



Town of Halton Hills Transit Service Strategy

Final Report



Contact information:

Project Manager

Jim Gough, P.Eng.
(905) 882-7283
Jim.Gough@wsp.com

Transit Specialist

Tim Rosenberger, AICP
(216) 781-7808
Tim.Rosenberger@wsp.com

Transit Analyst

Tianyi Zhang
(216) 416-1409
Tianyi.Zhang@wsp.com

TABLE OF CONTENTS

INTRODUCTION	1
<i>Vision Statement.....</i>	<i>1</i>
SERVICE REVIEW	2
EXISTING TRANSIT SYSTEM	2
<i>ActiVan.....</i>	<i>2</i>
<i>Taxi Scrip and Youth Taxi Scrip Programs</i>	<i>7</i>
<i>GO Transit Services</i>	<i>8</i>
<i>Existing Plans & Studies</i>	<i>12</i>
<i>Transportation Network</i>	<i>17</i>
SYSTEM REVIEW SUMMARY	32
MARKET ANALYSIS.....	33
POPULATION & DEMOGRAPHICS	34
<i>Population Growth.....</i>	<i>34</i>
<i>Population Density.....</i>	<i>36</i>
<i>Demographics.....</i>	<i>38</i>
EMPLOYMENT	48
<i>Employment Growth.....</i>	<i>48</i>
<i>Employment Status.....</i>	<i>52</i>
LAND USE AND DEVELOPMENT	54
DESTINATIONS	55
<i>Healthcare Services.....</i>	<i>57</i>
<i>Schools, Service, and Community Hubs.....</i>	<i>58</i>
<i>Commercial Areas.....</i>	<i>60</i>
<i>Recreation.....</i>	<i>60</i>
<i>Connections to Existing Transit Services</i>	<i>61</i>
<i>Proposed Developments</i>	<i>62</i>
MARKET ANALYSIS SUMMARY	62
PUBLIC ENGAGEMENT	64
SERVICE EVALUATION.....	66
<i>Level 2 – ActiVan +Universal Access Service</i>	<i>67</i>
<i>Level 3 – ActiVan + Universal Access Service + Limited Fixed-Route.....</i>	<i>74</i>
<i>Level 4 – ActiVan + Universal Access Service + Expanded Fixed-Route</i>	<i>84</i>
RECOMMENDATIONS	95
<i>Transit Service Recommendations</i>	<i>95</i>
<i>Communication & Marketing Strategy Recommendations</i>	<i>95</i>
<i>Additional Recommendations.....</i>	<i>96</i>
APPENDIX 1 – ACTIVAN POPULATION DESTINATIONS	98

(This page intentionally left blank.)

INTRODUCTION

The Town of Halton Hills has developed and adopted a Transportation Master Plan / Implementation Strategy that guides the future planning, design and implementation of transportation services and systems throughout the Town. One of the initiatives proposed in the Master Plan is the introduction of transit service in the Town. This study is an assessment of the feasibility of introducing expanded transit service in Halton Hills. In communities like Halton Hills, with a wide variety of transportation markets, there is no one-size-fits-all solution to meeting transit needs. The planning, design and implementation of transit services to address the needs of the community must result in a coherent network (integrated with existing transit services already serving the region). The system must ensure that basic transportation needs are met for all groups in an efficient and affordable manner.

The Town of Halton Hills is exploring opportunities for provision of a made-in-Halton Hills transit solution that builds on the existing ActiVan specialized transit service and Regional GO Transit services, to meet the current and future mobility needs of the community. This study identifies a long-term strategy for transit needs in Halton Hills and evaluates a range of service delivery alternatives. Over the next 17 months, the Town will consult with residents and businesses to develop ideas that will help in development of a strategy which aligns with the 2014-2018 Strategic Action Plan and addresses the needs of all potential users.

The objectives of the Halton Hills transit service strategy are to:

- Provide transportation access and mobility for the Town;
- Establish transportation network solutions to support planned growth in the community; and,
- Educate, consult, and engage residents, business, and other stakeholders.

VISION STATEMENT

Based on the comments and discussions received during the Visioning Workshop, and through Council discussions, the following Vision Statement has been adopted:

Expand on the existing Halton Hills transit service to provide an affordable and accessible system that is tailored to needs and opportunities in Halton Hills. The transit system will service the needs of residents, businesses and visitors within the Halton Hills urban, rural and hamlet communities, and provide links to surrounding municipalities by 2021. The transit system will continue to evolve to accommodate planned growth within the Town by 2031.

SERVICE REVIEW

Halton Hills provides accessible public transportation services to its residents. The purpose of this transit service review is to evaluate performance of the current specialized transit system as well as operational considerations relative to future alternatives, were evaluated against industry standards of service productivity, efficiency, effectiveness, cost-effectiveness, and cost recovery. WSP supported Halton Hills in setting agency service performance benchmarks and comparing its performance to that of other similar GTHA and Canadian peers, based on Halton Hills' current and estimated ridership as well as population. This process was used to evaluate existing service and proposed service changes, and provided a basis and a system baseline for Halton Hills to evaluate future performance in the future.

EXISTING TRANSIT SYSTEM

As of 2019, Halton Hills operates only specialized transit service, including an in-house specialized system, ActiVan, that provides curb-to-curb service to the elderly and people with disabilities. A subsidized taxi program, Taxi Scrip, serves as backup a to ActiVan during times when it is over-subscribed or not in service. A subsidized taxi-based Youth Taxi Scrip Program provides service for young Halton Hills residents, between 13 to 19 years of age.

ACTIVAN

The Town of Halton Hills currently operates a specialized transit (paratransit) service for persons with disabilities, and individuals aged 65+, who reside in Halton Hills. Known as ActiVan and founded in 1981, the service operates seven days per week (excluding statutory holidays), from 7:30am to 6:00pm on weekdays, and 8:00am to 2:00pm on weekends. Passengers are required to be registered users or accompanying a registered user. Service is provided anywhere within the municipal boundaries of Halton Hills, and are permitted to travel for any purpose. Travel beyond the borders of Halton Hills is accommodated by any ActiVan taxi service; however, standard (full) taxi rates apply for the portion of travel between the border of Halton Hills and the user's destination.

Use of ActiVan service requires a booking. Bookings must be completed on weekdays (excluding statutory holidays), 7:00am through 6:00pm, and must be completed 48 hours in advance of travel to ensure a scheduled pickup time. Same-day trip requests or changes are accommodated where possible, subject to availability. The pickup window is +/- 10 minutes from the scheduled pickup time.

ActiVan standard fare is \$3 per ticket, and costs one ticket per one-way trip. Standard fares apply weekdays from 7:30am to 5:00pm; outside of these times, a \$1 surcharge is applied, for a total fee of \$4 per trip. One support person is allowed to accompany each ActiVan registered user free of charge. Subsidized fares are also available under the Subsidized Passes for Low Income Transit (SPLIT) program. Under this program, trips to and from work, school, and appointments are subsidized for low-income individuals.

ActiVan maintains a Passenger Charter stating the rights and responsibilities of passengers.

Basic operating statistics for 2016 (the most recent data available) are shown in Table 1 below. Beyond ActiVan service, similar to other specialized transit agencies in North America, Halton Hills also operates a taxi scrip (i.e. discount) program, intended to accommodate spontaneous and short-notice travel. All ActiVan registered users are eligible for the taxi scrip program, which provides vouchers giving users a 40% discount on taxi travel.

Table 1: 2016 ActiVan Operating Statistics

OPERATING STATISTIC	2016 VALUE
Dedicated (In-House) Ridership	30,814 passenger trips
Non-Dedicated (Taxi) Ridership	42,585 passenger trips
Dedicated Vehicle Operating Kilometres	220,950 vehicle km
Total Operating Expenses	\$997,226
Revenues	\$207,825
Revenue/Cost Ratio	21%
Net Operating Cost per Passenger Trip	\$13.38
Number of Employees	3 x full-time, 12 x part-time

Source: 2016 CUTA Specialized Transit Fact Book

Shown in Figure 1, the ridership of the ActiVan service shows a trend of growing demand in transit, albeit with a slight decrease in 2017 due to a fare increase. Unlike fixed-route transit, which has a fixed operation cost for a given service level regardless how ridership changes, ActiVan has to increase its service level to accommodate the growing ridership. At some point, the cost of operating specialized transit will reach the level of operating a similarly routed fixed-route service, and become “unmanageable” if ridership continues to grow.

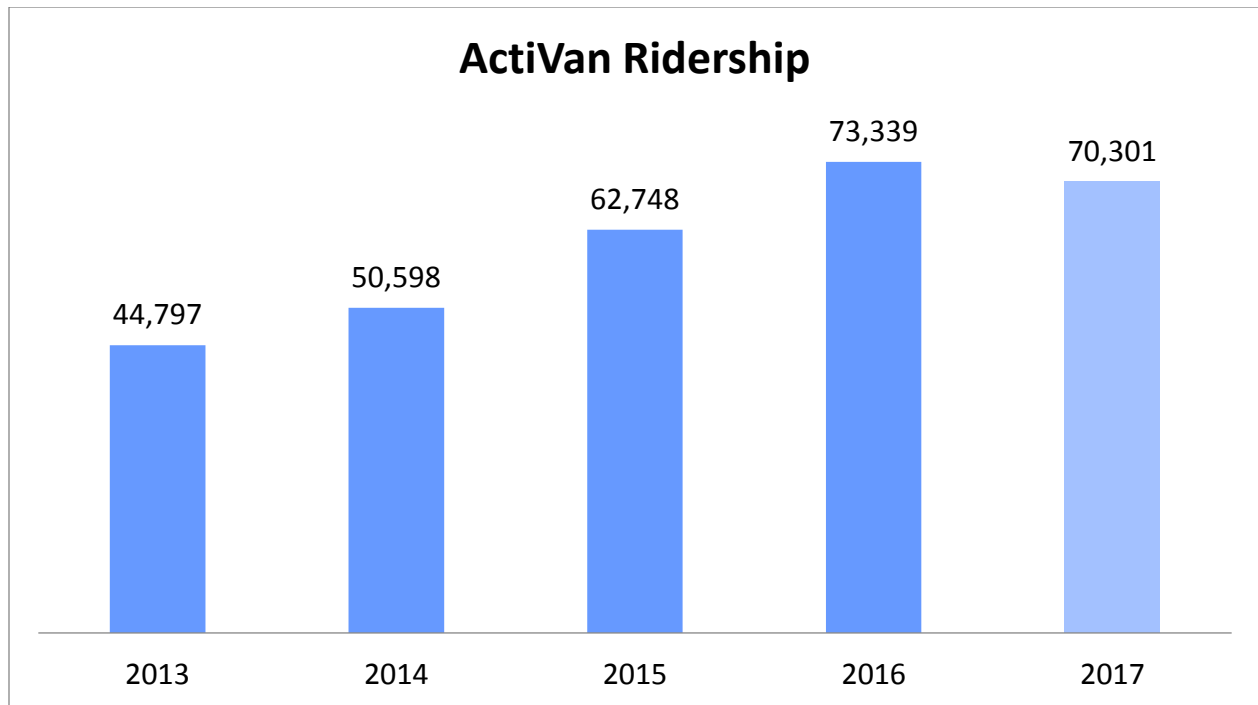


Figure 1: ActiVan Ridership (2013 - 2017)

A closer review of ActiVan's most popular destinations reveals that most the trips are clustered in Georgetown along Guelph Street east of Mountainview Road, while trip origins to those destinations also showed a base along Guelph Street, Mountainview Road, Main Street, and Maple Avenue within the Georgetown Urban Boundary, as shown in Figure 2 on the next page. A series of maps showing the respected origins to the ten most popular destinations is provided in Appendix 1. While there were a few exceptions, most of the recorded origins were within 10 min driving distance. This suggests that a fixed-route service connecting some of the most popular destinations in Georgetown would generate reasonable ridership and therefore could reduce ActiVan demand.

