1 INTRODUCTION

1 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.

The success of Scarborough Centre in the future will be dependent upon its ability to accommodate this growth, as it must ensure the physical infrastructure keeps pace with increasing demand. More specifically, challenges related to traffic congestion and the associated auto-dependence require the transportation network to be planned and designed to facilitate population and employment growth in the Centre, while providing safe, convenient, and sustainable choices for all.

The Scarborough Centre on the Move Transportation Master Plan (SCTMP) has been developed to clarify transportation-related policy objectives for the Centre. It is informed by public and stakeholder input, and is coordinated with significant investment into the transportation network, including the Line 2 -Scarborough Subway Extension (SSE). Building upon the completed planning work, the SCTMP provides the detailed transportation policies, initiatives, strategies and implementation priorities necessary to develop Scarborough Centre into a vibrant mixed-use urban hub.

1.1 Evolution of Scarborough Centre

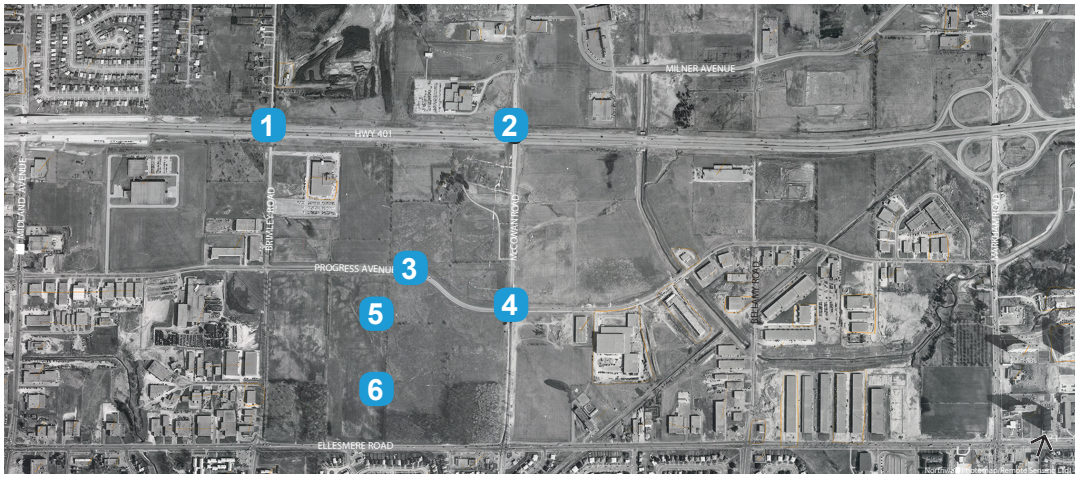
As shown in the following historical aerial photographs, much of the infrastructure in place was built in response to a few key developments, focusing on vehicle access to/from Highway 401. Arguably the greatest influence on the development and transportation network was the introduction of Scarborough Town Centre, a regional shopping mall, and Scarborough Civic Centre. Subsequent development around these key destinations resulted in an urban landscape that is dominated by vehicles and is inhospitable to pedestrians and cyclists.

The 1970 historical photograph (Figure 1.1), shows Scarborough Centre before Scarborough Town Centre Shopping Mall (STC) and Scarborough Civic Centre were developed, and before the Highway 401 interchanges at Brimley Road and McCowan Road were constructed. At this time, Progress Avenue intersected with McCowan Road at a four-leg at-grade intersection, and acted as a direct east-west connection through the Centre.

Figure 1.2 shows the SCTMP study area in 1983, when STC and Scarborough Civic Centre were open, and a network of connections to support these key destinations was developed. In particular, new roads were introduced to the area including Bushby Gate, Borough Drive, Triton Road and Borough Approach East and

West to provide access to/from STC and Scarborough Civic Centre. Other major network changes include the realignment of Progress Avenue north of STC, construction of the Highway 401 interchange at McCowan Road, and modification of the Highway 401 interchange at Markham Road.

