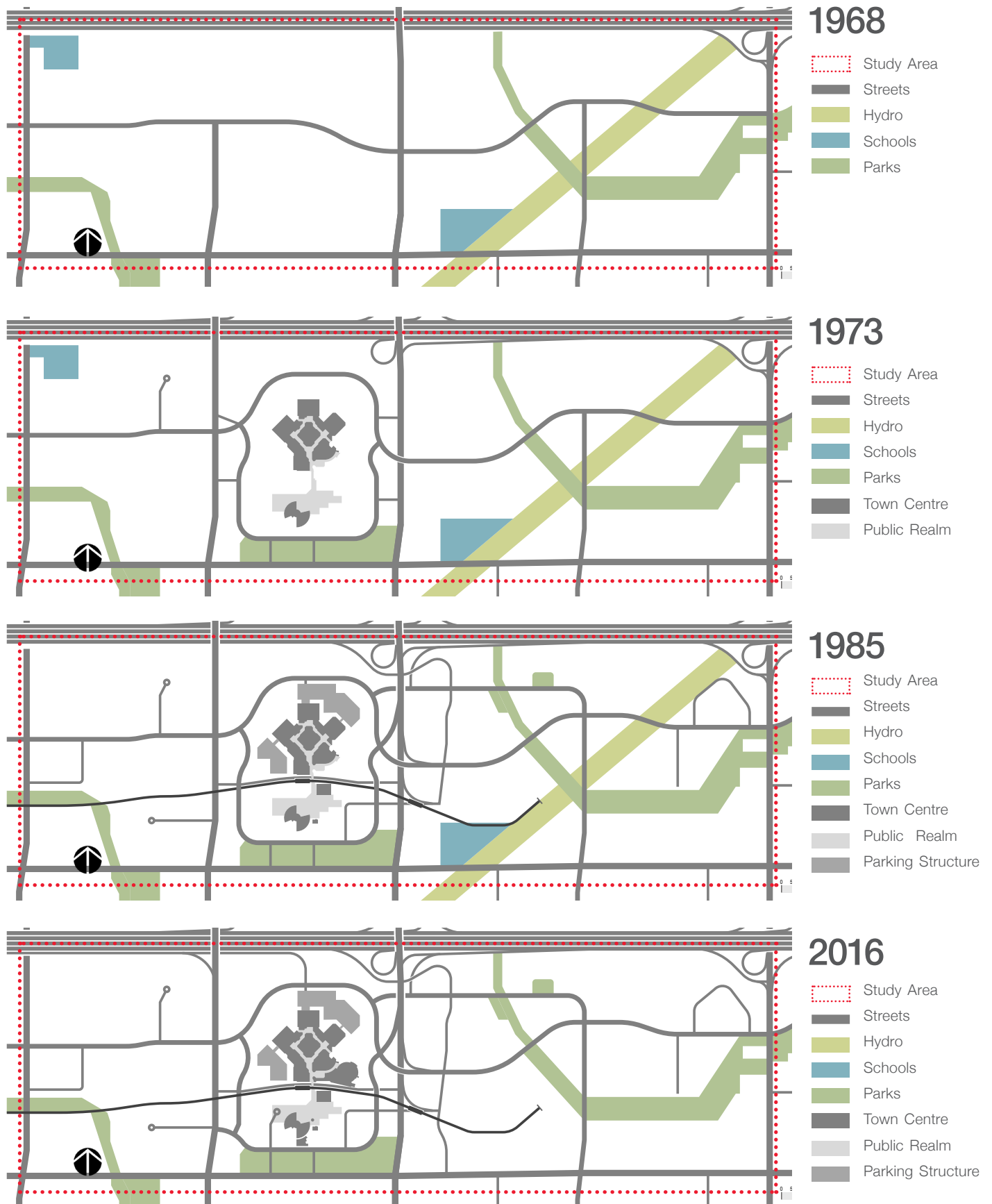


Figure 7 : Historical Street Networks

5.3 Existing Street Network

Major Arterials: The City of Toronto's Road Classification System criteria establishes that the primary use for major arterials is for the movement of traffic. Major arterials can accommodate more than 20,000 vehicle trips per day per direction, and greater than 5,000 transit passengers per direction.

- Ellesmere Road runs east-west from Victoria Park Avenue to Kingston Road.
- Brimley Road extends north-south from 14th Avenue to Bluffers Park.
- McCowan Road starts at Kingston Road and continues into York Region. McCowan Road is considered a major arterial from north of Lawrence Avenue East. McCowan Road turns into a collector road south of Lawrence Avenue East.

Minor Arterials: The Road Classification System criteria specify that minor arterials provide access to property with traffic movement accommodating between 8,000 to 20,000 vehicles per day per direction.

- Progress Avenue is the only classified minor arterial within the Centre. Progress Avenue runs east-west from Kennedy Road to Markham Road.
- Bellamy Road North extends from Eglinton Avenue to Corporate Drive.

Triton Road is classified as a Transit Road (with bus stops).

Highway 401 is a provincial expressway that runs east-west from Windsor to the Ontario-Quebec border. Within the Centre, access ramps to/from the highway are located on Brimley Road, Progress Avenue, McCowan Road and Markham Road.

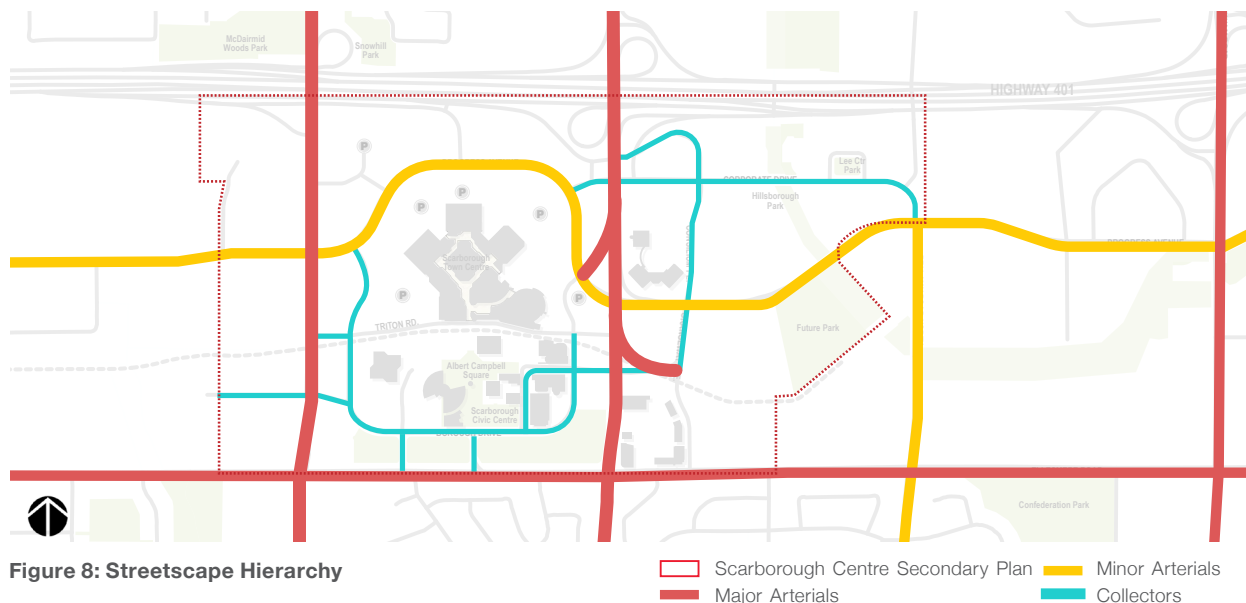
Detailed mapping of the street classification and hierarchy within the Centre is illustrated in Figure 8 on the following page.