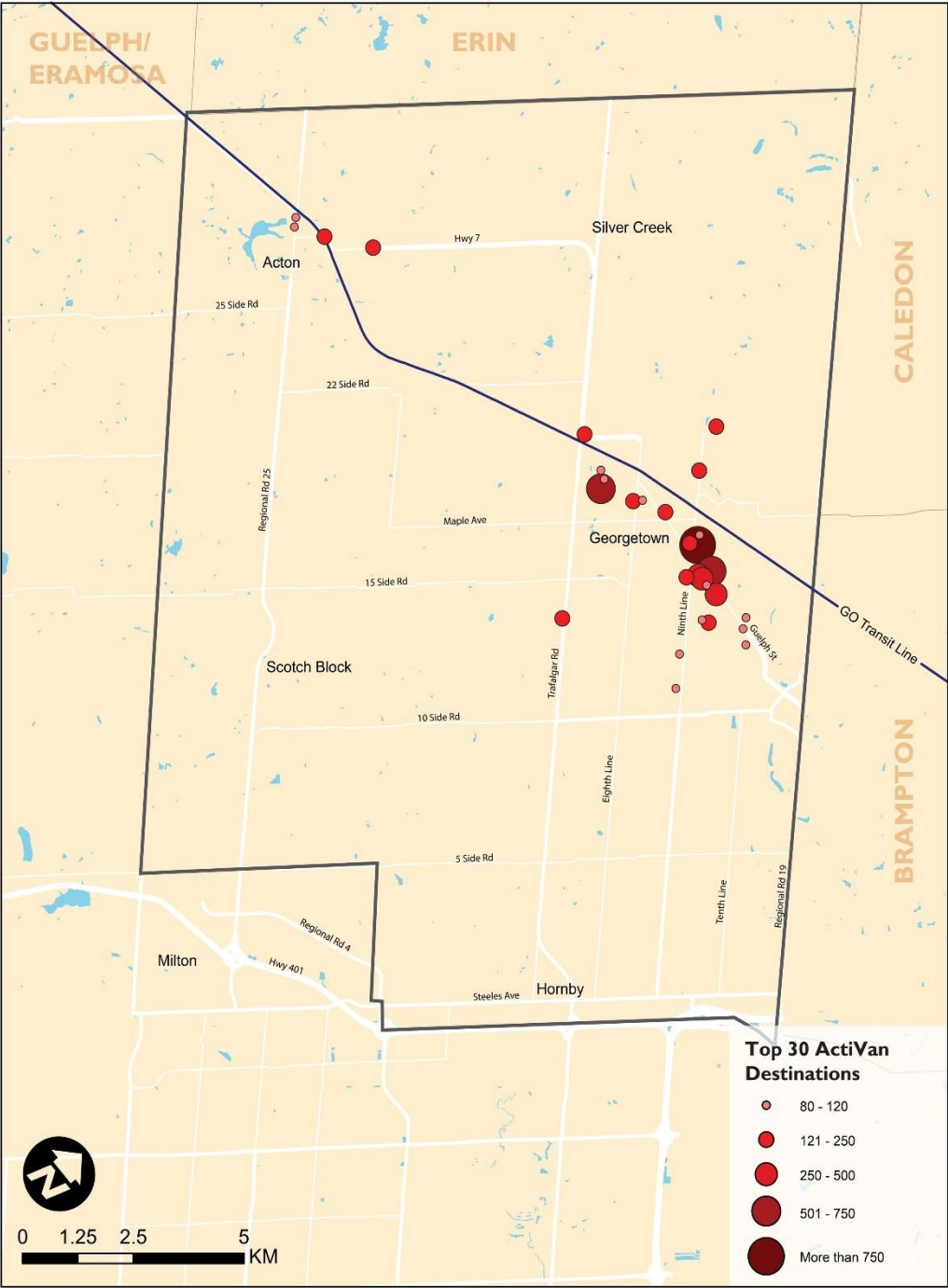


Figure 2: Top 30 ActiVan Destinations in 2017

FLEET SIZE

Dedicated (i.e., in-house) ActiVan service is currently operated using eight vehicles. Existing vehicles include three Mobility Ventures MV-1 passenger vans, one GMC Uplander passenger van, one Dodge Promaster passenger van, and three larger, medium-duty low-floor cutaway vehicles manufactured by Eldorado National, GMC, and Arboc Specialty Vehicles. Additional (non-dedicated) ActiVan service is provided by three local taxi contractors. The detailed fleet table is presented in Table 2.

Table 2: Halton Hills ActiVan Bus Fleet

UNIT	MFG	MAKE	MODEL	ASSET SUBTYPE	STATUS	PURCHASE YEAR
691	2014	ELDORADO	EZR 11 PASSENGER BUS	ACCESSIBLE BUS (10 PASS OR MORE)	In Service	2014
692	2014	MV1 VEHICLE	MV1 VEHICLE	ACCESSIBLE VAN	In Service	2014
693	2009	GMC UPLANDER	GMC UPLANDER	ACCESSIBLE VAN	In Service	2009
694	2014	GMC BLUEBIRD	BLUEBIRD	ACCESSIBLE BUS (10 PASS OR MORE)	In Service	2014
695	2014	MV1 VEHICLE	MV1 VEHICLE	ACCESSIBLE VAN	In Service	2015
696	2014	MV1 VEHICLE	MV1 VEHICLE	ACCESSIBLE VAN	In Service	2016
698	2017	DODGE	PROMASTER	ACCESSIBLE VAN	In Service	2017
699	2017	ARBOC	SPIRIT OF FREEDOM	ACCESSIBLE BUS (10 PASS OR MORE)	In Service	2017

ANNUAL OPERATING BUDGET

Table 3 on the next page shows the 2018 actual budget and council approved 2019 budget for Halton Hills' specialized transit service.

The "One-Time" expense/revenue under the 2019 tax categories reflect the additional cost from the additional drivers, dispatchers, and administrative staffs that are necessary to bring ActiVan operation in-house, as approved by Council. This expense will be funded from the Tax Rate Stabilization Reserve during the transition period, and therefore will not cause impact on the 2019 tax levy.

Table 3: Halton Hills ActiVan 2018/2019 Budget

	2018	2019		
	Actual	Based	One-Time	Total
Expense	\$1,247,302	\$1,339,650	\$233,800	\$1,573,450
Revenue	\$ (788,600)	\$ (796,750)	\$ (233,800)	\$ (1,030,550)
Net Expenditure	\$458,702	\$542,900	-	\$542,900

TAXI SCRIP AND YOUTH TAXI SCRIP PROGRAMS

Besides ActiVan, Halton Hills also operates a taxi scrip (i.e. discount) program, intended to accommodate spontaneous and short-notice travel. All ActiVan registered users are eligible for the taxi scrip program. The service provided under the program operates twenty-four hours a day, seven days a week within Halton Hills. The service sells books of taxi vouchers to eligible customers to pay for trips with participating taxi operators. A book of twenty \$1 coupons costs the user \$12, a 40% discount. ActiVan customers call taxi companies directly to schedule their trips. A similar but separate Youth Taxi Scrip Program is provided to residents between 13 and 19 years of age, with the same 40% discount through the purchase of coupon books.

Figure 3 on the next page shows the number of trips by month within the first year of the introduction of the Youth Taxi Scrip Program, from May 2015 to May 2016. Similar to ActiVan, the Youth Taxi Scrip Program also shows a noticeable trend of growth, from lower than 50 riders per month at the introduction of service to more than 200 riders per month.

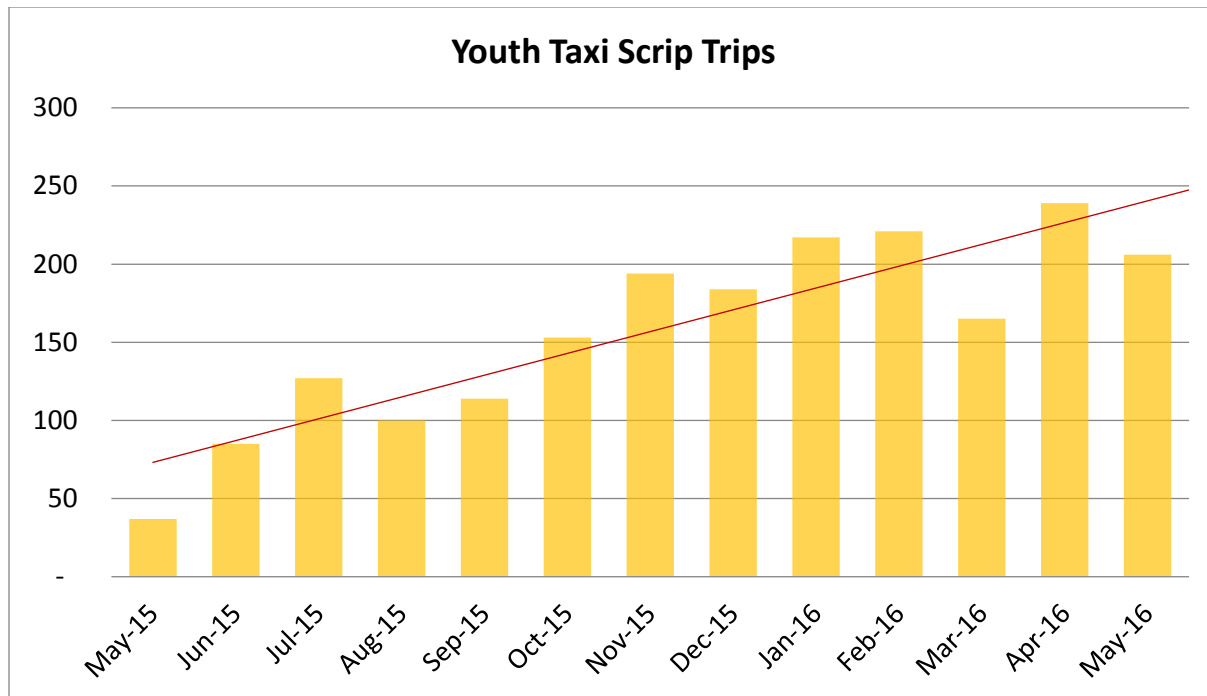


Figure 3: Youth Taxi Scrip Trips

GO TRANSIT SERVICES

Regional transit services are provided by GO Transit, an operating division of Metrolinx, the regional transportation planning agency for the Greater Toronto and Hamilton Area (GTHA). GO Transit operates seven diesel-powered train lines serving Southern Ontario, of which one line – the Kitchener corridor, known as the Georgetown corridor until 2011 – serves Halton Hills. In Halton Hills, the Kitchener corridor has stations at Georgetown and Acton. The system map of GO Transit, including both the GO Rail and the GO Bus network, is shown in Figure 4 on the next page.



Figure 4: GO Transit System Map

GO trains operate between Halton Hills and Union Station, GO Transit's central transit hub in downtown Toronto, during weekday morning and afternoon peak periods. Operating information is summarized in Table 4 on the next page. GO Transit also operates approximately 60 bus routes using coach buses, of which two (Routes 31 and 33) serve Halton Hills. Routes 31 and 33 provide two-way hourly service to/from stops in Georgetown (including Norval) and Acton.

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Table 4: 2017 GO Transit Halton Hills (Kitchener Corridor) Operating Statistics

INBOUND / OUTBOUND	PERIOD OF OPERATION	LOCATION SERVED	DAILY TRIPS	DEPARTURE TIMES	ONE-WAY FARE (PRESTO FARE) TO/FROM UNION
GO Train (Kitchener Corridor Service to/from Georgetown and Acton)					
Inbound Towards Union Station	Weekday and Weekend Morning Peak	Acton	4 trips	6:05-7:51am	\$13 (\$11.55)
		Georgetown	6 trips	6:23-8:09am	\$11.45 (\$10.17)
	All other time periods	Acton / Georgetown	None	N/A	N/A
Outbound Towards Georgetown / Acton	Weekday and Weekend Afternoon Peak	Acton	4 trips	4:50-6:50pm	\$13 (\$11.55)
		Georgetown	6 trips	3:35-6:50pm	\$11.45 (\$10.17)
	All other time periods	Acton / Georgetown	None	N/A	N/A
GO Bus (Route 31 and 33 Service to/from Georgetown and Acton)					
Inbound Towards Union Station	Weekdays	Acton	Every 1- 2 hours	5:04am- 9:05pm	\$13 (\$11.55)
		Georgetown	Every Hour	4:05am- 12:30am	\$11.45 (\$10.17)
	Weekends	Acton	Every 1- 2 hours	7:34am- 9:05pm	\$13 (\$11.55)
		Georgetown	Every Hour	5:00am- 12:00am	\$11.45 (\$10.17)
Outbound Towards Georgetown / Acton	Weekdays	Acton	Every 1- 2 hours	5:50am- 11:50pm	\$13 (\$11.55)
		Georgetown	Every Hour	5:50am- 2:30am	\$11.45 (\$10.17)
	Weekends	Acton	Every 1- 2 hours	07:30am- 11:30pm	\$13 (\$11.55)
		Georgetown	Every Hour	07:30am- 2:30am	\$11.45 (\$10.17)

Source: <http://www.gotransit.com>

Basic operating statistics for 2016 (the most recent data available) is shown in Table 5 below.

Table 5: 2016 GO Transit Operating Statistics

OPERATING STATISTIC	2016 VALUE
Total Ridership	69,193,574 trips
Kitchener GO Rail Ridership	18,000 trips per weekday in 2014
Total Vehicle Operating Kilometres	56,807,937
Direct Operating Expenses	\$823,990,986
Total Operating Revenues	\$576,815,370
Revenue/Cost Ratio	70%
Net Operating Cost per Passenger Trip	\$3.57
Number of Employees	3,372 x full-time, 355 x part-time

Source: 2016 CUTA Transit Fact Book

The Georgetown and Acton GO stations both accommodate trains and buses. Georgetown GO station has a total of 625 park-and-ride spaces in two parking lots. Acton GO station has a total of 45 park-and-ride spaces in one lot. Go bus stops are provided at Norval (Highway 7 and King St.), Georgetown Market (Highway 7 / Guelph St. and Alcott Dr.), and Georgetown (Main St. and Wesleyan St.). Bus stops have no car parking available. According to a passenger survey conducted by Go Transit in 2015, there were 689 boardings on the morning inbound train at the Georgetown GO Station, and 31 boardings at the Acton GO Station.