Figure 1.1: Aerial Photograph of Scarborough Centre (1970)



1 Brimley Road does not cross Highway 401 and does not have an interchange

2 McCowan Road crosses Highway 401 but does not have an interchange

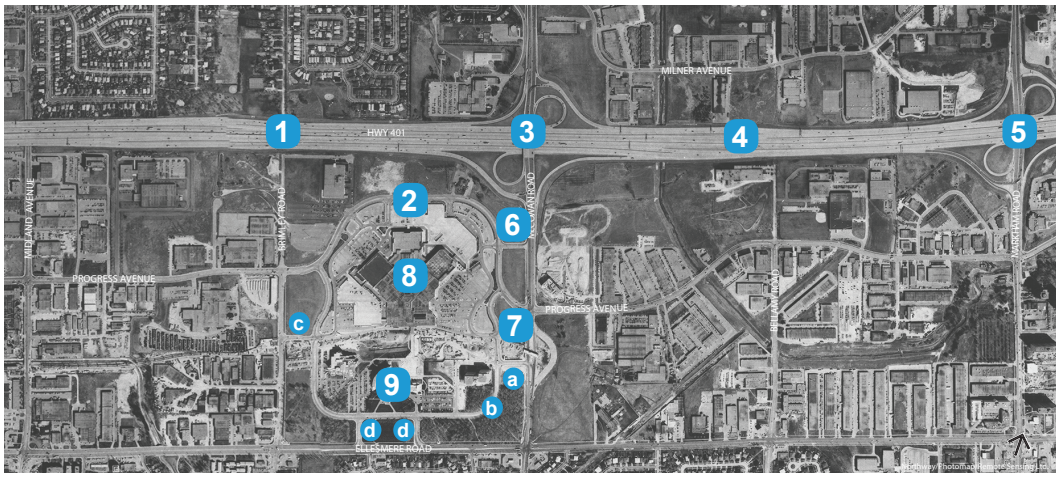
3 Direct alignment of Progress Avenue between Brimley Road & McCowan Road

4 Intersection of Progress Avenue and McCowan Road is at grade

5 Scarborough Town Centre Shopping Mall has not been built

6 Scarborough Civic Centre has not been built

Figure 1.2: Aerial Photograph of Scarborough Centre (1983)



1 Brimley Road does not cross Highway 401 and does not have an interchange

2 Progress Avenue realigned as a result of the Mall opening in 1973

3 McCowan Road has an interchange

4 Highway 401 widened in the 1970's

5 Markham Road interchange modified

6 Access to the Mall north of the McCowan/Progress intersection provided via a T-intersection

7 Intersection of Progress Avenue and McCowan Road is at grade

8 Scarborough Town Centre Shopping Mall opened on May 2, 1973

9 Scarborough Civic Centre opened on June 29, 1973

New Roads

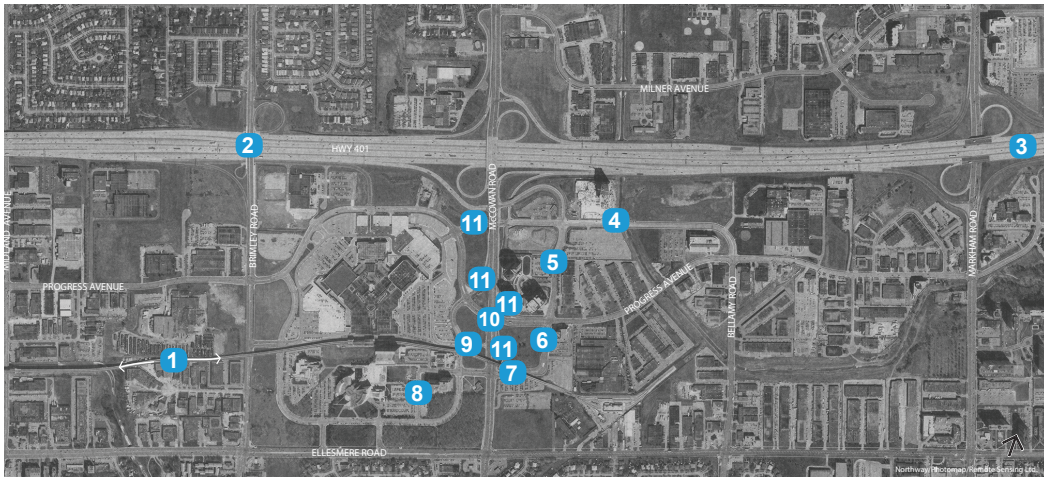
a Bushby Gate
b Borough Drive
c Triton Road
d Borough Approach East/West

In 1985, Scarborough Rapid Transit (Line 3 – Scarborough) opened, which connected Scarborough to Line 2 – Bloor-Danforth. As shown in the aerial image from 1991 (Figure 1.3), this was accompanied by the introduction of Transit Road (now Triton Road), which met Borough Drive at a grade-separated intersection. By 1991, the road network had also further developed to include Corporate Drive, Consilium Place, Grangeway Avenue, Bushby Drive, and Town Centre Court.