Collector Roads: collector roads are intended, under the road classification system, to provide access to property and traffic movement, and accommodate between 2,500 to 8,000 vehicles per direction and less than 1,500 bus passengers per direction.

- Borough Drive runs in a general east-west direction from Brimley Road to Triton Road.
- Town Centre Court is an east-west street that runs from Borough Drive to McCowan Road.
- Bushby Drive is an east-west street that extends from McCowan Road to Grangeway Avenue, with a west-north ramp that provides access to McCowan Road.
- Consilium Place runs in a general north-south direction from Progress Avenue to McCowan Road. The section of Triton Road that runs from Brimley Road to Borough Drive is considered a collector road (it then continues on as a transit street). Corporate Drive is an east-west collector road that runs from Bellamy Road North to Progress Avenue.
- Grangeway Avenue runs north-south from Ellesmere Road to Progress Avenue. From Progress Avenue to Bushby Drive, it is a collector road then it turns into a local street from Bushby Drive to Ellesmere Road.



McCowan Road is a major arterial road within the Centre



5.3.1 Opportunities in Street Network

The existing street network within the Centre provides several opportunities, as identified in the following:

- Ellesmere Road has elements of a boulevard, with a median in certain sections lined with trees, vegetation, and public art. There is an opportunity to convert this into a grand boulevard, with the Civic Centre Park and its associated trails and pathways acting as a buffer for the residential neighbourhoods to the south.
- As identified in previous planning studies the Scarborough Centre, large parcels of land available within the Centre present an opportunity to enhance the hierarchy and function of the street network, allowing the development of a finer street network with a focus on the movement of people and not vehicles.
- Widening Ellesmere road, east of McCowan provides an opportunity to improve transit accessibility between Scarborough Centre and the eastern neighbourhoods and communities. This would involve improvements to existing transit services along Ellesmere Road, an important east-west transit route, via designated HOV lanes and higher bus frequencies.
- Borough Drive is transitioning into a pedestrian-friendly street in the core study area, with some public art and street furniture that create a sense of place. For example, the street lamps on Borough Drive create a distinct character for Scarborough Centre. Street lamps at the mall entrance on Progress Avenue and McCowan Road also function as a landmark. It is the most “memorable” place in the Centre. Specifically, the function of Borough Drive, between Borough Approach East and Borough Approach West, presents an opportunity to improve street functions for pedestrians and cyclists. An example of a similar initiative is the narrowing of vehicle lanes on Front Street at Union Station to encourage active modes of transportation.

5.3.2 Constraints in Street Network

The challenges and constraints, with regards to achieving a balanced street network within the Centre, are identified below:

- The existing street network is not balanced for all modes of transport, with a fragmented street hierarchy and long block lengths that limit connectivity for pedestrians and cyclists.
- Highway 401 is a major barrier that limits north-south connectivity for pedestrians and cyclists in the Centre.
- The majority of streets (with the exception of some segments of Borough Drive) are not pedestrian and cyclist-friendly. This includes the internal street network within the mall. The loading bays located at the main mall entrance do not segregate truck loading movements from vulnerable street users.
- Surface parking is a constraint to the street network. It takes up 20% of the core study area, which discourages walking and place-making.
- The lack of east-west streets and connections throughout the Centre, which results in large blocks that are not accessible for vehicles, pedestrians or cyclists. For example, there are no street connections in the southern section of the Centre, with the exception of Borough Drive in the Civic Precinct.
- Auto-oriented, irregular intersection of Borough Approach East and Borough Approach West with Ellesmere Road.
- Lack of Highway 401 overpass in the McCowan Precinct, specifically on Bellamy Road..
- Numerous vehicular ramps throughout the Centre, such as McCowan Road and Progress Avenue, which create a confusing driving experience and limit accessibility for pedestrians, cyclists and people with special needs.

- Lack of a continuous loop connection around the Town Centre Commercial Precinct and the Civic Precinct.

5.4 Auto Traffic

The majority of the intersections operate at acceptable Level of Service (LOS) with no major delays and queues. Detailed traffic analysis can be found in Appendix H.

McCowan Road is one of the major spines in the Centre and provides full access (east and westbound) to Highway 401. Intersections along the McCowan Road corridor During both the AM and PM peak hours operate at congested levels. This is typical in urban conditions where major arterials are in close proximity to a highway.

The following section summarizes results of the traffic analysis for both morning and afternoon peak periods.

AM Peak Hour Critical Intersections & Movements

- The intersection of McCowan Road and the Highway 401 Eastbound Off-ramp/Consilium Place operates with an overall poor level of service LOS E, with critical movements on the eastbound, westbound and southbound approaches.
- The intersection of McCowan Road and Ellesmere Road operates with an overall intersection LOS E, with critical left turn movements on the westbound, northbound and southbound approaches.

PM Peak Hour Critical Intersections & Movements

- The intersection of McCowan Road and Ellesmere Road operates with an overall intersection LOS F, with delays and queue lengths observed for the eastbound left, westbound left and through, and northbound left movements.
- The intersection of McCowan Road and Town Centre Drive/Bushby Drive, operates with an overall intersection LOS D. However, with the eastbound left approach experiences delays and queues.

5.5 Transit

There are a number of transit routes and options available to Scarborough Centre. This includes GO Transit, TTC buses, and TTC rapid transit service. Scarborough Centre has (2) rapid transit stations on Line 3 – Scarborough, with stops at Scarborough Centre Station and McCowan Station. The Scarborough Centre Station is located along Triton Road, adjacent to the south (lower) portion of the Scarborough Town Centre. Trains on this line run at intervals of 4-5 minutes during peak hours, and 5-6 minutes during off-peak hours. As shown in Figure 9, the Scarborough Centre Station has by a large margin the largest ridership for the RT in the Centre (81%).

Roughly 23% of Scarborough Centre residents possess a transit pass, suggesting those residents regularly use public transit for travel, primarily the TTC. The number of transit pass holders has increased considerably since 1996, 2% in 1996 compared to 23% in 2011, as shown in Figure 10.

As shown in Figure 11, TTC bus services have the highest demand of all transit services in Scarborough Centre. Approximately 65% of transit users beginning their trip in Scarborough Centre use TTC buses, followed by 28% using TTC rapid transit. A small portion of transit users use GO Transit bus services (4%), with the remaining transit users utilizing, TTC Wheel Trans, or other services.

Scarborough Centre Station on Line 3 (Scarborough RT) integrates rapid transit and local bus services. The station has three levels: the Scarborough RT on the upper level, the mezzanine and passenger entry from the mall on the middle level, and the Bus Terminal located on the ground level. The TTC station is fully accessible for people with disabilities via elevators and provides Passenger Pick-up, Drop-off and Designated Waiting Areas. However, the GO Bus terminal does not provide accessibility elevators. Bike shelters and dedicated parking spaces are not available in the station. Furthermore, pedestrians are not allowed to access the station from Triton Road.