GO STATION CHANGES

No significant capital upgrades to GO Transit stations/stops in Halton Hills are currently underway or planned in the near future. In 2015, GO Transit completed the Georgetown South project, which included 60km of track expansion and seven new overpasses and underpasses along the Kitchener GO rail corridor. The upgrade was completed to accommodate the Union-Pearson Express (operating between Union Station in Toronto and Pearson International Airport in Mississauga), and to enable an increased level of GO train service on the Kitchener corridor. The expansion included 14 new midday GO train trips per weekday between Mount Pleasant GO station in Brampton and Union Station in Toronto. While Mount Pleasant GO station falls outside Halton Hills, it is close to Georgetown and has potential to serve rail transit trips between Halton Hills and Union station.

In the longer term, GO Transit will be undertaking massive capital upgrades under its Regional Express Rail (RER) program to expand GO rail service, including electrification of some corridors and provision of two-way, full-day service on all corridors. The anticipated completion date for the RER program is approximately 2025.

EXISTING PLANS & STUDIES

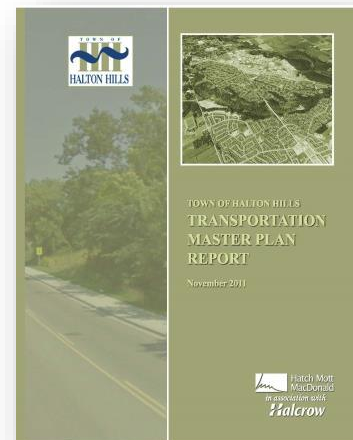
The planning team reviewed a series of local and regional plans and studies related to this Transit Service Strategy Study. A summary of each plan/study is provided below.

TOWN OF HALTON HILLS

TOWN OF HALTON HILLS TRANSPORTATION MASTER PLAN (2011 - 2031)

The *Halton Hills Transportation Master Plan (TMP)* integrates transportation and associated strategies to address transportation challenges faced by the Town. Integrating transportation planning with land use planning and environmental assessment objectives, the TMP focuses on creating a transportation system that is sustainable and encourages a healthy and active lifestyle. Specifically, the goals of the Halton Hills TMP are to: address existing transportation challenges; identify the initiatives that support the town's planned growth and development; find ways to encourage active transportation; identify necessary infrastructure improvements; and develop a transportation system that offers individuals travel choices, and balances the needs of all users. To achieve its goals, the Halton Hills TMP outlines the following policies:

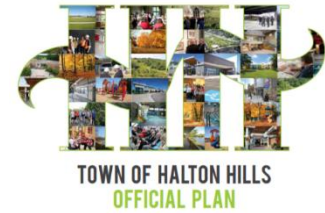
- Implement travel demand management;
- Implement an active transportation network with access to major activity and employment areas;
- Review the need for municipal transit, and when provided, to integrate with and support other transit systems and coordinate with wider transportation initiatives and agencies;
- Encourage and promote the use and expansion of specialized transit services for individuals with disabilities, the elderly, and local youth through the ActiVan Service;
- Promote efficient and reliable goods movement and encourage measures to reduce the impact of truck traffic on residential communities;
- Investigate traffic calming measures;
- Consider roundabouts for intersection traffic control; and,
- Design roads to current safety standards and consider safety explicitly in road improvement projects.



THE TOWN OF HALTON HILLS OFFICIAL PLAN (2008)

The *Town of Halton Hills Official Plan (Halton Hills OP)* encourages intensification of existing lands within the downtown areas. The Halton Hills OP aims to preserve and enhance the small-town character and rural nature of the town, while directing growth and change to key locations, including the Georgetown GO station area.

While there is no existing fixed transit system in Halton Hills, the Halton Hills OP encourages use and expansion of ActiVan. The Halton Hills OP promotes transit-supportive land uses in nodes, corridors, and new development areas, and states that Council is to review the need for a municipal transit system and integrate with other transit systems.



APPROVED MARCH 2008 | CONSOLIDATED JANUARY 2017

VISION GEORGETOWN – GUIDING PRINCIPLES (2014)

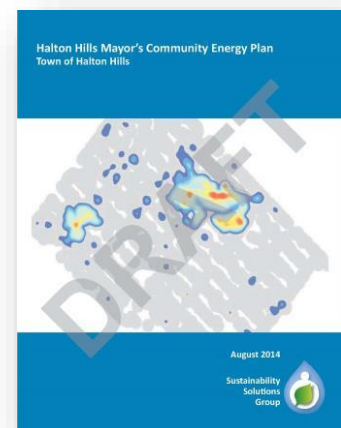
The *Vision Georgetown* community is striving to be a new urban community that connects to the broader community of Georgetown and the Town of Halton Hills, while still maintaining the rich heritage of the Town. There are fourteen guiding principles to help achieve the vision set out for this new area. The principles that directly affect transportation within the Town are highlighted below:



- To design a community that is connected internally and integrated with the rest of Georgetown, and other surrounding communities, through a network of roads, paths and trails;
- To provide wide range of residential, commercial, and institutional uses, in a manner that reduces the need for an automobile to meet the daily needs of life; and
- To establish a transportation system that safely and efficiently accommodates different forms of travel (including automobiles, walking, and cycling) and plans for future public transit.

MAYOR'S COMMUNITY ENERGY STRATEGY (2014)

The *Mayor's Community Energy Plan's* implementation will enhance quality of life in Halton Hills through improved energy efficiency and cost savings, greenhouse gas reductions, renewable energy generation and the pursuit of innovative approaches to generating energy for Halton Hills. The two parts that this plan include are a Corporate Energy Plan and a Local Action Plan. The Corporate Energy Plan includes a 5-year roadmap to ensure Town facilities are built and operated as efficiently as possible, and implementation of additional energy efficiency improvements at current facilities. The Local Action Plan addresses energy across the community and fulfills the first three milestones of the Federation of Canadian Municipalities' Partners for Climate Protection program. Through the Mayor's Community Energy Plan, Council endorsed the recommendation for staff to plan and design the Vision Georgetown area to be transit ready.



STRATEGIC ACTION PLAN (2014 – 2018)

The *Strategic Action Plan* sets priorities for Council to plan for a vibrant urban and rural community that has a broad range of public services to achieve the nine strategic directions. These priorities include:

- Municipal Service Delivery;
- Financial Sustainability;
- Planning for Growth;
- Transportation/Mobility;
- Sustainability;
- Employment Areas Development;
- Rural Economic Development; and,
- Communications.



Within the Transportation/Mobility priority, there are seven key objectives, which includes three specifics to transit service.

- Exploring inter-/intra-regional connections;
- Planning Vision Georgetown to be ‘transit ready’; and

Develop a public transit strategy to address the needs of all potential users.

METROLINX

METROLINX – THE BIG MOVE REGIONAL TRANSPORTATION PLAN (2008 - 2033)

The Big Move is a long-term strategic plan developed by Metrolinx that envisions an integrated, multimodal, regional transportation system for the GTHA that is seamless, coordinated and efficient. The plan envisions a transportation system that supports a high quality of life, provides a thriving sustainable and protected environment, and supports a strong, prosperous, and competitive economy. The plan sets out nine “Big Moves” and 10 strategies, which focus primarily on transit and active transportation.



The 10 key strategies to achieve its overarching vision, goals and objectives incorporate both priority actions and supporting policies. Nine of the Priority Actions are considered “Big Moves”, having the largest and most transformational impacts on the transportation system in the Region. These priority actions include enhanced regional rapid transit; higher-order transit to Pearson International Airport from all directions; an expanded Union Station; complete walking and cycling networks; a passenger information system; regional transit fare system integration; a system of connected mobility hubs; a complete goods movement strategy; and an investment strategy for funding. Some of the top transit priorities for the first 15 years of the RTP are highly relevant for Halton Hills, including the Express Rail enhancements which will increase connectivity between urban growth centres, including Burlington and Oakville, as well as Downtown Milton. Rapid transit along Dundas Street was illustrated to provide a

direct connection with the subway system at Kipling Station, and rapid transit on Highway 403 will connect Halton to the Pearson Airport district.

METROLINX – REGIONAL EXPRESS RAIL (2016 – 2026)

As part of the larger Regional Transportation Plan (RTP), Metrolinx has developed a 10-year plan to improve the regional GO Transit rail network for faster, more convenient service. This will include: running all-day, two-way electric trains at least every 15 minutes within the most travelled parts of the network; quadrupling off-peak trips; and doubling the number of trips during weekday peak-hour periods.

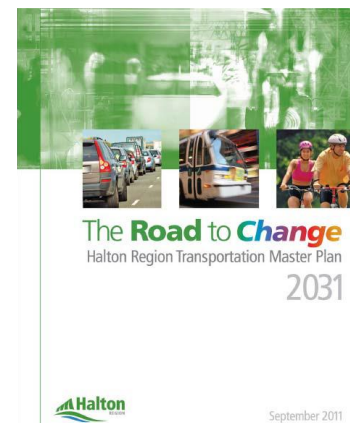
The initial business case for regional express rail (RER) identified significant net benefits to delivering RER service. To achieve higher frequency service, the *RER Plan* involves improving track infrastructure and electrifying the regional system (where lines are owned by Metrolinx). Furthermore, Metrolinx has prioritized 14 new stations for inclusion in the *10-year RER Program*, which would: improve service and increase ridership; minimize impact on trip time for existing users; maintain appropriate station spacing; support regional and municipal plans; and consider different roles and needs of each location. Frequency on the Kitchener Line is being improved to provide more service throughout the corridor, and improvements at the Milton GO Station are underway to support the added level of service and demand.

HALTON REGION

HALTON REGION TRANSPORTATION MASTER PLAN – THE ROAD TO CHANGE (2011 - 2031)

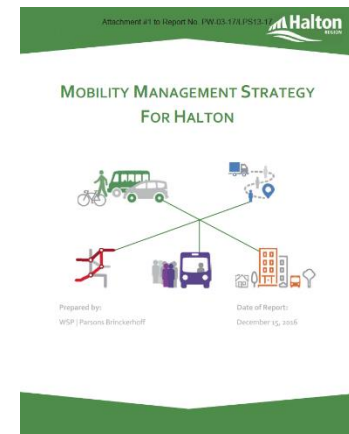
The *Halton Region Transportation Master Plan* (Halton Region TMP) outlines the strategies, policies and tools for a sustainable, integrated and balanced transportation system, taking into account all modes of travel that safely, effectively, and cost efficiently meet the Region's transportation needs to the year 2031. The plan provides guidance and support for the development of the Region's transportation system, and helps define the Region's role in this process. It supports the objectives of *Sustainable Halton*, and is guided by *The Big Move*, the policies coming out of ROPA 38, and extensive consultation. Five key guiding principles (balanced needs, healthy communities, economic vitality, sustainability, and well-maintained infrastructure) were used to outline five key area recommendations:

- Active Transportation
- Transportation Demand Management
- Goods Movement
- Inter-municipal Transit
- Roadway Improvements



MOBILITY MANAGEMENT STRATEGY FOR HALTON (2016 – 2041)

The Mobility Management Strategy for Halton is intended to align with multiple layers of Official Plans and transportation plans, and provide guidance on the evolution of the region-wide transportation between 2016 and 2041. The plan focusses on mobility-as-a-service and increasing the modal share of a variety of sustainable transportation modes, including public transit and a range of active transportation modes, while considering the unique characteristics of all four local municipalities. The plan considers the full range of transportation opportunities to support the transportation of both people, goods, and services throughout the region.



DEVELOPMENT CHARGES

The new Development Charges Act (DCA) legislation, which came into effect in January 2016, permits the use of a forward-looking level of service for transit development charge calculations. These changes to the Act include:

Service level

- Province can now specify services that are permitted to use a planned level of service to establish development charges, and to prescribe the method and criteria to estimate the planned level of service through regulation
- Only transit services are eligible

10% reduction

- 10% reduction of eligible growth-related capital costs of all services excluding: water services; roads; electrical power; police; fire protection; and Toronto-York subway extension
- Transit no longer on list of 90% recoverable services

Timing of development charge payment

- Charges calculated and payable upon the issuance of a building permit that allows above-grade construction
- Buildings requiring multiple permits have charges payable upon the issuance of the first permit

Background study

- Required to be made available to the public 60 days prior to passing a by-law (increased from 20 days)

Asset management plans

- Development charge background study must include an asset management plan to deal with all assets whose capital costs are proposed to be funded under the development charge by-law and demonstrate that all these assets are financially sustainable over their full life cycle

Additionally, the DCA also prescribes extensive reporting requirements under the calculation methodology for transit which need to be met. These reporting requirements include:

- Financial statement related to development charge by-law and reserve funds prepared by the treasurer of a municipality must include a statement identifying all assets whose capital costs were funded under a

development charge during the year, and the manner in which any capital cost not funded under the by-law will be funded;

- Financial statement to be made available to the public;
- Identification of the portion of the total estimated capital costs attributable to the transit service over the 10-year DC period and after the 10-year DC period;
- Calculations which were used to prepare the estimate for the planned level of transit services;
- Forecast of ridership for all modes of transit services proposed to be funded by the DC for the 10-year forecast period, categorized by development type and whether from existing or future development; and
- Ridership capacity for all modes of transit services proposed to be funded by the DC for the 10-year forecast period and identification of the anticipated excess capacity that would exist at the end of the 10-year DC period.