Another significant change to the transportation network was the modification of McCowan Road and Progress Avenue into a grade-separated intersection. This was a key contribution to the auto-oriented character of Scarborough Centre seen today, where a system of slip roads and bridges limits the amount of safe crossing opportunities for pedestrians and cyclists.

By 2014, much of today's transportation network in Scarborough Centre was in place. As shown in the 2014 aerial photograph (Figure 1.4), Omni Drive was built, and Grangeway Avenue and Progress Avenue were extended to increase connectivity in the area.

Figure 1.3: Aerial Photograph of Scarborough Centre (1991)



1 Scarborough Rapid Transit (Line 3 - Scarborough) opened in 1985

2 Brimley Road crosses Highway 401 and has a partial interchange

3 Progress Avenue does not cross Highway 401

4 Corporate Drive built

5 Consilium Place built

6 Grangeway Avenue has been introduced

7 Bushby Drive has been introduced

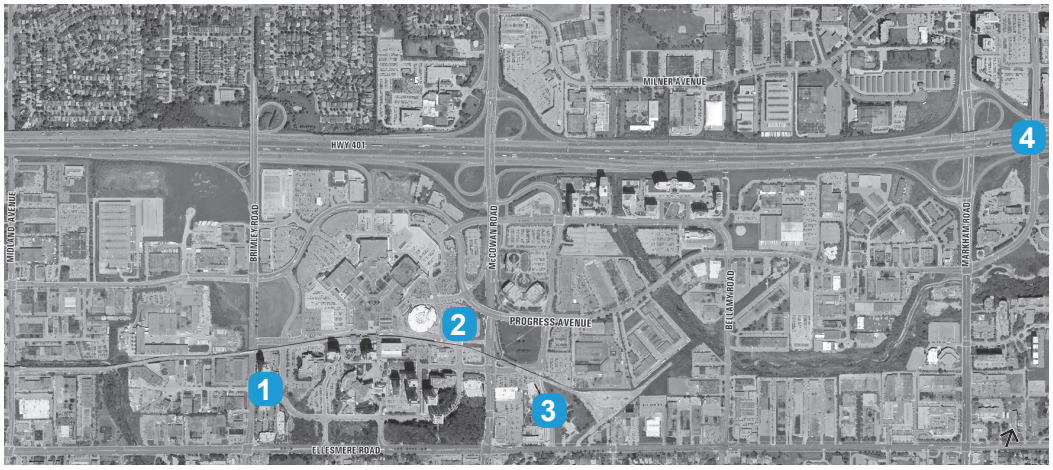
8 Town Centre Court has been introduced

9 Transit Road (Triton Road) has been introduced and is grade separated from Borough Drive

10 Intersection of McCowan Road and Progress Avenue has been grade separated

11 System of slip roads and grade separations on McCowan Road

Figure 1.4: Aerial Photograph of Scarborough Centre (2014)