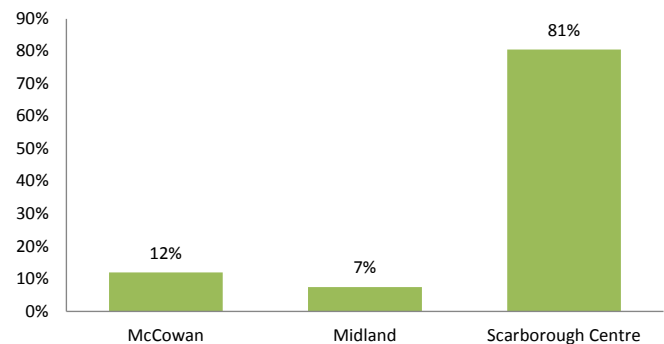


Figure 9: Ridership percentage of RT line in Scarborough Centre (Per Station)

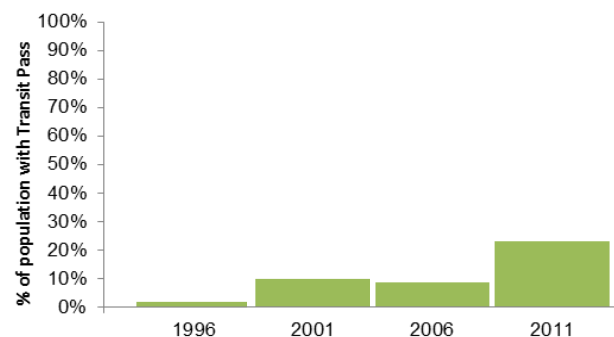


Figure 10: Transit Pass Possession in Scarborough Centre

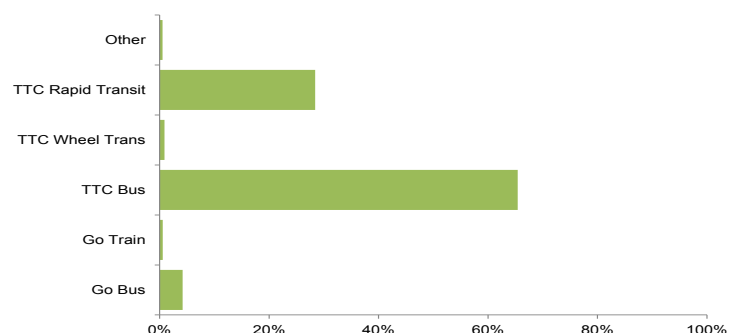


Figure 11: Transit Share per Mode

5.5.1 Optimized Network Plan for Rapid Transit in Scarborough

The implementation of GO Regional Express Rail (RER), introduction of SmartTrack, and delay in the Sheppard East LRT result in the need to re-examine the planned rapid transit network in Scarborough. In January 2016, the Chief Planner & Executive Director, City Planning Division brought forward the report EX11.5 Scarborough Transit Planning Update, and was directed to study in detail an optimized Scarborough rapid transit network. The report identified two key objectives:

1. Support the development of Scarborough Centre as a vibrant urban node
2. Support the development of complete communities along the Avenues and improve local accessibility

The optimized network plan includes, as shown in Figure 12.

1. SmartTrack/GO RER;
2. An express extension of Line 2 (Bloor-Danforth Subway) between Kennedy Station and Scarborough Centre; and
3. An eastern extension of the Eglinton LRT from Kennedy Station along Eglinton Avenue East, Kingston Road and Morningside Avenue to the University of Toronto, Scarborough Campus (UTSC).

5.5.2 Opportunities For Transit

Transit investment in the Scarborough Centre provides the following opportunities:

- Scarborough Centre plays an important part in regional and international connections, with strong transit serviceability via rapid transit (Scarborough RT) and local and regional bus routes. This includes 16 TTC bus routes, seven GO Transit Buses, and other regional transit services (Greyhound, Coach Canada)



Figure 12: Optimized Network Plan for Rapid Transit in Scarborough

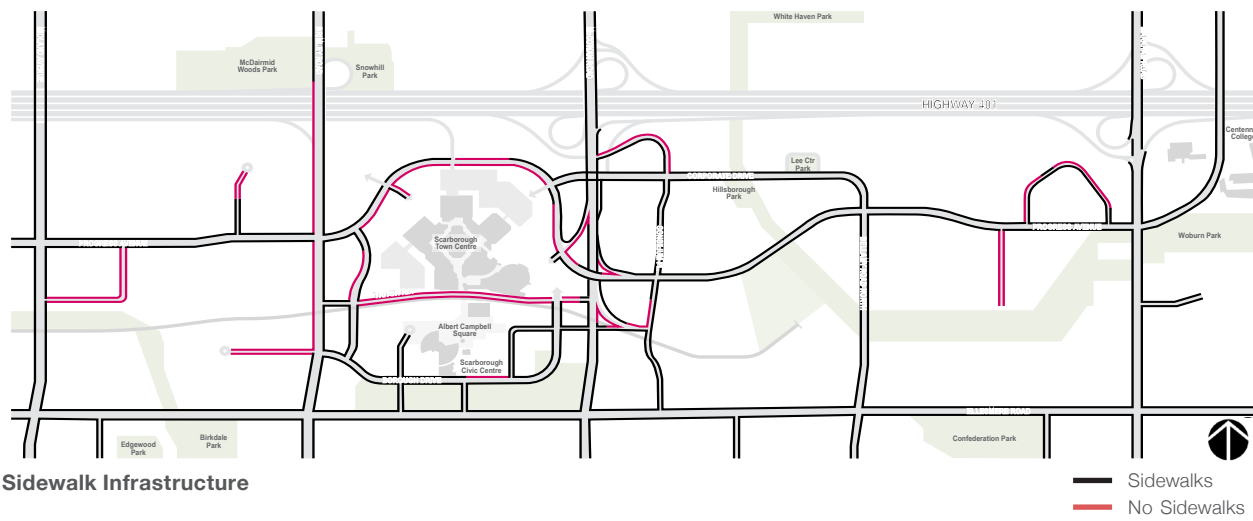
- Scarborough Centre Station offers significant bus coverage, which relates to TTC buses having the biggest share of transit users in the Centre
- The number of people that hold a transit pass within the Centre has increased from 2% in 1996 to 23% in 2011, while the number of people with a driver's license has decreased, indicating that public transit is an increasing as a preferred form of transportation for people that live within the Centre
- The proposed Scarborough Subway Extension will add to the transit services provided in the Centre, providing another alternative and facilitating changes to travel behaviours.

5.5.3 Constraints for Transit

The following section identifies existing and future challenges with regards to transit within the Centre:

- Transit is not well integrated with pedestrian and cycling infrastructure in the surrounding neighbourhoods. This is evident in the low daily ridership numbers for the Midland and McCowan Stations in relation to the Scarborough Centre Station. Furthermore, there are no bike shelters observed near transit stations.
- Driving is still the most attractive mode of transportation to access Centre. Approximately 81% of people utilize an automobile during morning peak periods.
- GO bus terminal is not accessible as the Fare Zone blockade limits connections within the bus terminal.