Based on the consultation and transit planning process, the Transit Service Strategy Study will define recommendations with regards to the provision and level of service of transit in Halton Hills. The DCA will incorporate the transportation demand modelling being conducted throughout the Transit Service Strategy Study and use the ridership forecasts developed for the transit strategy as a key input.

TRANSPORTATION NETWORK

Halton Hills' existing transportation system is almost exclusively oriented to cars and other private vehicles. The Town is served by the grid of older County Roads maintained by the Town and by Halton Region, and is served by interchanges with highways 401 and 407. Public transit services are limited to the ActiVan special transportation system dedicated to providing curb-to-curb service to the elderly and disabled, and to GO rail service at Acton and Georgetown, oriented to serving day workers commuting to Toronto and other GO stations inboard of Halton Hills.

Halton Hills already experiences traffic congestion and delays on some roads and highway interchanges during peak travel periods. As the Town's population and employment grows, this congestion can be expected to increase. Planned and programmed projects on both Regional and Town-maintained roads will add travel lanes, reconfigure intersections and make other improvements that will increase capacity on the roadway network serving Halton Hills. However, these improvements will increase ongoing roadway maintenance costs while doing little more than slowing the growth in traffic congestion on the town's roads.

The Metrolinx Big Move plan to provide higher-frequency, all-day, bi-directional train service to Acton and Georgetown will greatly expand the number of people who use rail service to travel from Halton Hills to jobs and educational opportunities both north and south of the Town, and who travel to work in Halton Hills. However, without local transit service to carry Halton Hills residents to the station, local streets around the stations are likely to be clogged with traffic accessing station park-and-ride lots during peak periods. Opportunities for people to commute to Halton Hills by train will be even more limited without bus service to take them from the stations to their workplaces.

Halton Hills' population and employment growth is likely to generate increased traffic congestion with or without the implementation of a fixed-route transit network. However, fixed-route transit can reduce the growth and magnitude of that congestion, increase the number of trips that the transportation system can serve, and provide options to those who live and work in Halton Hills, allowing them to avoid driving in, and contributing to, congested traffic conditions.

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

The map in Figure 5 shows the concentration of average daily trips from point of origin from locations within Halton Hills as well as other information concerning travel within the Town. As the map shows, the primary concentration of trips in the Town originate from Georgetown, with very little concentration of trips from elsewhere in the Town. As the graphics show, the transportation system in Halton Hills as a whole and in Acton and Georgetown is highly auto oriented. More than 90% of trips made in the town are made by auto, and the percentage in Georgetown and Acton is also around 90%. In Halton Hills, more than 70% of households have more than two cars; the percentage is about the same in Georgetown, but significantly lower in Acton (72%). The majority of Halton Hills residents (72.5%) have driver's licenses, with the percentage slightly higher in Acton (75%) and lower in Georgetown slightly lower (70%).

Transit accounts for 4.5 percent of trips in Halton Hills, with the percentage slightly higher in Acton (5.5%) and Georgetown (5%). These percentages are high given the limited access that Halton Hills residents have to public transit options (GO rail service at Acton, Georgetown and stations in surrounding communities; GO bus service; the ActiVan special transportation service for the elderly and disabled, and the taxi scrip program). About 38% of trips in the Town are work trips, with the percentage of work trips higher in Georgetown (42%) and Acton (41%). The second highest category of trip purpose in Halton Hills and in Acton and Georgetown is categorized as "other." In Halton Hills 11% of trips are school trips, with the percentage higher in Georgetown (14%) and lower in Acton (9%).



Halton Hills, like much of Canada, is seeing a significant increase in the use of transit and active transportation options, though in Halton Hills this growth is starting from a very low base. In Canada, the proportion of commuters using transit increased from 10.1% in 1996 to 12.4% in 2016. While this remains a small minority of commuters, it represents a proportional increase of nearly 23%. In Halton Region, the proportion using transit is below the Canadian average but still significant at 11%, and represents a more than doubling in the proportion (and more than a tripling in the number of trips) since 2006, when the proportion using transit was 4%. The proportion using transit in Halton Hills is 3.6%, representing not only the lower density and more urban character of the area, but also the limited transit options in the Town.

ROADWAY TRAFFIC VOLUMES

Halton Region collects directional counts and speed data at cordon points on various regional roads throughout the region, including 31 locations in Halton Hills. The Region provides hourly average traffic volumes and travel speeds by direction at each of these locations. This data indicates the traffic conditions in which future transit service would operate in the town, as well as how traffic conditions may influence travelers' use of transit service, primarily for commuter travel during peak periods.

The map in Figure 6 shows bi-directional annual average daily traffic (AADT) at the cordon points in Halton Hills. Traffic on regional roads in Halton Hills is light in the north and east of the Town, with most cordon points indicating traffic volumes below 10,000 trips per day. Cordon counts along Regional Road 25 and Trafalgar Road south of the GO rail line are mostly in the range of 10,000 to 15,000 daily trips, with the cordon on Trafalgar south of 5 Side Road reaching the level of 15,000 to 20,000 daily trips. The count at the cordon points at Regional Road 25 at 5 Side Road, and on James Snow Parkway (Regional Road 4) north of the 401 interchange (both on the border with Milton) are in the range of 20,000 to 25,000 daily trips. The cordon points on James Snow south of the 401 interchange (in Milton, but heavily used by travelers to and from Halton Hills) and on Winston Churchill Boulevard (Regional Road 19) north of the 401 interchange (on the border with Brampton) have traffic volumes over 25,000 daily trips. Unfortunately, there is no cordon count data available near the Trafalgar-Steeles Avenue intersection in Hornby, which is the site of the Premium Outlets mall and surrounding development as well as the 401 interchange that is the primary access point to the highway for travelers to and from Halton Hills.

Figure 7 shows the volume and directionality of traffic at the cordon points during the morning peak period (7:00 to 9:00 AM). The relative split of each pie graph between green and red indicates the directional split at that location (for example, a larger green area indicates that volumes are higher in the northbound or eastbound direction, larger red indicates higher volumes in the southbound or westbound direction), while the shading indicates the absolute volume of traffic in each direction. As the graphs show, AM traffic on Regional Road 25, Trafalgar, Ninth Line and Winston Churchill is skewed in the southbound direction during the AM peak period, with splits ranging from 60/40 to 75/25 southbound, as Halton Hills residents travel south to jobs in Milton, Burlington and Oakville, and to access the Highway 401 interchanges. Southbound traffic volumes for the two-hour morning peak period are above 2,000 vehicles at all cordon count locations along Regional Road 25 south of Acton, on Trafalgar south of Maple Avenue in Georgetown, on Ninth Line between 10 Side Road and 5 Side Road, and at Winston Churchill north and south of Steeles Avenue. The count south of the Highway 401 interchange at James Snow Parkway indicates higher volumes moving north, indicating that the interchange is used more by residents of Milton than of Halton Hills. Traffic is lighter northbound during

the peak periods, with the James Snow locations north and south of the interchange being the only locations where northbound counts exceed 2,000 trips during the morning peak period. East-west travel on 10 Side Road tends to be skewed eastbound, as Halton Hills residents travel to workplaces in Brampton. Volumes are much lighter in the east-west direction, with few counts on the east-west roadways exceeding 1,000 trips during the peak period.

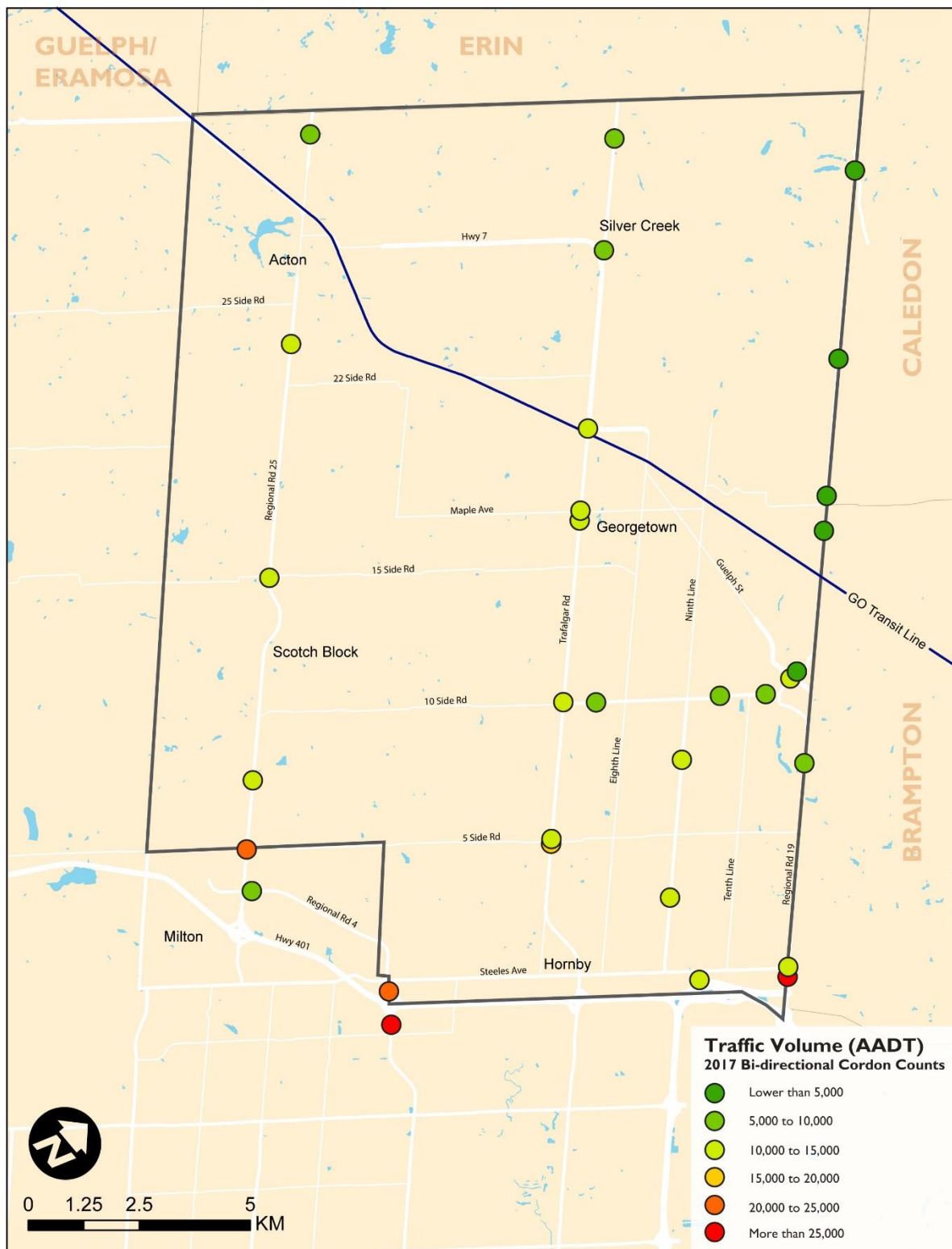


Figure 6: Daily Bi-Directional Traffic Volumes (AADT) at Cordon Points in Halton Hills