1 Omni Drive built

2 Borough Drive between Town Centre Court and Progress Avenue has been closed

3 Grangeway Avenue has been extended to Ellesmere Road

4 Progress Avenue has been extended across Highway 401 to Sheppard Avenue

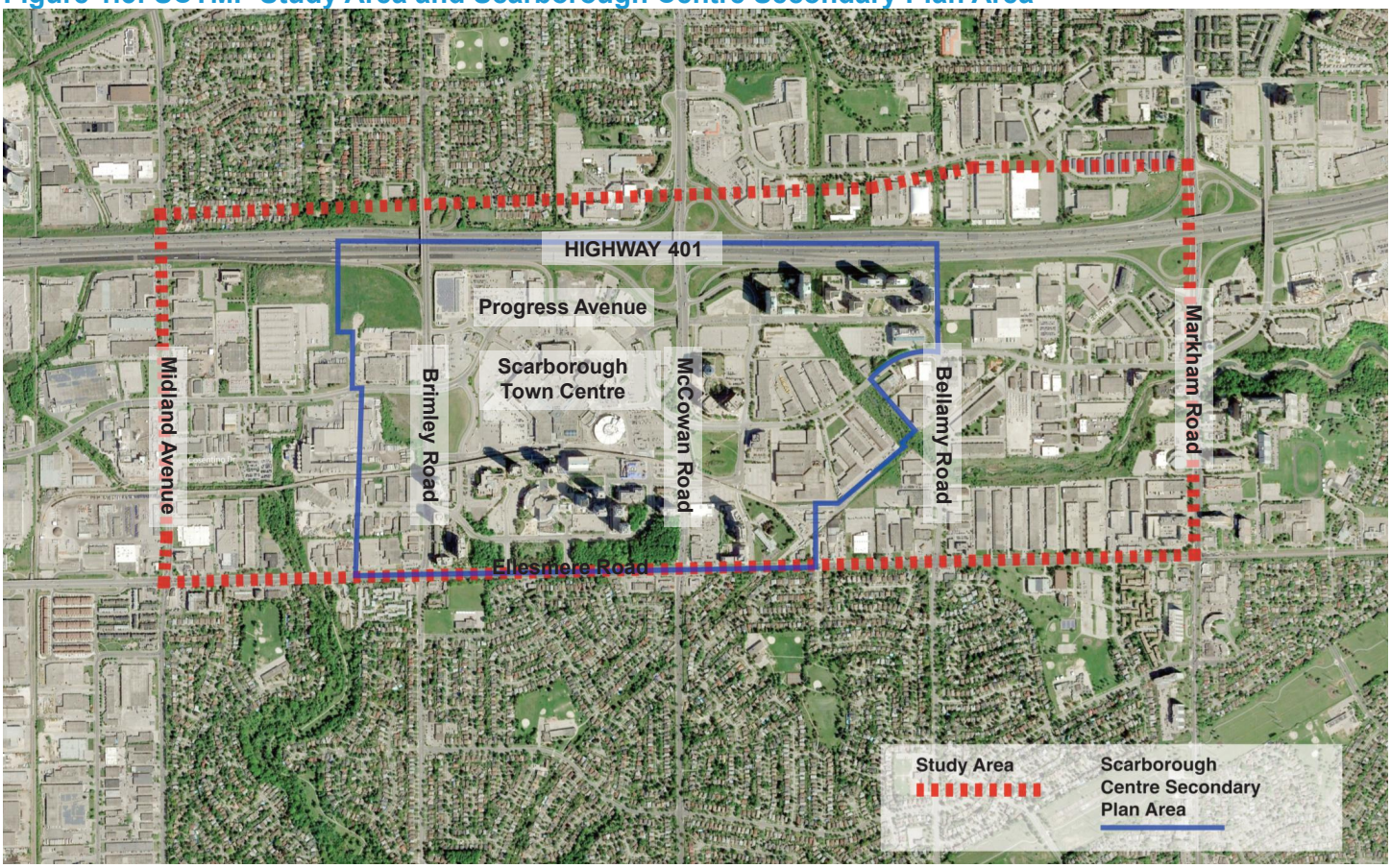
1.2 Scarborough Centre Today

1.2.1 Study Area

For the purposes of assessing traffic for the SCTMP, a study area was established. This area was established for the purposes of capturing the travel demand to the Centre from the rest of the Greater Toronto Area. The study area, as illustrated in Figure 1.5, 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 SCTMP is a study to inform an update to the Scarborough Centre Secondary Plan. 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. The study area of the Scarborough Centre Secondary Plan, for which the TMP recommendations are focused, is also illustrated in Figure 1.5.

Figure 1.5: SCTMP Study Area and Scarborough Centre Secondary Plan Area



1.2.2 Comparable Centres

In order to appreciate the extent and development potential of the study area, a number of scale comparisons with other urban areas is appropriate. Existing attributes in the Secondary Plan area are summarized in Figure 1.6. 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 that form a simplified grid;
- Presence of major destinations; and
- Transition from monolithic land use to a more balanced mix of uses.

Table 1.1 provides a comparison of Scarborough Centre's transportation network to other urban centres in the GTA to illustrate the type of network that is required to support Scarborough Centre's population and employment growth. The grid network that has been established in Downtown Toronto supports a density of 380 people and jobs per hectare, a density that is not dissimilar to the 350 people and jobs per hectare that is planned for Scarborough Centre. Downtown Toronto therefore represents the type of grid system that can reasonably be applied to Scarborough Centre in the future.