5.6 Active Transportation



Residents, workers and visitors that travel within Scarborough Centre rely heavily on cars. Automotive travel has been and remains the most attractive mode of transportation. The goal of the City is to reduce private automobile dependency, improve accessibility and connectivity for all modes of travel, and encourage active transportation.

An example of the above approach can be found in Albert Campbell Square, which provides good connectivity between the Scarborough Town Centre and Civic Centre, specifically encouraging active modes of transportation. This is also evident in Frank Faubert Woodlot, which provides good green linkage between Borough Drive and Ellesmere Road. Furthermore, recent improvements on Borough Drive at the Civic Centre Public Library, such as wide sidewalks and streetscaping, create a pleasant environment for pedestrians. Another example of active transportation are the covered pedestrians walkways along Progress Bridge and McCowan Road, which provide some accessibility to transit services.

5.6.1 Opportunities for Active Transportation

The following section identifies opportunities to adapt active transportation as a viable and preferred travel choice:

- It is the City's Vision to plan and design for the movement of people and not vehicles, with major transit infrastructure investments catalyzing the shift in travel behavior towards transit, walking and cycling. It is important to note that transit investments are not sufficient alone to change travel behavior. The development of complete communities, complete streets and transit-oriented neighbourhoods around the Centre is necessary to generate high ridership on new transit services.
- Recent improvements, such as wide sidewalks and streetscaping on Borough Drive at the Civic Centre Public Library, provide an opportunity to apply the same approach for the rest of the Centre
- Scarborough RT infrastructure can be re-imagined as part of a pedestrian and cycling network
- Realignment of Progress Avenue and other existing roadways can serve as part of an improved and hierarchical movement network that also safely accommodates pedestrians and cyclists. This can include the reconfiguration of Triton Road to allow for pedestrians and cyclists.



Large sidewalks on Borough Drive

5.6.2 Constraints for Active Transportation

The following section highlights constraints in encouraging active modes of transportation in the Centre:

- There is a lack of consistent sidewalk infrastructure within the Centre. Sidewalks are only provided adjacent to retail frontages, bus stops and primary intersections/entrances to the mall. Sidewalks, particularly leading to bus stops or extending beyond retail frontages, lack connectivity to the surrounding sidewalk network. These sidewalks often end abruptly and/or lead to dead ends forcing pedestrians to cross the street or turn back. In general, the Scarborough Centre has sub-standard sidewalk widths which does not support active modes of transportation. The majority of the sidewalk infrastructure appears to be in disrepair, physically and/or visually, with the exception of the sidewalk adjacent to the new public library, which was recently reconstructed.
- Sidewalk conditions along the eastern edge on McCowan Road of Scarborough Centre are quite unique due to grade separations, the street configuration and overpasses. Sidewalks in these areas are either parallel but away from the roadway or via dedicated and isolated pedestrian walkways/crossings.
- There is no full pedestrian access on Triton Road., limiting east-west connectivity.
- Surface parking discourages other modes of travel, especially pedestrians and cyclists, and fragments the connectivity of the Scarborough Centre.
- There is a lack of segregation between heavy truck movements and vulnerable street users; for example, the placement of Loading Bay #2 by the main mall entrance and the loading bays that are directly accessible from the northern section of Progress Avenue, creating unsafe conditions for pedestrians and cyclists.
- With the exception of the bike racks at the public library and the Loblaws food store, and 3 City-owned bike lockers in Albert Campbell Square, there is no other observed bicycle infrastructure.
- The east and west Approaches on Borough Drive, between Ellesmere Road and Borough Drive, do not provide strong accessibility for pedestrians, cyclists and neighbourhoods to the south of the Scarborough Centre.
- There are existing barriers to pedestrian and cycling movement in the form of grade-separated roadways, expansive arterial streets and Highway 401 on- and off-ramps.

5.7 Signage and Wayfinding

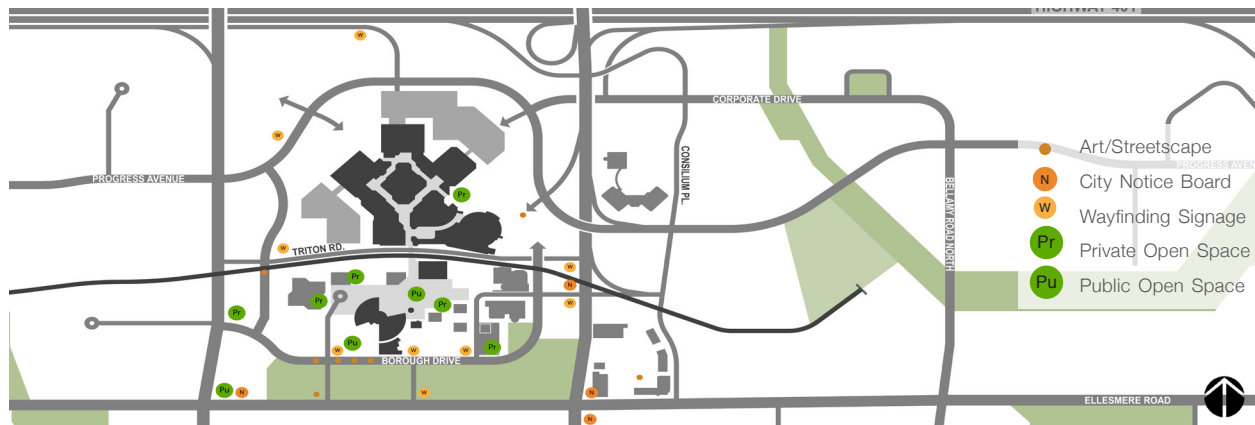


Figure 13: Signage and Wayfinding

Stakeholder consultations have revealed that current existing signage and wayfinding in the Centre is not clearly communicated. It was observed that existing signs are mainly oriented to directing automobile traffic. Furthermore, signage was identified to be non-uniform, mismatched and in some cases, in deteriorating conditions. Some pedestrian wayfinding infrastructure was identified, as shown in Figure 13, specifically east of Albert Campbell Square, and outside the entrance of the Health Unit at 160 Borough Drive, which provides pedestrian with estimated walk time to major destinations.

5.7.1 Opportunities for Signage and Wayfinding

The following section identifies opportunities in improving signage and wayfinding in the Centre:

- The efficient and clear communication of wayfinding, specifically for pedestrians and cyclists, will help encourage the shift to active modes of transportation.
- Signage announcing the presence of the Scarborough Town Centre Mall was most prominent around Borough Drive, giving a unique character to the Scarborough Centre.
- Several instances of unique streetscaping elements have the potential to contribute to wayfinding, although they do not currently

reflect a consistent design. These streetscaping elements are found along Borough Drive and in front of the movie theatre. There was also a number of City of Toronto notice boards along McCowan and Brimley Roads, which may reflect the beginning of a cohesive strategy for wayfinding.

- Key public spaces, which includes Albert Campbell Square, the Civic Green (the new landscaped area adjacent to the Toronto Public Library and civic buildings) and the Civic Centre Park woodlot, offer pleasant public open spaces.
- The Civic Centre Park offers connectivity to surrounding neighbourhoods with trails and pathways that connect to Ellesmere Road.