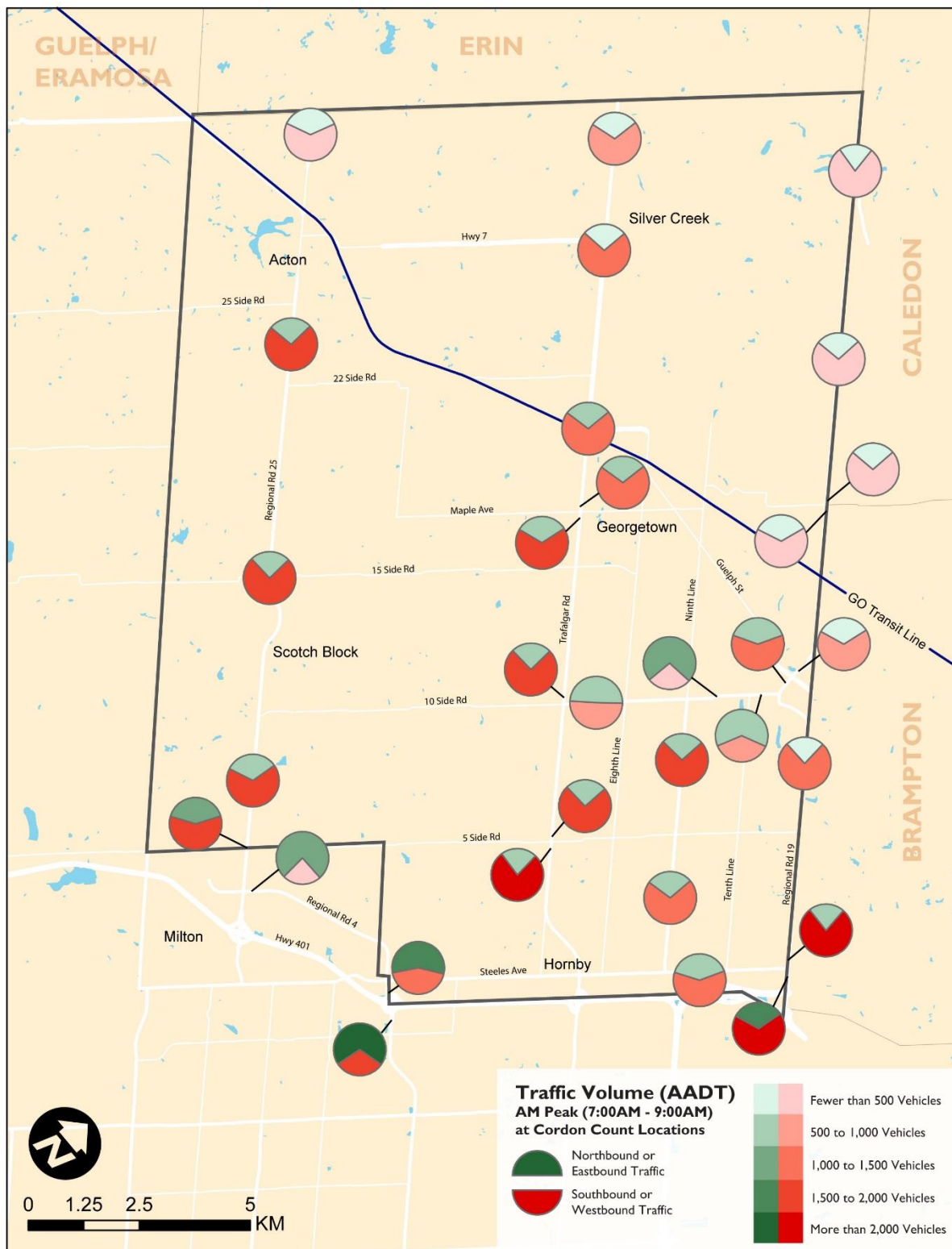


Figure 7: AM Peak Traffic Volume at Cordon Points in Halton Hills

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Figure 8, which shows traffic volumes for the afternoon peak (4:00 to 6:00 PM) essentially mirrors the morning volumes, with higher northbound volumes in the northbound and westbound directions. The directionality of travel during the afternoon is slightly less pronounced than in the morning peak periods, owing to the slightly higher volume of background traffic in the afternoon, and the volumes at a few locations, including the interchanges north and south of Highway 401 at James Snow, and the westbound movement on 10 Side Road between Ninth Line and Tenth Line, are notably higher during the afternoon peak period.

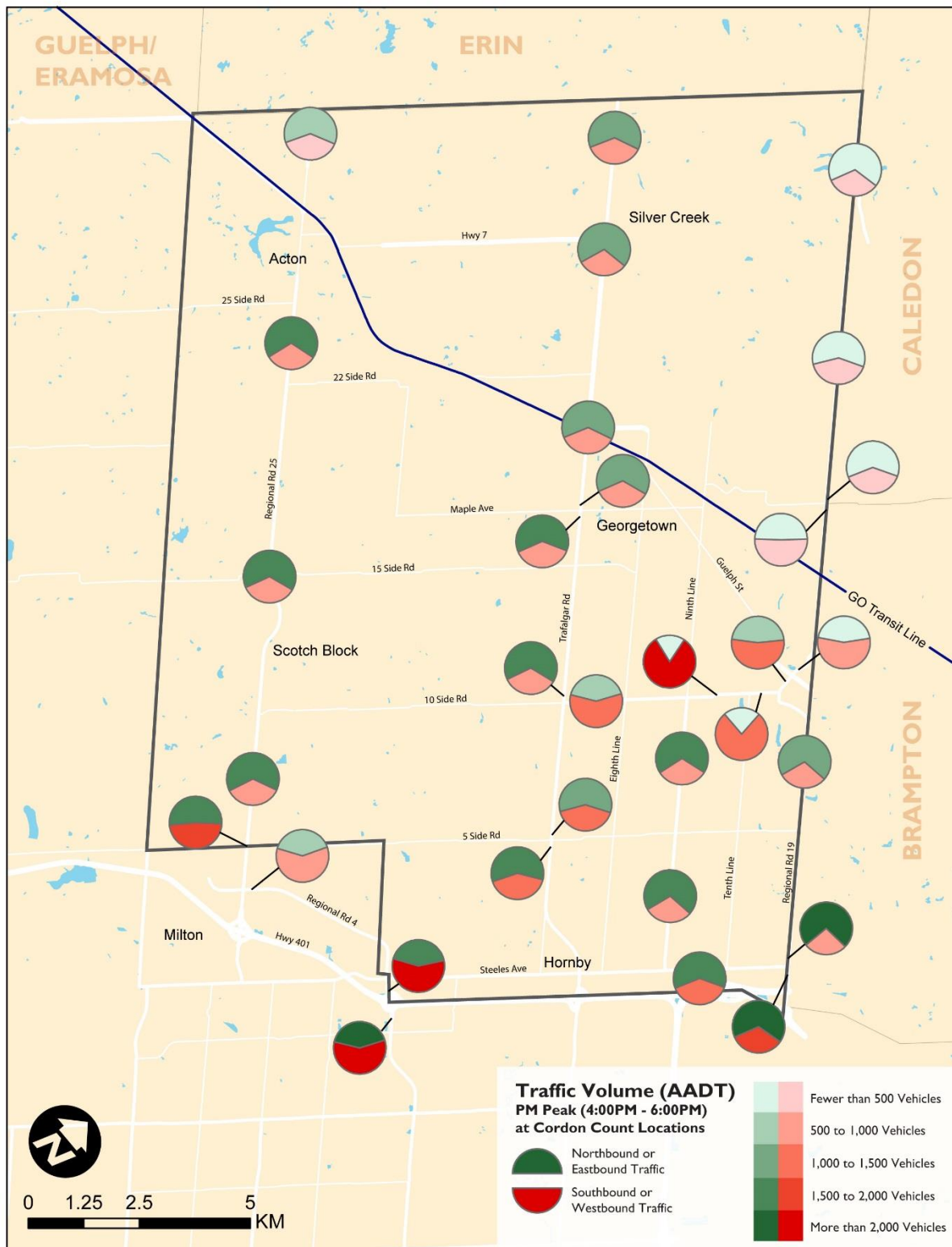


Figure 8: PM Peak Traffic Volume at Cordon Points in Halton Hills

TRAVEL SPEEDS

In addition to traffic volumes, comparison of actual travel speeds to posted speed limits is critical to identifying congested locations, and is potentially indicative of travel patterns that could benefit from transit service, particularly during peak periods. Under free-flowing traffic conditions, drivers will operate at a level slightly above the speed limit (significantly above the speed limit if the design speed of the roadway is significantly higher than the posted limit); under congested conditions, drivers will operate more slowly, operating at less than the posted speed limit under moderate congestion, and at speeds that are a small fraction of the limit under severe congestion.

Figure 9 and Figure 10 compare the morning peak period average speeds to the posted speed limits, for the southbound-westbound and northbound-eastbound movements, respectively. The pie graphs show the ratio of the average speed to the posted speed limit. The colour on the left of the pie shows the percentage by which the average speeds are higher or lower than the posted speed limit; the speed limit is indicated by the grey scale colour on the right of the pie. Generally, yellow and green indicate that the average speed is at or above the speed limit, indicating free-flow traffic conditions; orange or red indicate that the average speed is below the speed limit, with red indicating that the speed is 60 percent or less of the posted speed limit. Speeds below the posted speed limit usually indicate traffic congestion, usually resulting from traffic volumes exceeding roadway capacity.

The graphs for the morning peak period shown in Figure 9 and Figure 10 show many locations on the regional road network where average speeds are slightly or significantly below the speed limit. In the southbound direction, average speeds are between 90 and 100 percent of the speed limit at seven locations: on Regional Road 25 north of 25 Side Road in Acton and at 5 Side Road just north of Milton; along Trafalgar Road at the junction with Regional Road 7 and at 5 Side Road; at Ninth Line between 5 Side and Steeles; and at Winston Churchill between 10 Side and 5 Side and just north of the 401 interchange. Average speeds in this range also were recorded on 10 Side west of Norval and on Steeles Avenue between Ninth Line and Tenth Line. More significant delays, with average speed between 60 and 90 percent of the speed limit, are found on Trafalgar at three locations: just south of 5 Side Road; north of Maple Avenue in Georgetown; and just south of Ballinafad and the border with Guelph. Speed in the 60-90 percent range is also recorded in the southbound direction just north of 10 Side Road in Norval.

Lower-than-posted average speeds, some of them significant or severe, also are recorded in the northbound and eastbound directions during the morning peak period, despite these movements mostly being against the peak direction traffic flow. Average speeds in the range of 90-100 percent of the posted limit are recorded at eight locations. These Regional Road 25 at 15 Side and North of 5 Side; Janes Snow south of the 401 interchange (in Milton: Trafalgar north of Maple Avenue, north of 10 Side and north and south of 5 Side; and Ninth Line between 10 Side and 5 Side. Eastbound movements with speeds in the 90-100 percent range were recorded at James Snow east of Regional Road 25 and on 10 Side Road west of Norval. Speeds between 60 and 90 percent of the posted speed were recorded on Trafalgar at Ballinafad and at the Regional Road 7 Junction. The counter at 10 Side Road east of Ninth Line also indicated speeds in the 60-90 percent range. The counter at Norval (Winston Churchill at 10 Side) recorded speeds below 60 percent of the posted limit.

At several locations, northbound speeds are lower than southbound. Northbound speeds are below the posted speed limit at the following locations where southbound speeds were at or above the speed limit: James Snow south of the 401 interchange (this is unsurprising since the prevailing traffic movement at this location is northbound), James Snow south of 5 Side Road (in Milton); Regional Road 25 at 15 Side Road; Trafalgar at 10 Side Road; Ninth Line between 10 Side and 5 Side; and Winston Churchill between 10 Side and 5 Side and south of Steeles Avenue.

Speed reduction patterns in the afternoon diverge significantly from mirroring the morning peak period patterns, as a comparison of Figure 9 and Figure 10 with Figure 11 and Figure 12 illustrates. Figure 11 and Figure 12 compare average speed to posted speed for the afternoon peak period. In the northbound peak direction, speeds between 90 and 100 percent of the posted speed were recorded at seven locations. Three of these are along Trafalgar, at the stations both north and south of Maple Avenue, and at 5 Side Road. Two are along Regional Road 25, at 15 Side and 5 Side roads. The others are at Ninth Line between 10 Side and 5 Side, and at Winston Churchill north of the 401 interchange. In addition, speed in the 90-100 percent range was recorded at three eastbound locations, at James Snow Parkway east of Regional Road 25 (in Milton), 10 Side between Ninth Line and Winston Churchill; and on Steeles Avenue between Ninth Line and Winston Churchill. Average speeds in the range of 60 to 90 percent of the posted speed for northbound movements were recorded at three locations: Trafalgar south of Ballinafad and at the junction with Regional Road 7, and on Ninth Line north of Steeles Avenue. The eastbound movement on 10 Side Road between Ninth Line and Winston Churchill also had an average speed in the range of 60-90 percent of posted speed.

Southbound, average speeds between 90 and 100 percent of the posted speed were recorded at seven locations. As in the northbound direction, speeds in this range were recorded at Regional Road 25 at 5 Side, Trafalgar north of 5 Side, and Winston Churchill north of the 401 interchange. The other locations where southbound speed was in this range include Regional Road 25 north of 22 Side; James Snow just north of the 401 interchange; Trafalgar at the Regional Road 7 junction; and Ninth Line between Steeles Avenue and 5 Side Road. Average speeds of 90-100 percent of posted speed also were recorded on Steeles Avenue between Ninth Line and Winston Churchill. Southbound average speeds in the 60-90 percent range were recorded at two locations, on Trafalgar south of Ballinafad, and on Winston Churchill in Norval. Westbound on 10 Side Road just west of Norval also recorded average speed between 60 and 90 percent of posted speed.