The existing networks in Vaughan Metropolitan Centre, Markham City Centre, and Mississauga City Centre are all comparable to Scarborough Centre, as they provide large block sizes. In the next few decades, these centres are anticipated to transition into mixed-use multi-modal centres with significant population growth and transportation improvements. As shown in Table 1.1, the Vaughan Metropolitan Centre and Markham City Centre have developed transportation networks that resemble the block plan in Downtown Toronto to facilitate mobility for all street users. Mississauga City Centre also has a street network that is denser than Scarborough Centre, despite having two-thirds the amount of planned density. The future Hurontario LRT through Mississauga City Centre will be a catalyst for growth in that area.

Figure 1.6: Key Scarborough Centre Secondary Plan Area Statistics

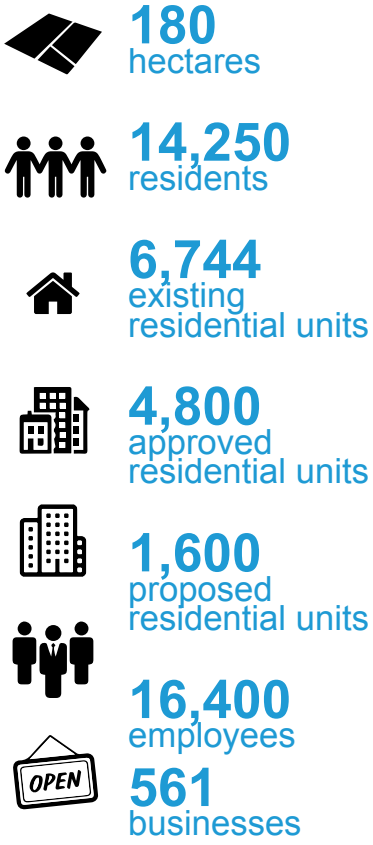
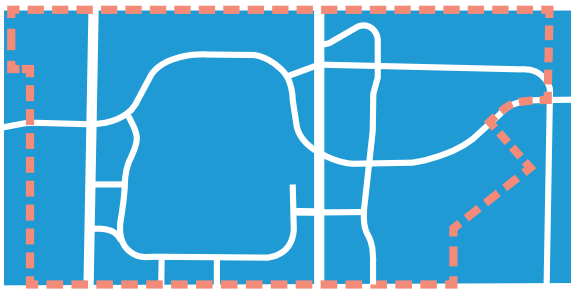
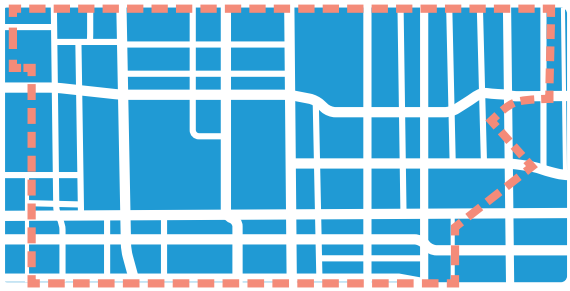
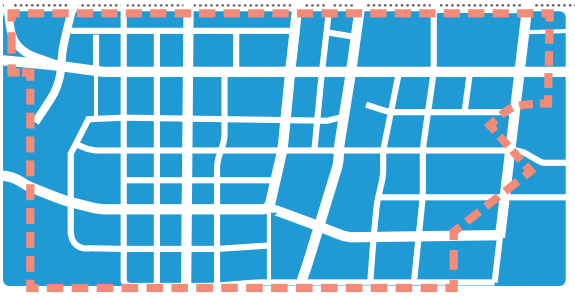
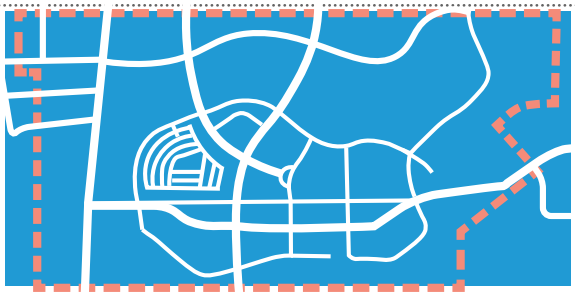
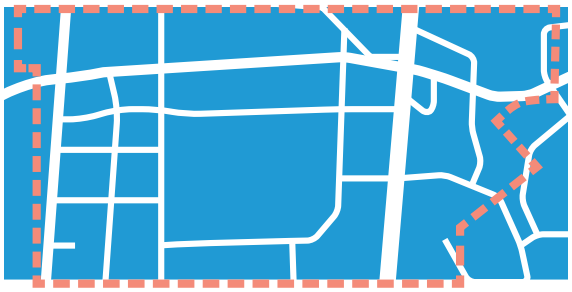