5.7.2 Constraints for Signage and Wayfinding

Constraints to improving signage and wayfinding in the Scarborough Centre are identified below:

- There is a lack of a uniform, comprehensive system of signage to help residents and visitors navigate the Centre. For example, there is no introduction signage leading into the Scarborough Centre, with the exception of one sign on McCowan Road. Directional/location signage is inconsistent, with different colors, sizes and logos.

- Vehicle wayfinding is present but is not comprehensive (end destinations) and some signs are worn-off and illegible. Pedestrian wayfinding is minimal.
- There is no signage or wayfinding inside the mall parking structures to provide directions toward exits or to access the mall. However, there are several pedestrian connections and accessibility elevators.
- Unclear transit wayfinding signs were identified (on Borough Drive) potentially directing drivers and pedestrians in the wrong direction.
- Around the Scarborough Centre, there are a number of grade changes, particularly in and around the major streets, which creates constrained travel path options for pedestrians and may contribute to a sense of insecurity, especially after dark.
- Pedestrian directional wayfinding within the mall and in Albert Square do not provide direction to the transit terminals within the Centre.
- Lack of gateways for Scarborough Centre, along McCowan Road, Ellesmere Road and Brimley Road.
- With the exception of two small privately-owned seating areas, all open spaces are located south of Triton Road. The key public spaces included Albert Campbell Square, the landscaped area adjacent to the Toronto Public Library and the Frank Faubert woodlot. A handful of other small open space pockets are observed, but they generally appeared to be privately owned and were often accessible through parking areas or internal/private streets. As a result they are not viable contributions to the public realm. All open space in the Centre are for passive recreations (i.e. seating) with the exception of an amphitheatre space at Albert Campbell Square.
- There were a number of pedestrian connections throughout the Centre, though

again they were more concentrated south of Triton Road. However, due to the lack of clear wayfinding elements as discussed, these connections were not always intuitive to use, there was a lack of clarity in where they led and pedestrians might at times be uncertain whether these paths were open to the public. In particular, around the Civic Centre the pedestrian connections are at odd and indirect angles as they make their way around the building and can include stairs, presenting an accessibility barrier.



Examples of Pedestrian wayfinding in Scarborough Centre



Poor Pedestrian Access and Permeability



View looking north from Triton Road and Borough Drive



Existing Condition - Pedestrian Environment

5.8 Public Realm

The projected population is expected to increase by way of residential and employment growth, with upwards of 40,000 people living and working in the Scarborough Centre over the next 30 years. It is important to enhance/expand the public realm in the Centre in order to help the area transition to a more urban, attractive and pedestrian-friendly environment. Furthermore, in order to ensure the success of major transit infrastructure investments in the Centre, higher ridership will be encouraged via the planning of complete communities and transit-oriented developments. Opportunities and constraints for the public realm within the Centre are identified as follows:

5.8.1 Opportunities

- The majority of land is under-developed, offering flexibility for planning and opportunities to enhance/expand the public realm through private development initiatives. Efficient and effective co-ordination of public and private initiatives (such as the proposed subway station and redevelopment of Oxford lands) can produce mutually beneficial results.
- The future subway station will provide a catalyst for development, public realm initiatives and create a strong, positive area identity.
- “Greening” of major arterials can enhance the public realm and contribute to improving the experience for pedestrians and cyclists experience in the Centre.

5.8.2 Constraints

- There must be a balance in transforming the existing urban form (streets, blocks, built form, open spaces, etc.) while respecting functioning relationships with existing uses, such as the efficient movement of vehicles and goods.
- There must be recognition of property lines and approved developments when formulating initiatives for the master plan to ensure a coordinated public realm.

5.9 Road Safety

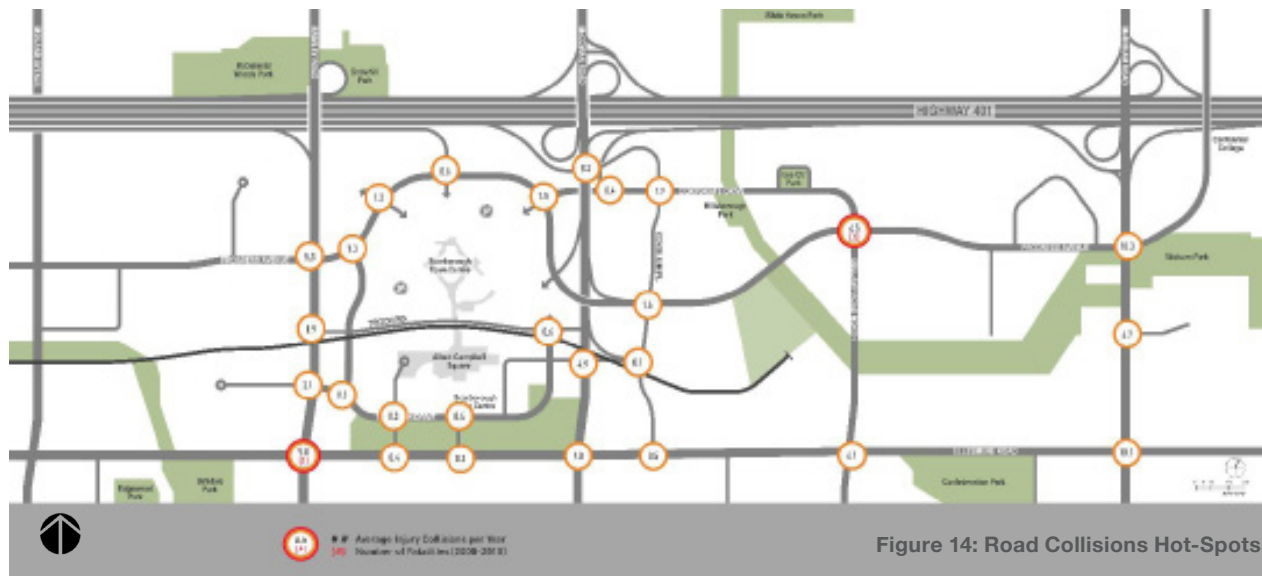


Figure 14: Road Collisions Hot-Spots

In the Centre, an average of 1,500 traffic collisions occurred every year from 2005 to 2015, causing minor injury to 500 people as well as serious injury to 12 people annually. Over the same 11-year period, a total of 6 people were killed in 6 separate fatal collisions. Details of the collision analysis can be found in Appendix G.

There has been an increase in the total number of collisions, going from a 3-year average of 1,420 (2005-2007) to 1,630 (2013-2015). Despite the increases in total collisions, the occurrence of injury collisions decreased, with the 3-year average dropping 19%.

Approximately 3 out of 4 collisions that occurred in the Centre caused only property damage and no injuries to people. Of collisions where injury occurred, 2% were Killed or Seriously Injured (KSI) crashes. The proportion of KSI collisions at intersections (0.5%) was not significantly different than the proportion of KSI collisions among all collisions at all locations in the Scarborough Centre (0.44%).

The vast majority (84%) of persons involved in collisions were vehicle drivers. However, only 1-in-10 drivers involved in collisions were injured and

1-in-1000 were KSI. By contrast, motorcycle riders, pedestrians, cyclists, and vehicle passengers were significantly and disproportionately more likely to be injured, seriously injured, or killed.