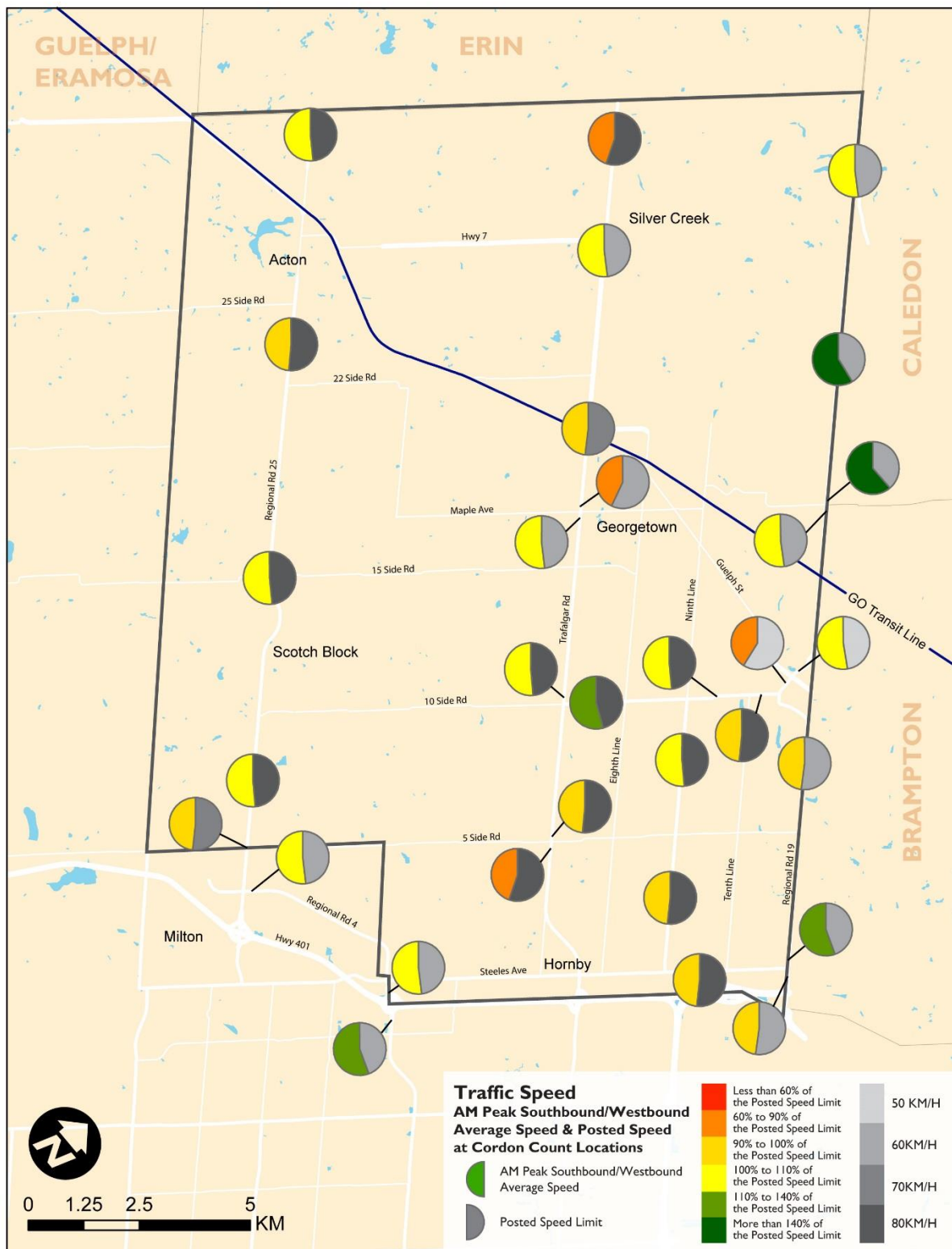


Figure 9: Comparison of Southbound/Westbound Average Speed and Posted Speed for AM Peak Period

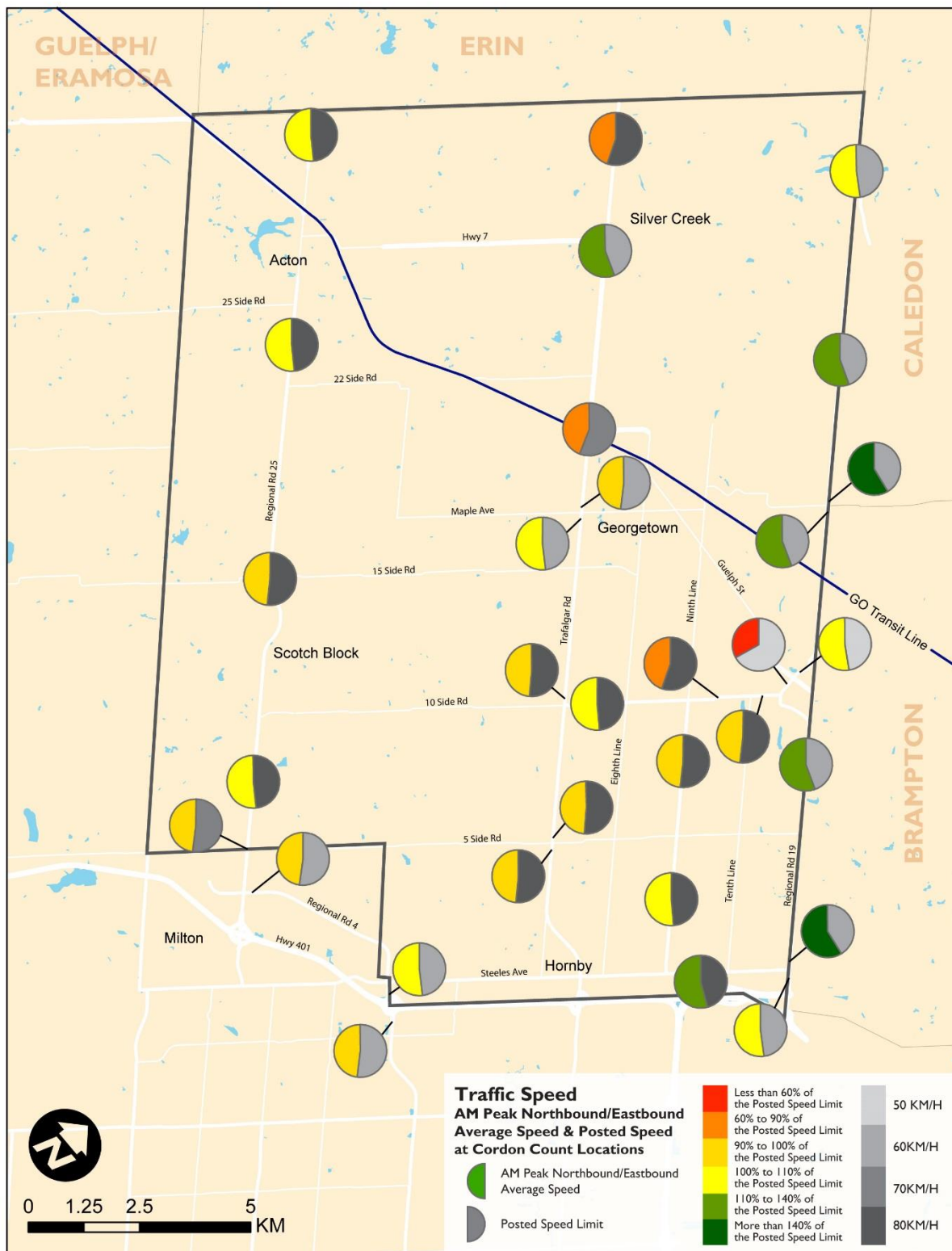


Figure 10: Comparison of Northbound/Eastbound Average Speed and Posted Speed for AM Peak Period

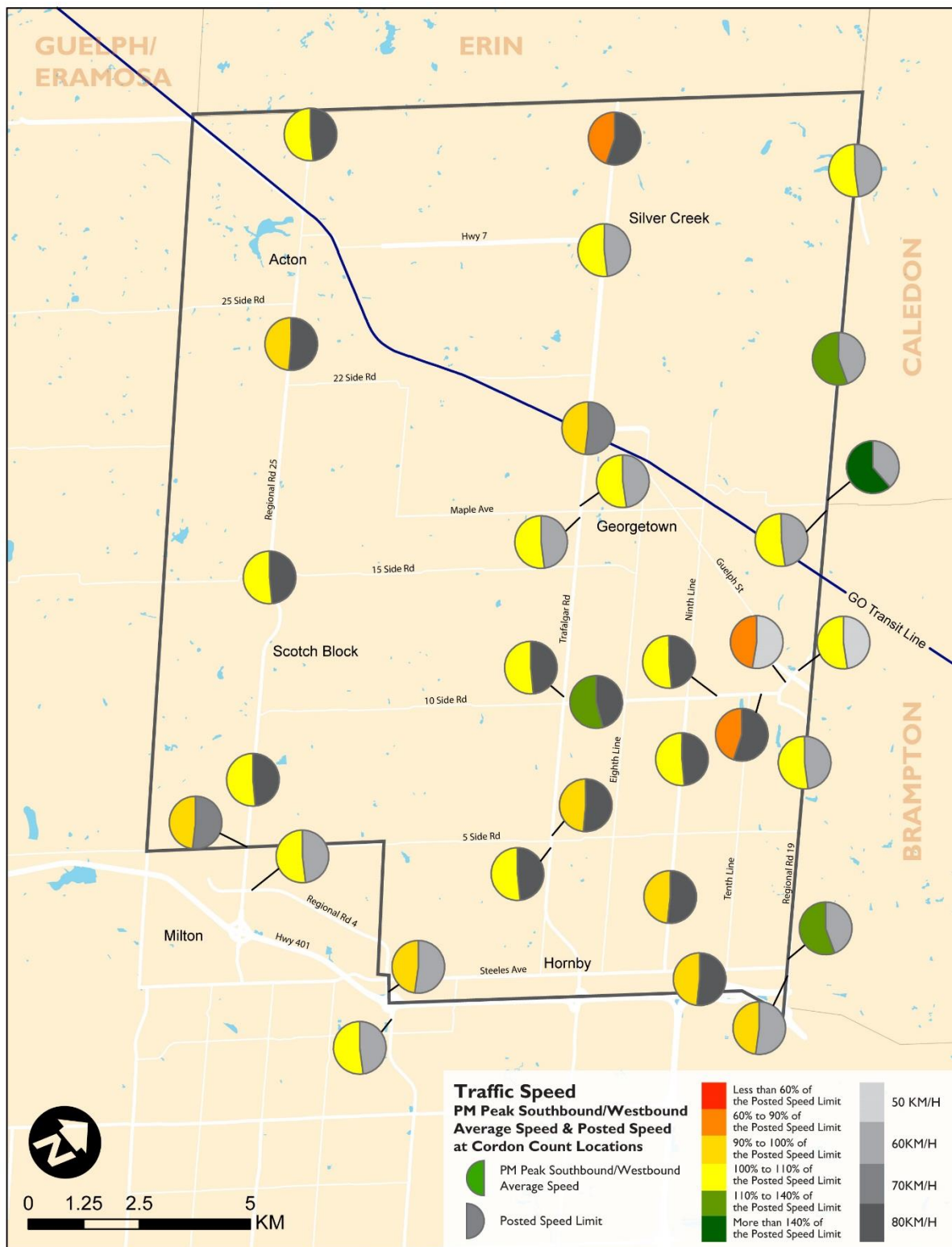


Figure 11: Comparison of Southbound/Westbound Average Speed and Posted Speed for PM Peak Period

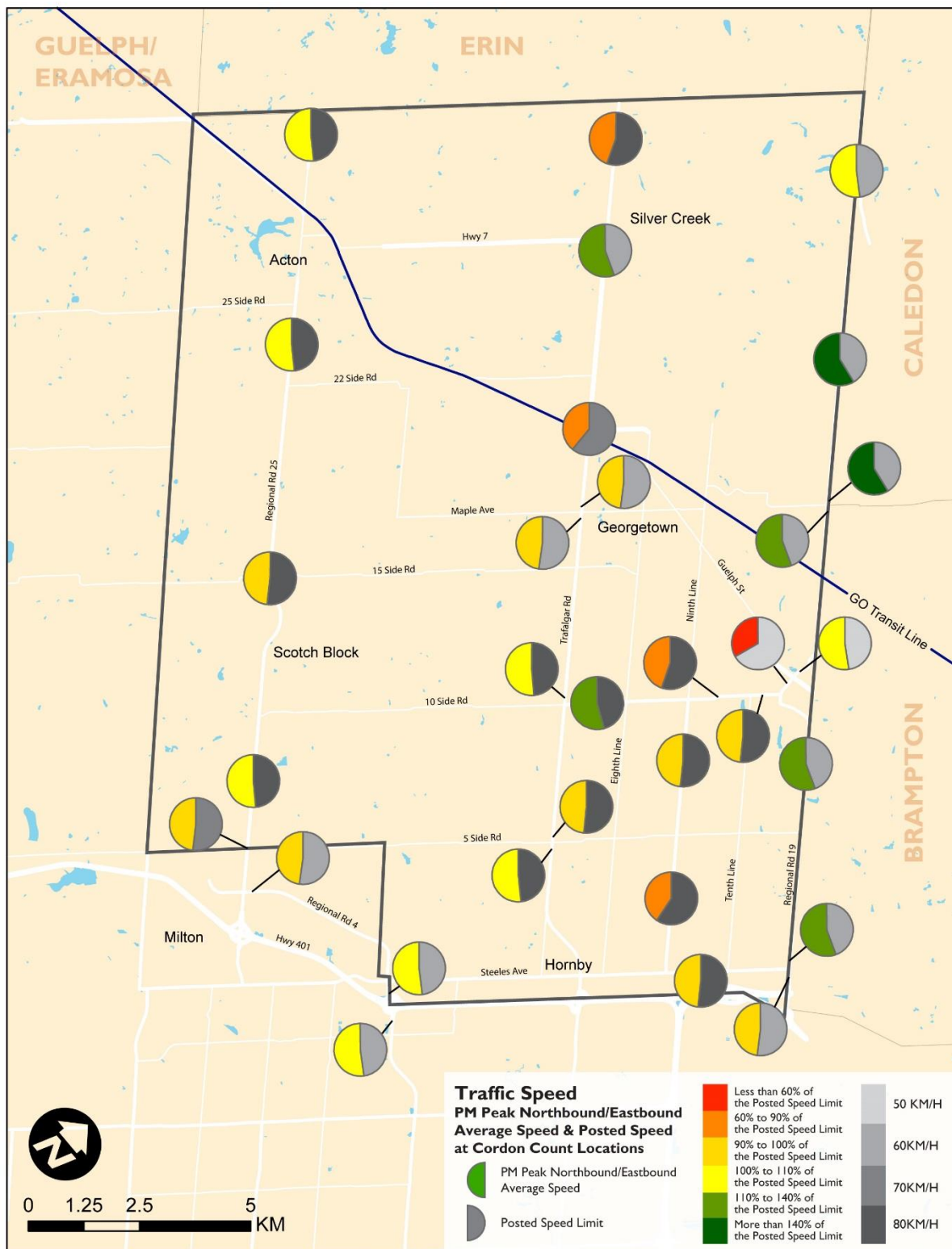


Figure 12: Comparison of Northbound/Eastbound Average Speed and Posted Speed for PM Peak Period