Table 1.1: Statistics and Typical Grid of Comparable Centres

Centre	Area (Hectares)	Projected Density (People and Jobs per Hectare)	Proposed Grid (Comparable Size to Scarborough Centre Secondary Plan Area)
Scarborough Centre	180	350	
Downtown Toronto	1,700	380*	
Vaughan Metropolitan Centre	179	201	
Markham City Centre	400	200	
Mississauga City Centre	255	210	

*Represents existing density; Downtown Toronto is a mature development area anticipated to accommodate infill development only

The future density identified for Scarborough Centre (350 people and jobs per hectare) is comparable to that existing in Downtown Toronto (380 people and jobs per hectare). The street network in Scarborough Centre, however, significantly differs from the simple and fine-grained grid system found downtown. The amount of development proposed to occur in Scarborough Centre must therefore be accompanied by a transformation of the street pattern into one that supports walkability and provides route choices and directness between destinations, similar to a typical grid network found in major urban centres around North America.

1.3 Vision for Scarborough Centre

1.3.1 Scarborough Centre Secondary Plan Vision

The Scarborough Centre Secondary Plan identifies the Centre to be a focus of growth. It is the City's intent that Scarborough Centre becomes a mixed-use urban centre where jobs, housing, services, cultural and recreational amenities, and transit are concentrated. Objectives of the Secondary Plan for Scarborough Centre 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;
- Enhance the Centre as a destination;
- 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.

1.3.2 Scarborough Centre on the Move Transportation Master Plan Vision

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.

Figure 1.7 illustrates the key components of the vision for Scarborough Centre.