The potential for conflicts is greater at intersections, where turning movements occur and pedestrian crosswalks are located, which can contribute to crash frequency, severity, and exposure for vulnerable users, such as pedestrians. The total and relative occurrence of collisions at intersections has increased over the last decade, from 330 collisions per year at intersections in 2005 (28% of all collisions), to 550 collisions per year in 2015 (35% of all collisions). In fact, the increase in total collisions in the Centre can be wholly accounted to the increase in collisions at intersections.

Three of the 6 fatal crashes in the Centre over the last decade occurred at intersections. The other three fatal crashes occurred on Ellesmere Road (between Bellamy Road North and Markham Road), Markham Road (between Ellesmere Road and Tuxedo Court), and Progress Avenue (between Corporate Drive and Markham Road). The locations of the crashes is illustrated are **Figure 14**.

6.0 Draft Vision Statement



Draft Vision Statement

The Scarborough Centre transportation network will develop in a way that supports the creation of a diverse, attractive and safe mixed-use community which is easily **accessible by all modes of transportation**. This will be achieved by creating an **easily navigable and fine-grained street network** which provides infrastructure and amenities for **all street users**. This transportation network will be **fully integrated** into the regional transportation system, including the transit, pedestrian and cycling networks, and provide **clear and easy connections** to the surrounding communities.



7.0 Guiding Principles

Based on the review of existing conditions in the Centre, and consultation with the public and key stakeholders, the following principles were identified to guide the formulation of the draft problem/opportunity statement.

The Scarborough Centre transportation network will develop in a way that supports the creation of a diverse, attractive and safe mixed-use community which is easily accessible by all modes of transportation. This will be achieved by creating an easily navigable and fine-grained street network which provides infrastructure and amenities for all street users. This transportation network will be fully integrated into the regional transportation system, including the transit, pedestrian and cycling networks, and provide clear and easy connections to the surrounding communities.

Achieving a Transportation Master Plan for Scarborough Centre will require acknowledgement of the existing challenges facing the area. However, there are also opportunities readily available in the development of an overarching strategy for movement and placemaking. Responding to the challenges while taking advantage of the opportunities can result in the long-term realization of a vision that is transformative for the area and for the surrounding context. Moving forward in the development of the Transportation Master Plan, it will be important not to lose sight of the conceptual structure plan.

Transitioning from the current context to a diversified environment that recalibrates modes of movement will require imagining a more “urban” identity for Scarborough Centre. As a first step towards redefining the area, several principles are proposed that, when realized together, have the potential to change Scarborough Centre into a more vibrant urban centre.

The following principles adhere to previous planning work, and will guide the formulation of new strategies, initiatives and improvements recommended by the Transportation Master Plan.

7.1 Street Connectivity (Fig. 15)

One of the study’s principles is to explore and propose ways to transform the existing street network into a finer-grained network of streets. Achieving this requires improved connectivity throughout the area. It also requires improving ease of movement, not only for motorists, but also for pedestrians, cyclists and transit users. Creating a finer-grained network of streets will improve accessibility for all, building connections within the centre as well as to the surrounding communities.

7.2 Open Space Connectivity

(Fig. 16)

The principles of connectivity extends beyond streets to the existing and planned open spaces within Scarborough Centre. Current greenways exist exclusively as drainage tributaries. In concert with a proposed new park and school facility, an opportunity exists to extend their usage as part of a new off-road cycling and pedestrian network. Combined with future sidewalks, this multi-use path system has the potential to extend beyond the Centre to Centennial College in the east as well as to communities north of Highway 401, south of Ellesmere Road and west of Midland Avenue.

The extension of the Bloor-Danforth subway line to Scarborough Centre will result in the closing of the SRT line. Once rapid transit no longer operates along this route, its infrastructure offers an opportunity to repurpose the corridor as a pedestrian and cycling route. In combination with the open space network east of McCowan Road, pedestrian and cycling activity can be extended westward to Midland Avenue and beyond

7.3 Focus on Seams (Fig. 17)

Too often streets serve as dividers between uses and form barriers. Brimley Road, McCowan Road, Triton Road and Highway 401 all define character edges of the contributing precincts. To better integrate distinct character areas with each other, there needs to be a re-examination of the role played by arterial roadways as transition zones. These zones can soften the abrupt change in character and use while also framing the street right-of-way, creating a character zone in its own right.

7.4 Placemaking (Fig. 18)

As previously referenced, much of the street network today is the result of the shopping mall and Civic Centre as well as the Scarborough Rapid Transit infrastructure. The shopping mall and Civic Centre have formed dual centres of gravity with the fulcrum for both located where they intersect: the current Scarborough Centre SRT station and Albert Campbell Square.

In the future, a third centre will emerge focused around a new subway station. As a result, the fulcrum will shift to balance the three focal points of activity. Similar to the current condition, an enhanced and extended public realm that connects all three focal points can offer cohesion and identity to disparate built form elements. It should also facilitate the movement of people between desirable destinations and become a destination in its own right.

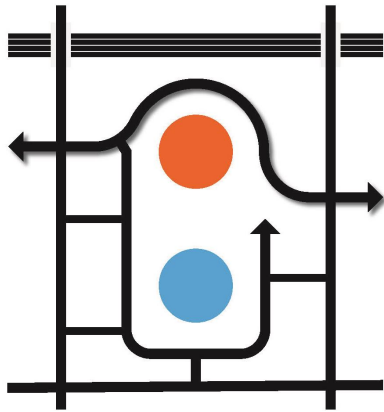
7.5 Gateways

Primary entry points have been identified throughout the Centre. Focused along arterial streets, the gateways represent wayfinding junctures at critical intersections. They also demonstrate transition zones between precincts where change of precincts coincide with key roadway intersections.

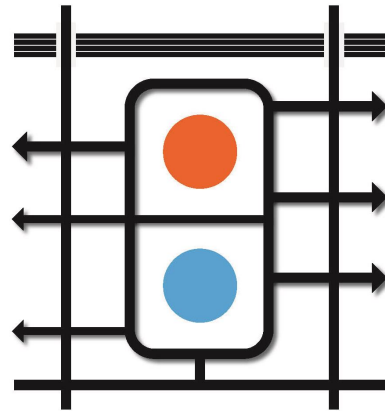
7.6 Linkages

Linking elements are comprised of roadways, open spaces and transit infrastructure. They permit the near uninterrupted movement of people within and beyond the Centre. Importantly, they will facilitate the movement of pedestrians and cyclists from residential neighbourhoods south of Ellesmere Road to those north of Highway 401, and from employment lands at Midland Avenue to Centennial College east of Markham Road. Moving forward, these linkages will be necessary in integrating Scarborough Centre into its surrounding context. Of significant note is the potential repurposing of the SRT infrastructure as an elevated pedestrian/cycling pathway.

Detailed analysis of urban form and principles and the development of alternatives for the Scarborough Centre can be found in Appendix F.