SYSTEM REVIEW SUMMARY

Various local, regional, and GTHA-wide planning documents suggest an increasing need for transit throughout the GTHA and in Halton Region. Some of these documents explicitly suggest or imply the need for fixed-route transit service (local and or inter-municipal) in Halton Hills, or assume the future existence of such service. The Halton Hills Mobility Management Strategy specifically recommends transit connections to Halton Hills that assume a mechanism for supporting transit service to and within the Town. Given the relatively large volume of future development anticipated in Halton Hills, development charges offer Halton Hills one option for funding both capital (vehicles, facilities) and operating (funding of service) funding for expanded transit services.

Metrolinx provides GO rail service from park-and-ride stations in Acton and Georgetown, and GO bus service connecting to those stations and to Norval and to the Mount Pleasant GO Station and other bus connections in Brampton. Existing GO rail service is now highly directional and oriented to day commuters in Toronto and at other stations south and east of Halton Hills, with inbound trips during the morning and outbound in the evening. The existing park-and-ride lots are nearing capacity, and local bus service could supplement the capacity of these GO stations today.

The introduction of more frequent, two-way, all-day GO rail service will improve options for Halton Hills residents to commute to Toronto and points south and east of the Town; create options for Halton Hills residents to commute to Guelph and Kitchener; and create opportunities for travelers from both directions to commute to job locations in Halton Hills. This more robust and more frequent service will generate increased demand for GO rail service, both for commuters from Halton Hills and to connect travelers from outside the Town to their workplaces in Halton Hills. Additional demand will quickly outstrip supply for park-and-ride spaces at the existing GO stations, increasing the need for local bus service to provide additional connectivity to the stations, and local bus service will be required to provide connections for travelers to Halton Hills at the workplace end of their trips.

Halton Hills' existing ActiVan service, which provides curb-to-curb special transportation service, serves significant demand within the town. Investigation of specific travel patterns of existing ActiVan users will likely form the basis of proposed fixed-route services.

Halton Hills has a highly auto-oriented transportation system, and this is likely to remain the case through 2031. However, traffic volumes during peak periods are high on many regional roads in Halton Hills, particularly those connecting to Highway 401 and to nearby employment locations in Milton and Brampton. Peak period volumes and speeds suggest that recurring traffic congestion occurs on the roads today. Population and employment growth will only aggravate this traffic congestion. Local and inter-municipal transit services could shift a small portion of this demand from the roadways, particularly if priority treatments can be put in place to move buses around congested traffic. Transit also provides travelers to and from the Town with an alternative to driving in congested conditions.

MARKET ANALYSIS

The Town of Halton Hills is one of four lower-tier municipalities that comprise the Regional Municipality of Halton. Formed in 1974 with the creation of Halton Region, Halton Hills includes: the former towns of Acton and Georgetown; active agricultural land around several other small rural villages and hamlets; a growing number of suburban residential, commercial, retail and industrial developments; and a considerable portion of parkland and public open space, including the Greenbelt.

Several factors are poised to bring change to Halton Hills over the next 25 years, including:

- Significant population and employment growth;
- Changes in land use and development patterns to favor denser, mixed-use, and pedestrian-oriented development;
- Demographic changes including growth in the number of older and disabled people, teens and young adults, and immigrants;
- Additional GO rail service and investments in transit infrastructure by Halton Region; and
- Environmental regulations and goals that require efforts to reduce use of single-occupancy vehicles.

These changes will impact transportation markets significantly. The volume of auto trips is likely to continue to increase, and peak period traffic congestion – already a problem for some Halton Hills residents traveling to work outside the Town – will worsen. However, the proportion of trips made by auto will fall significantly. New development patterns will mean that more trips will be made on foot or by bicycle.

These changes all point to the need for Halton Hills to develop a fixed-route transit network. Halton Hills currently funds and oversees the operation of ActiVan, a special transportation system that provides curb-to-curb service for the community's elderly and disabled. As the community's population grows and ages, demand for paratransit service will outstrip the service's capacity, and volumes will grow to such an extent that offering fixed-route service would be more cost-effective than expanding capacity of the service. As the community continues to grow and change, additional transit markets – commuters traveling to GO rail stations, students and lower-income workers traveling within Halton Hills and Halton Region - will emerge and grow in numbers.

The following sections provide detailed background information related to the need for fixed-route transit service, the transportation system, land use planning and financial context in which that service would be developed, and data on demand patterns and volumes. This data has been used in subsequent project phases to develop a program of recommended activities for Halton Hills to develop its transit capacity in the short, medium and long terms.

POPULATION & DEMOGRAPHICS

The recent and future development of Halton Hills parallels that of the Greater Toronto Hamilton Area (GTHA). The GTHA has grown considerably in population over the last twenty-five years, and is projected to continue that growth over the next twenty-five. Halton Hills has received a share of this recent growth, and the Town's population is expected to grow significantly through 2031. Like the larger region, the demographics of Halton Hills also are likely to change, with growth in the proportion of older and younger people, immigrants and people of varying backgrounds. The proportion of people with limited mobility is also likely to grow together with the proportion of older adults. This population growth and demographic change will lead to significant changes in the Town's transportation market. These changes will include increasing demand for public transportation, including both curb-to-curb, demand-response services for the elderly and disabled and, increasingly, fixed-route services to supplement and aggregate services for the disabled as well as for other segments of the population.

POPULATION GROWTH

Figure 13, below, shows the population of Halton Hills for 2006 and 2011, and then projections from Halton Region's Best Planning Estimates (2011) for each fifth year from 2016 to 2031.

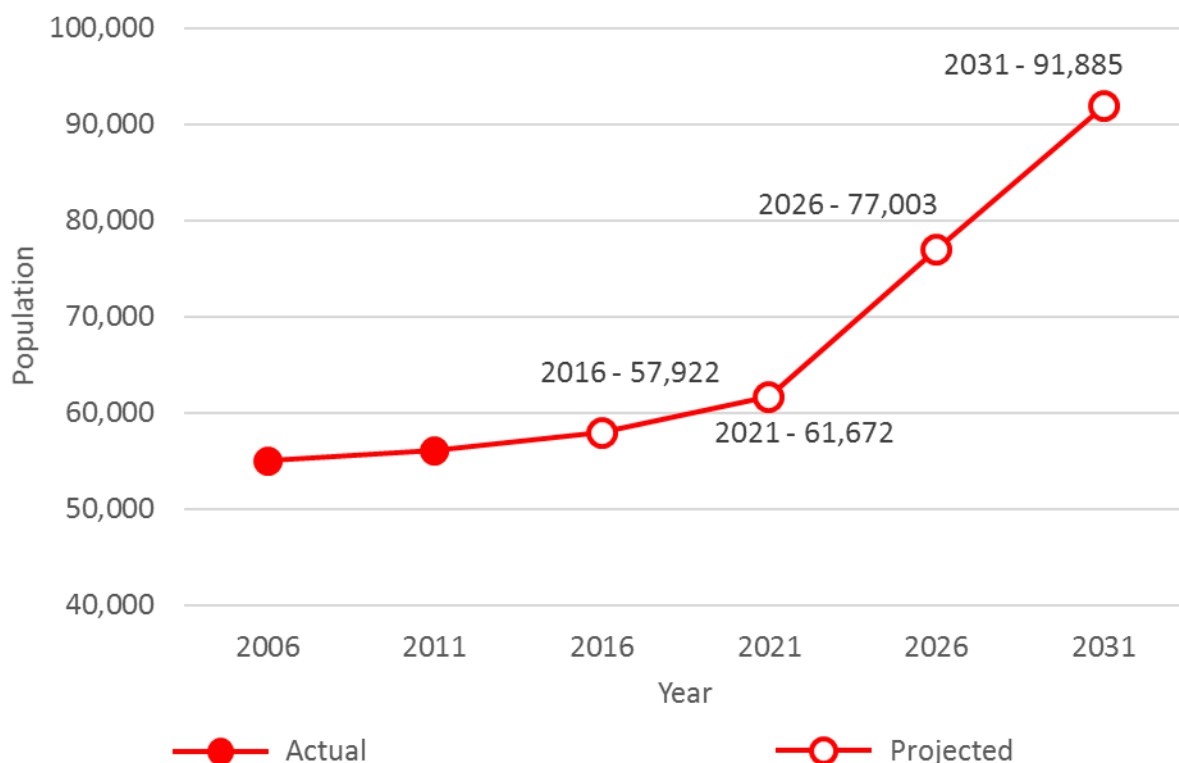


Figure 13: Halton Hills Population 2006-2011 and Projected to 2031, Halton Region Best Planning Estimates, June 2011

As the graph shows, Halton Hills' population is currently estimated to be approximately 58,000. It is expected to grow modestly in the next several years, reaching 61,700 by 2021, an increase of 3,750, or 6.5 percent. The rate of growth is expected to increase substantially after 2021, with the population growing to 77,000 (an increase of around 15,300, or nearly 25 percent) by 2026, and to nearly 91,900 by 2031, a further increase of 15,000, or 19 percent more than in 2026. The estimated 2016 to 2031 increase is estimated to be around 34,000, a 59 percent increase over the current population. On average, the Town is projected to add nearly five percent, or 3,000 people, to its population every year from 2021 to 2031.

Figure 14 is a pair of maps showing population density for Halton Hills (and nearby areas of Milton to the west and south), based on projections for 2016 and 2031. As the maps show, population density is projected to increase over that period within some developed areas of Acton and Georgetown, due to infill and repurposed development. In addition, several areas adjacent to developed zones will become developed, some to moderately high levels of density. The largest of these areas is the undeveloped area south of the Club at North Halton golf course in Georgetown, along the eastern side of Trafalgar Road from the southern side of the golf course to 10 Side Road. A second area of significant new development will be on Guelph's northeastern side, south of Guelph Road to the intersection of 10 Line and 10 Side Road. In Acton, the major new development area is along the northeastern side of Main Street (Regional Road 25), south and east of the downtown area and southeast to 22 Side Road.

In several of these areas, both existing and new, future population densities are projected to reach levels that are considered sufficient to support moderate levels of fixed-route transit service. Two areas within the core of Georgetown will reach density levels above 100 persons per hectare. Were this density level sustained over a larger area, this density level would be sufficient to efficiently support frequent bus service operating at an interval of 15 minutes or less. Much of Georgetown, including most of the area southeast of downtown, will have a density of 50 persons per hectare, considered sufficient to support fixed-route bus service operating every 30-60 minutes.