Figure 1.7: Vision for Scarborough Centre - Key Components

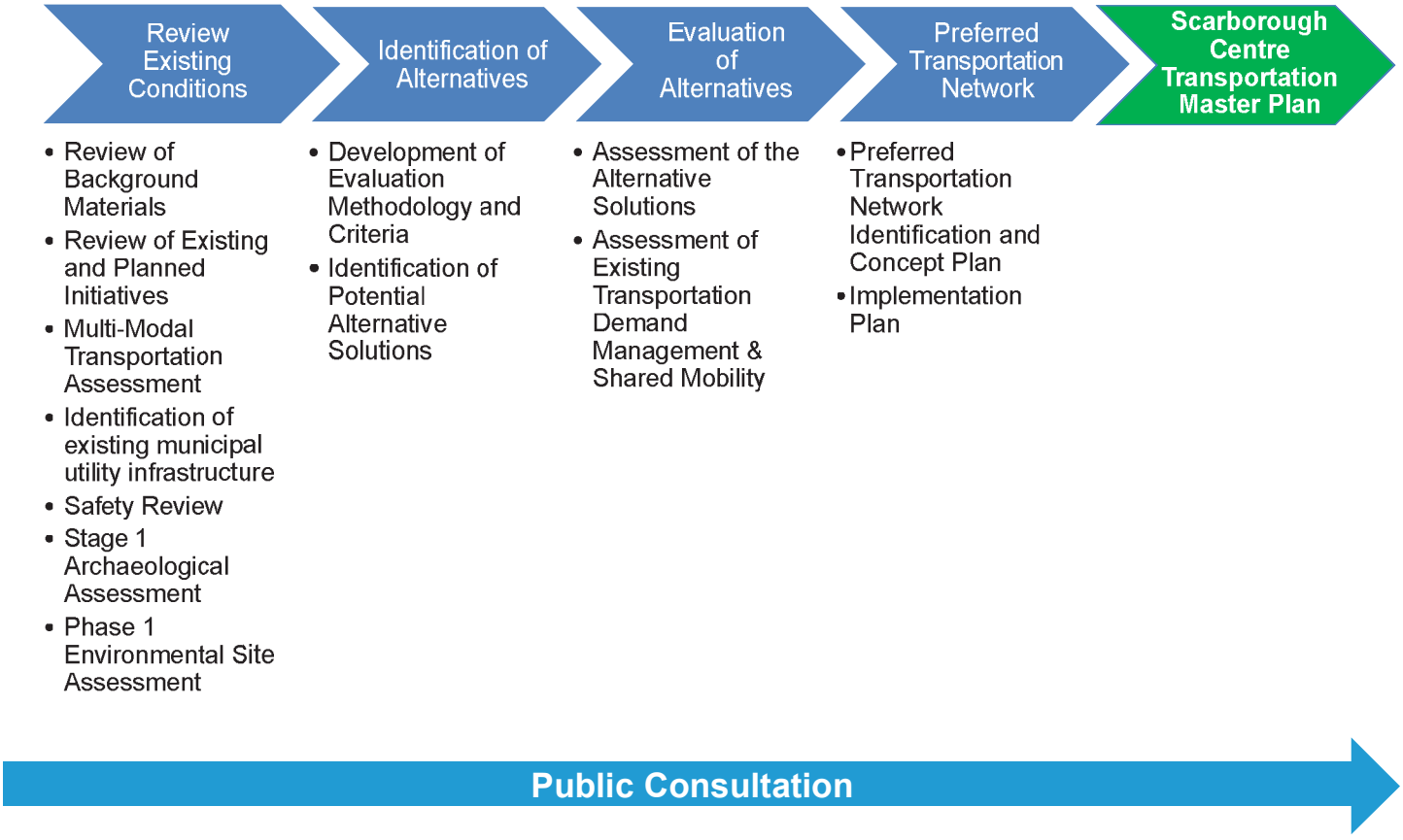
1.4 Study Process and Methodology

1.4.1 TMP Process

A Transportation Master Plan (TMP) sets the vision and strategic plan for the City's transportation system. It informs and directs policies, programs and infrastructure initiatives to meet the needs of the population and employment growth anticipated. More specifically, the TMP provides the framework, direction, and implementation plan for a transportation network that serves pedestrians, cyclists, transit and automobile users.

The TMP is reflective of the interests and priorities of stakeholders, representing the values of residents and businesses. Therefore, engaging the community is a key component in developing the TMP as public input is essential in identifying community needs and defining priorities. The phases of the study process are illustrated in Figure 1.8.

Figure 1.8: Transportation Master Plan Process



1.4.2 Municipal Class Environmental Assessment (MCEA) Process

The Municipal Class Environmental Assessment (MCEA) process is a planning and design tool used to assess the possible effects of an infrastructure project on the surrounding environment.

There are five phases in the EA process:

- Phase 1: Identify the problem or opportunity
- Phase 2: Identify alternative solutions
- Phase 3: Examine alternative design concepts for the preferred solution
- Phase 4: Prepare an Environmental Study Report (ESR)
- Phase 5: Implementation

The SCTMP has been prepared in accordance with the MCEA process to meet the following objectives:

- Complete Phases 1 and 2 of the MCEA
- Meet requirements under the MCEA for any Schedule A+ and Schedule B activities that are identified
- Identify any Schedule C activities or activities that are subject to Part II of the Environmental Assessment Act (EAA), where further study/EA will be required.
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1.4.3 Scarborough Centre on the Move Transportation Master Plan Methodology

The SCTMP is about developing a long term and implementable plan to guide the Centre's transportation system to meet the needs of anticipated growth to 2041. To achieve the vision of a multi-modal hub that encourages transit-oriented development and provides a variety of connected transportation options, Scarborough Centre requires a significant transformation and evolution. This plan is framed around four key strategies, or "pillars" that must come together to achieve the vision:

- Pillar One: Encourage Active Modes of Transportation
- Pillar Two: Support Transit and Innovative Mobility Solutions
- Pillar Three: Reduce Single-Occupant Vehicle Use
- Pillar Four: Integrate Land Use and Transportation

1.4.4 Public Consultation

Developing the SCTMP also included an extensive community consultation program. A public engagement and consultation plan was developed, which included a wide range of communication methods and opportunities for public involvement. Figure 1.9 provides a summary of Public Consultation methods and attendance.