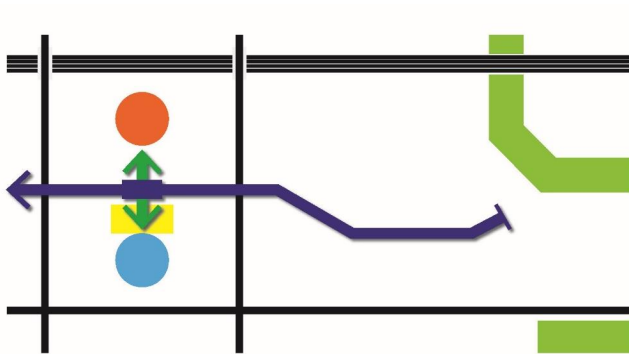


Today: One east-west through-route

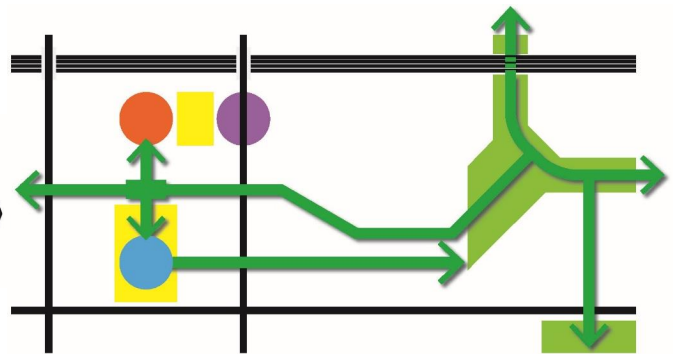


Objective: Increase ease of movement throughout Study Area

Figure 15: Street Connectivity

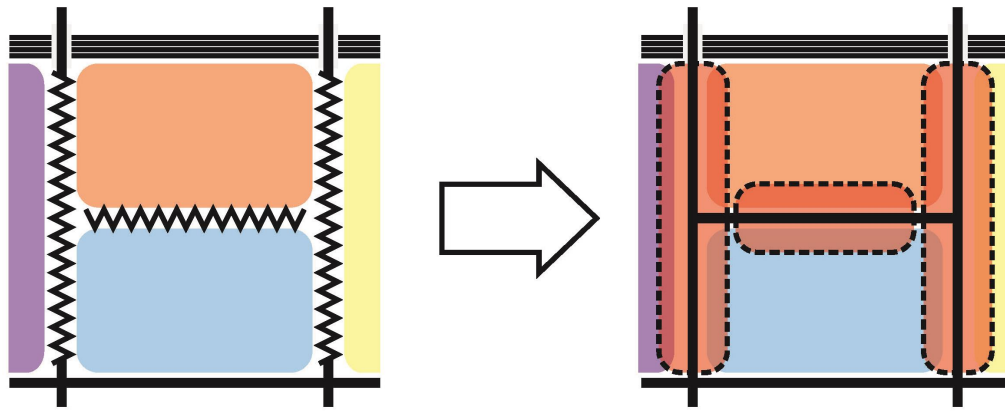


Today: Disconnect between existing open spaces



Objective: Provide new linkages and expand open spaces to create a continuous pedestrian and cycling network

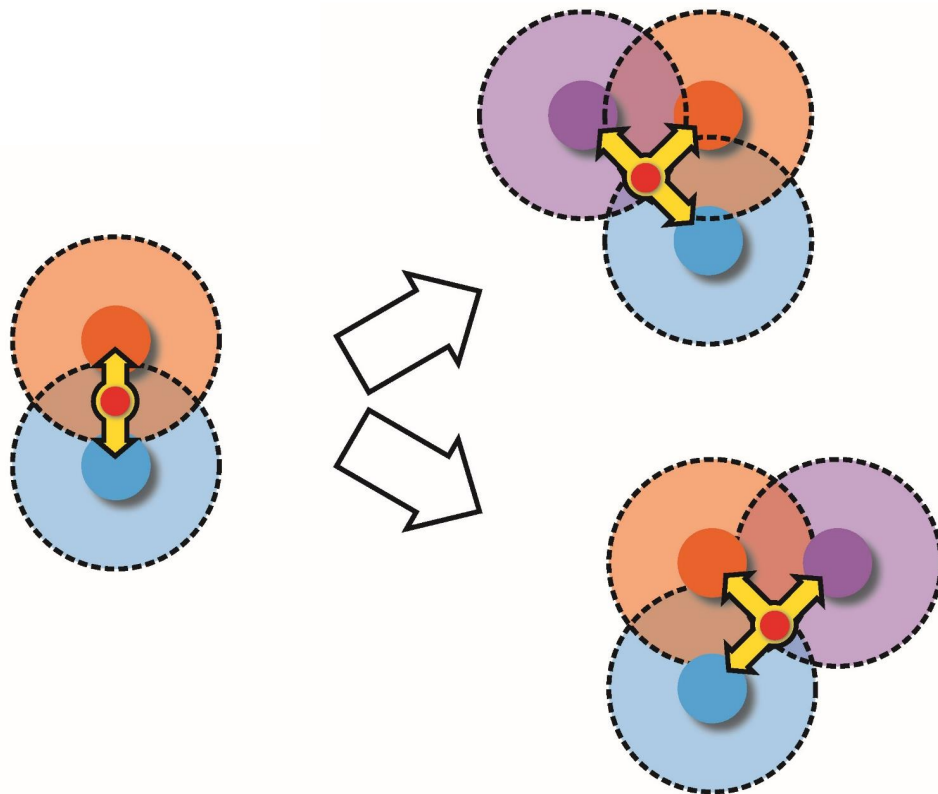
Figure 16: Open Space Connectivity



Today: Hwy 401, arterials and Triton Road act as partitions

Objective: Create transition zones between areas

Figure 17: Focus on Seams



Today: Centre of gravity between Scarborough Town Centre and Civic Centre

Objective: Respond to shift in critical mass with a focus on public space

Figure 18: Placemaking

8.0 Draft Problem/ Opportunity Statement

The Municipal Class EA process requires the preparation of a Problem/Opportunity Statement to guide the project and confirm the need and justification of the Study. A draft Problem/Opportunity Statement was developed for the Scarborough Centre On the Move Transportation Master Plan:

As one of Toronto's four 'Centres', Scarborough Centre is a key location within the City that combines jobs, housing and services in a dynamic mixed-use setting supported by excellent transit accessibility. Located at the heart of Scarborough, the area is expected to be a magnet for future growth over the coming decades. Currently, Scarborough Centre is less than the sum of its parts:

- The existing transportation network is designed to favour vehicular movement and is defined by big blocks that result in longer travel distances;
- Bridges, ramps and grade-separations are barriers to walking and cycling;
- Dedicated infrastructure for cyclists is lacking;
- Crosswalks are distantly spaced, sidewalks are often too narrow, missing or located in a way that does not support a vibrant and walkable public realm; and
- Development parcels are large and not serviced in a manner that supports a finer grain in the urban fabric.

Given significant public and private investments planned for the Centre, an opportunity exists to evolve the transportation network in a manner that better supports the policies outlined in the Scarborough Centre Secondary Plan. Key opportunities include developing a fine-grained street network that is safe, accommodates all users and reduces travel distances. Giving priority to infrastructure required to enhance walking, cycling and transit will help build connections throughout the Centre as well as to the surrounding communities and beyond. Improved transportation facilities, complemented by better wayfinding, land -use diversity and an inviting public realm, will provide greater accessibility to the Centre's many amenities.

The Transportation Master Plan will help guide growth and ensure the emergence of a vibrant, walkable and connected Scarborough Centre.

9.0 Draft Evaluation Framework

The alternatives will be evaluated against the following principles to identify a preferred direction. Each principle has a number of criteria, which were based on the evaluation framework and principles developed as part of the review of the City's Official Plan transportation policies ("Feeling Congested?").