Figure 1.9: Public Consultation Statistics

Planners in Public Spaces (PiPS)

16 events

1,600+ participants

2,500+ flyers distributed

Local Advisory Committee (LAC)

3 meetings

22 members

MetroQuest Survey

200+ participants

Roving Information Stations

2 days

11 locations

41 interviews

Public Consultation Meetings

65+ participants

Meeting #1 (November 2016)

85+ participants

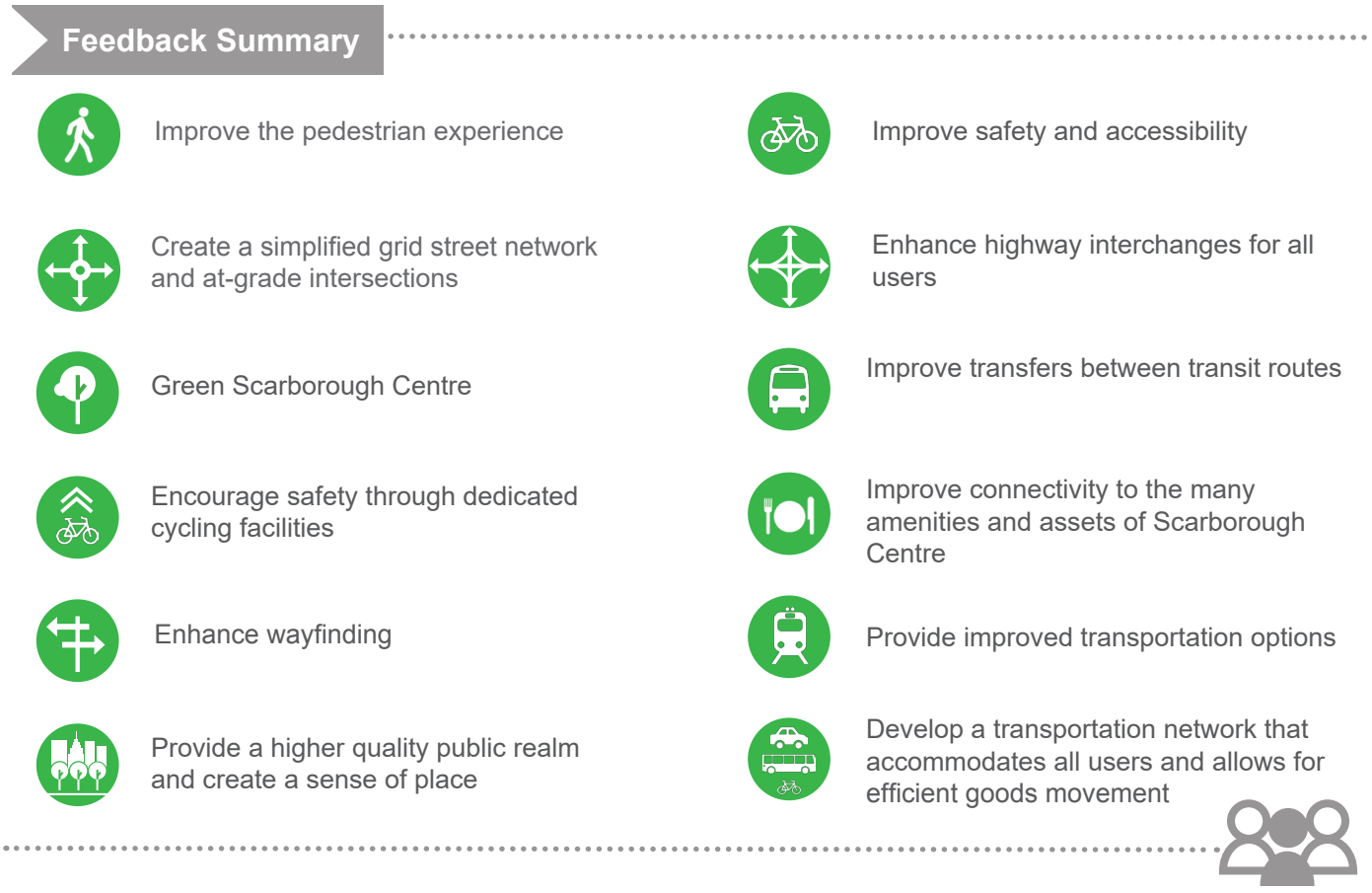
Meeting #2 (May 2017)

70+ participants

Meeting #3 (November 2017)

Throughout the study process, participants shared their thoughts by speaking with team members one-on-one, listening to presentations conducted by the project team, engaging in brainstorming activities, and providing feedback through comment sheets and MetroQuest online survey tool. A summary of key themes from the public engagement is shown in Figure 1.10.

Figure 1.10: Public Consultation Feedback Summary



The Study Initiation and Early Engagement Summary, along with summaries of the public consultation and Local Advisory Committee (LAC) meetings, is provided in Appendix A.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