As shown in Table 5, the draft evaluation framework captures many aspects of transportation planning and city-building, all of which are important to the future of Toronto. This includes specific criteria and measures to guide the evaluation process in screening the most beneficial alternative.

Table 5: Evaluation Principles, Draft Criteria and Measures

Principles	Criteria	Measures
Healthy Neighbourhoods	<input type="checkbox"/> Consistency with Complete Streets Principles	<input type="checkbox"/> Public Space Opportunities (area) <input type="checkbox"/> Exposure Risk of Vulnerable Users (separation distance) <input type="checkbox"/> Street Tree Opportunities (area)
	<input type="checkbox"/> Mitigates Impacts to Existing Neighbourhoods	<input type="checkbox"/> Potential for Traffic Infiltration
	<input type="checkbox"/> Improves Connectivity with Existing Neighbourhoods	<input type="checkbox"/> Number of Connections Provided
Choice	<input type="checkbox"/> Connectivity to Transit	<input type="checkbox"/> Average Catchment Area of Transit Stop
	<input type="checkbox"/> Connectivity of Cycling Routes	<input type="checkbox"/> Number of Intersection between Cycling Routes
	<input type="checkbox"/> Improves Walkability	<input type="checkbox"/> Average Block Length
Public Health and the Environment	<input type="checkbox"/> Impact to Area Ecology	<input type="checkbox"/> Open Space Affected (area)
	<input type="checkbox"/> Impact to Climate Change	<input type="checkbox"/> Impact to Noise/Air Quality <input type="checkbox"/> Impact to Water Run-off
	<input type="checkbox"/> Effect on Area of Natural and Scientific Interest	<input type="checkbox"/> Size of Area Affected
	<input type="checkbox"/> Effect on Environmentally Significant Areas	<input type="checkbox"/> Size of Area Affected
	<input type="checkbox"/> Impact on Built/Cultural Heritage	<input type="checkbox"/> Number of Features Affected
	<input type="checkbox"/> Impact on Areas with Archaeological Potential	<input type="checkbox"/> Size of Area or Number of Features Affected
Social Equity	<input type="checkbox"/> Level of Compliance with AODA	<input type="checkbox"/> Number of Minimums versus Targets
	<input type="checkbox"/> Improves Mobility for Vulnerable Users	<input type="checkbox"/> Existing Barriers Removed
Supports Growth	<input type="checkbox"/> Mitigate Impacts to Private Property	<input type="checkbox"/> Size of Area Affected/Number of Properties
	<input type="checkbox"/> Accommodation of Population/Employment Targets	<input type="checkbox"/> Qualitative Review
	<input type="checkbox"/> Protection for Improved Public Transit	<input type="checkbox"/> Accommodation of Subway Station/Ellesmere RT
Shaping the City	<input type="checkbox"/> Consistency with City, Regional, and Provincial Policies	<input type="checkbox"/> Qualitative Review
	<input type="checkbox"/> Consistency with Transit Oriented Development Principles	<input type="checkbox"/> P/E distance from Transit (walking time)
Experience	<input type="checkbox"/> Supports a Diverse-Scaled Community	<input type="checkbox"/> Variety of Block Sizes
	<input type="checkbox"/> Impact on Travel Time	<input type="checkbox"/> Average Travel Time
	<input type="checkbox"/> Impact on Vehicle Kilometres Travelled	<input type="checkbox"/> Average Vehicle Kilometres Travelled
	<input type="checkbox"/> Impact to Safety and Comfort for All Modes	<input type="checkbox"/> Qualitative Review
Affordability	<input type="checkbox"/> Construction Cost	<input type="checkbox"/> Cost (\$)
	<input type="checkbox"/> Maintenance Costs	<input type="checkbox"/> Cost per Year (\$)

10.0 Next Steps

Based on the above document, the Scarborough On the Move Transportation Master Plan has reviewed existing conditions of different transportation elements within the Centre. A draft Vision Statement, Problem and Opportunity Statement and evaluation framework have also been provided, to allow progression to the next phase of the study, as shown in the SCTMP Process, which include the identification, evaluation and selection of preferred alternative for the Scarborough Centre.

Subsequent work will be conducted with regards to the movement of goods, Transport Demand Management (TDM) and a quantitative multi-modal assessment, to be shared at a later date.

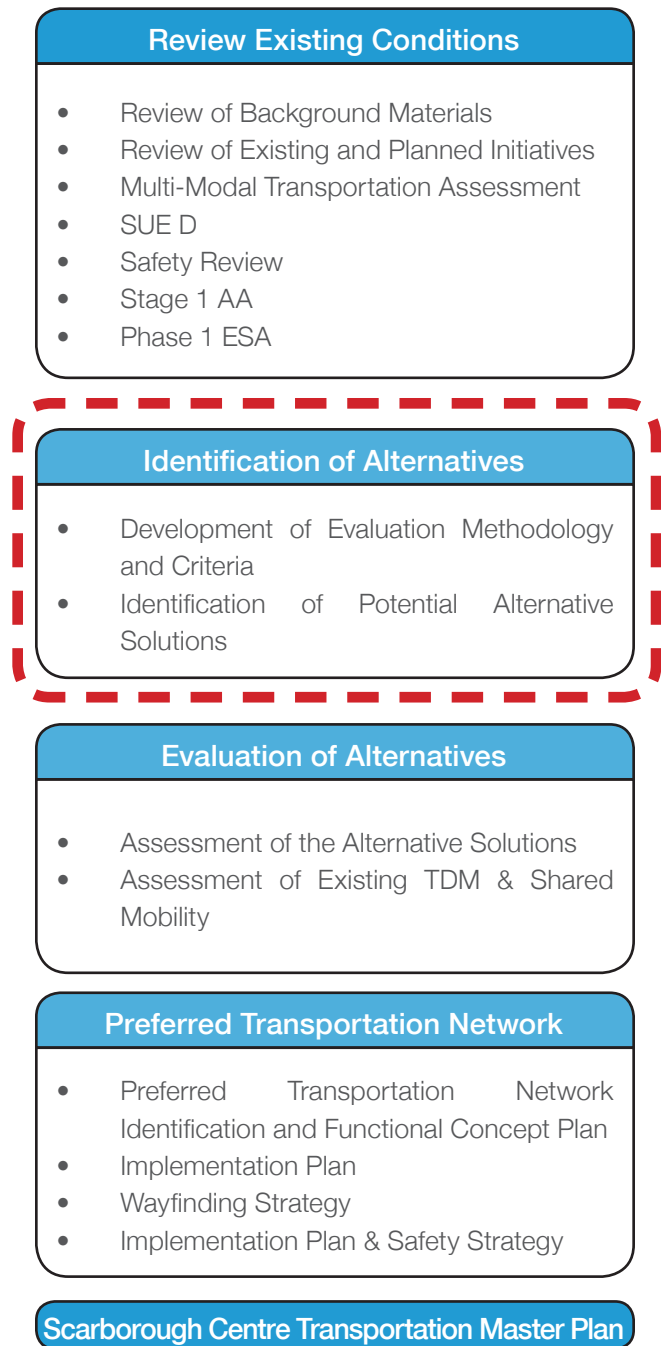


Figure 19: SCTMP Process