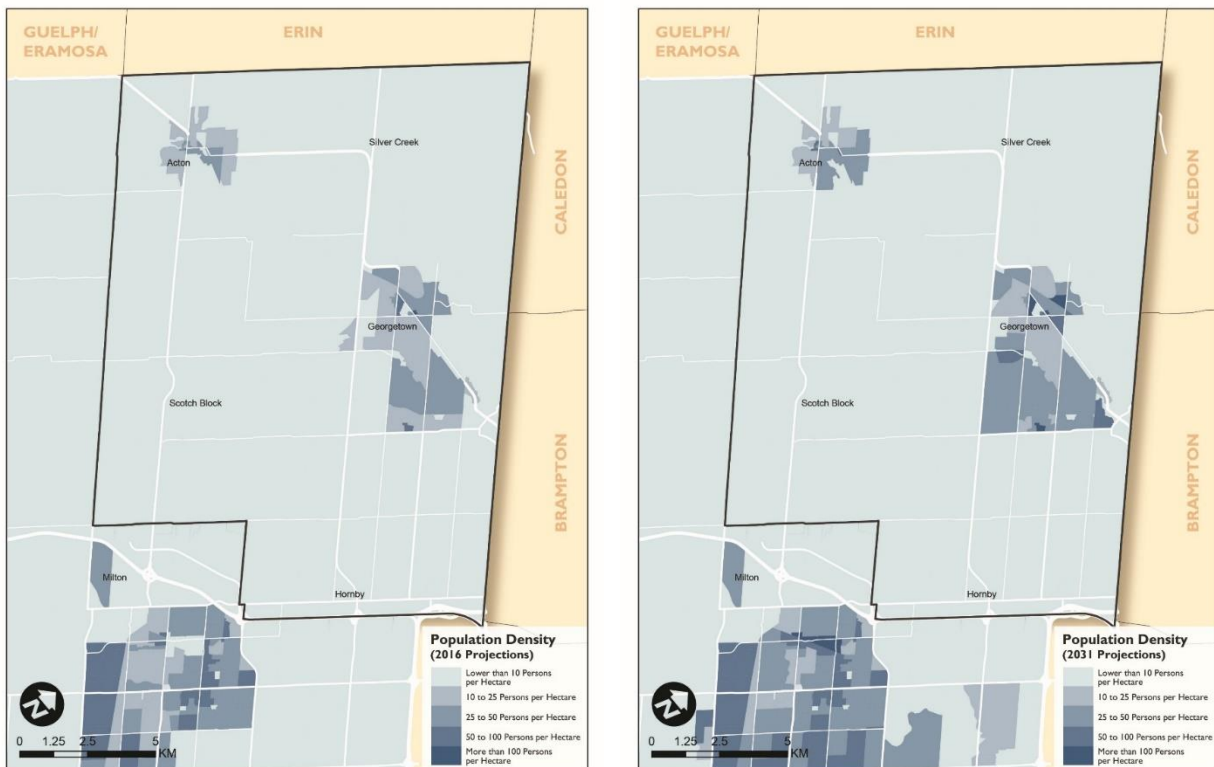


Figure 14: Projected Population Density for 2016 and 2031, Halton Region Best Planning Estimates, June 2011

POPULATION DENSITY

Figure 15 shows the current population density by transportation analysis zone of Halton Hills, based on data from the 2016 census. As the map shows, population density is very low in most of the town. The average population density in Halton Hills is 220 persons per square kilometre, or 2.2 persons per hectare, but in most of the town's physical space, population density is below one person per hectare, well below the density at which fixed-route transit service can be operated efficiently. The only areas within Halton Hills where population density exceeds ten persons per hectare are within Acton and Georgetown. Much of Acton and Georgetown has a population density above 25 persons per hectare, density levels high enough to support fixed-route transit. Several small areas have densities above 100 persons per hectare, density levels high enough to support higher frequency transit were the densities sustained over a longer distance.

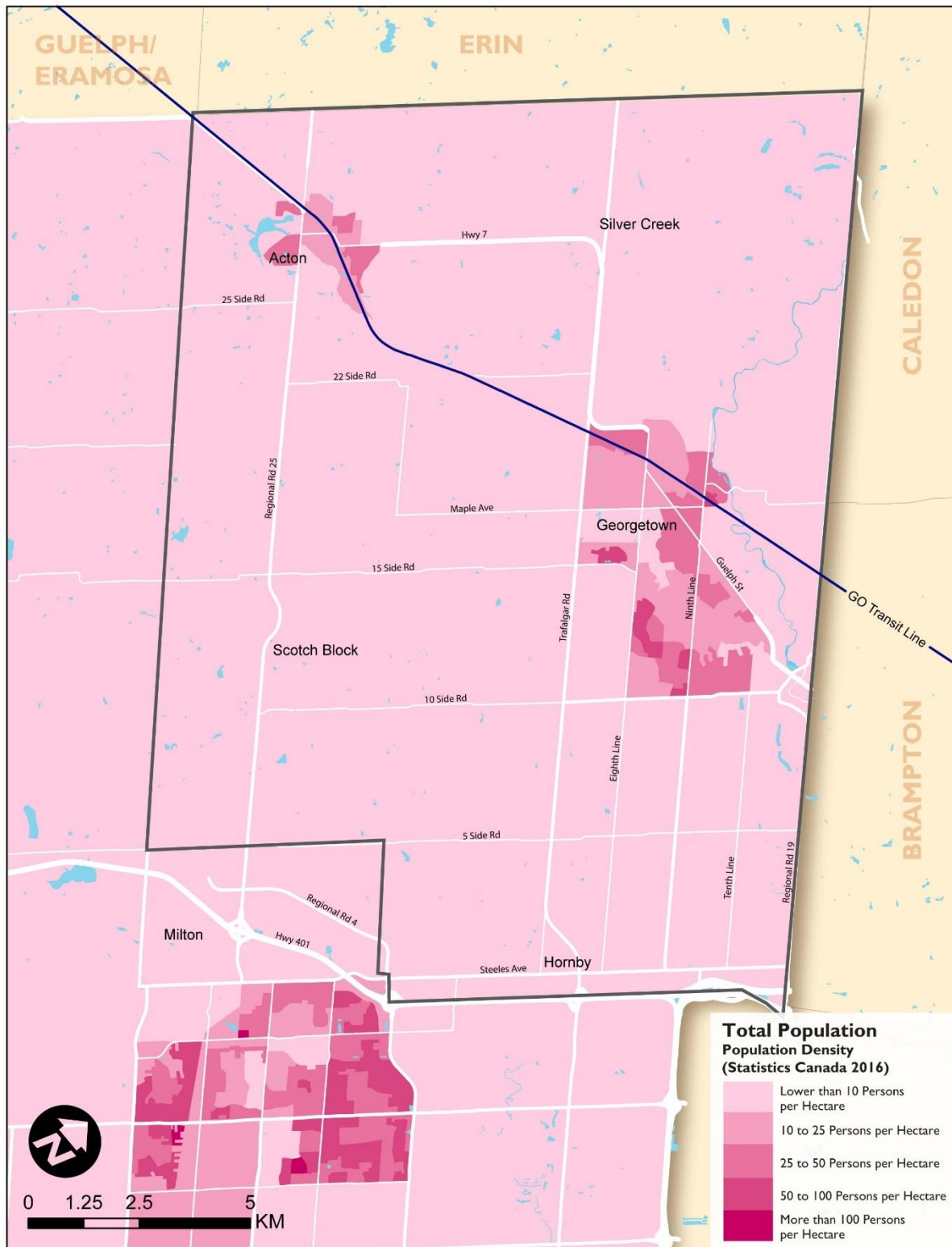


Figure 15: Halton Hills Population Density, Statistics Canada 2016 Census

DEMOGRAPHICS

In addition to population density, several demographic characteristics indicate higher propensity to use transit, including characteristics potentially indicating income level, concentrations of older and younger people, and lack of availability of a car, among other factors.

ELDERLY POPULATION

Figure 16 shows the percentage of elderly (age 65 and over) in each zone's population. The elderly population are most concentrated in several small zones in Georgetown, where the percentage of the population over age 65 exceeds 25 percent. Several zones in Acton also have higher than average levels of elderly population, as do several lower density zones south of Acton and in the Town's southern tier adjacent to Milton and Oakville. In most of the rural areas, the percentage of elderly was below 15 percent of the population. The suburbanization trend that prevailed from the 1950s to the early 2000s means that older people are more likely than younger people to live in lower density suburban neighbourhoods or in rural areas that are difficult to serve efficiently with public transit.

As people age, their need for public transit often increases due to reduced incomes and infirmities that prevent them from driving. As the baby boom generation passes through its retirement years over the next several decades, this tendency of elderly people to "age in place" is likely to increase demand for both fixed-route and special transportation services, and to increase the cost per trip for these services due to the need to reach elderly people in lower density areas. The concentration of medical facilities in Georgetown (and in locations outside Halton Hills, like in Milton and Oakville) also will generate significant transit trips generated by older people from areas throughout the Town.

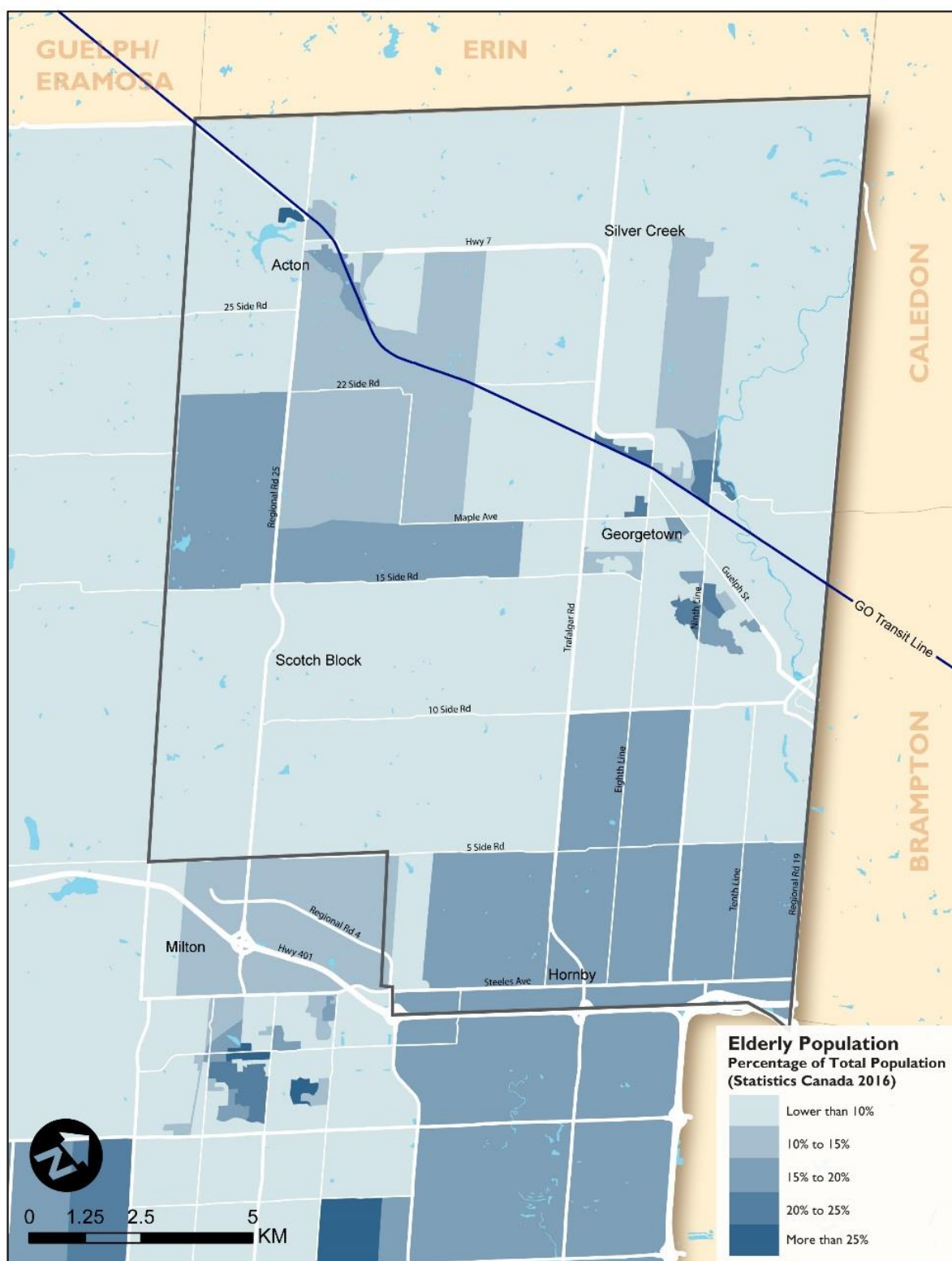


Figure 16: Halton Hills Elderly Population Percentage, Statistics Canada 2016 Census

YOUTH POPULATION

Figure 17 shows the percentage of younger people in the population of each zone, between 10 to 19 years of age. Zones with higher percentages of younger residents also were mainly located in southern peripheral of Georgetown (in many cases, different zones than those that had higher percentages of elderly residents) and northeast of Acton, with percentages exceeding 25 percent in some zones. In most of the rural areas of the town, the percentage of the population in the youth category was below 15 percent, with a few exceptions in the northeast quadrant of the Town. Halton Hills' population includes a significant number of younger people, with nearly 20,000 residents under the age of 20. This reflects the large number of families with young children, many though not most of them members of visible minority groups, that have been attracted to Halton Hills' newer neighborhoods, larger houses and semi-rural surroundings. Halton Hills' population includes more than 4,600 between the ages of 15 and 19, an age group that is crucial for the transit market. People in this group are completing high school and either entering college or other training—often while working full-or part-time—or beginning their full-time working lives. They are often transit-dependent or semi-dependent, in that they lack exclusive use of a vehicle. They also are forming personal habits and preferences, many of which they will carry with them throughout their lives. This age group is not only an important market for transit in the short-term, but also offers transit providers the opportunity to capture life-long transit users by providing members of this group with high quality service.

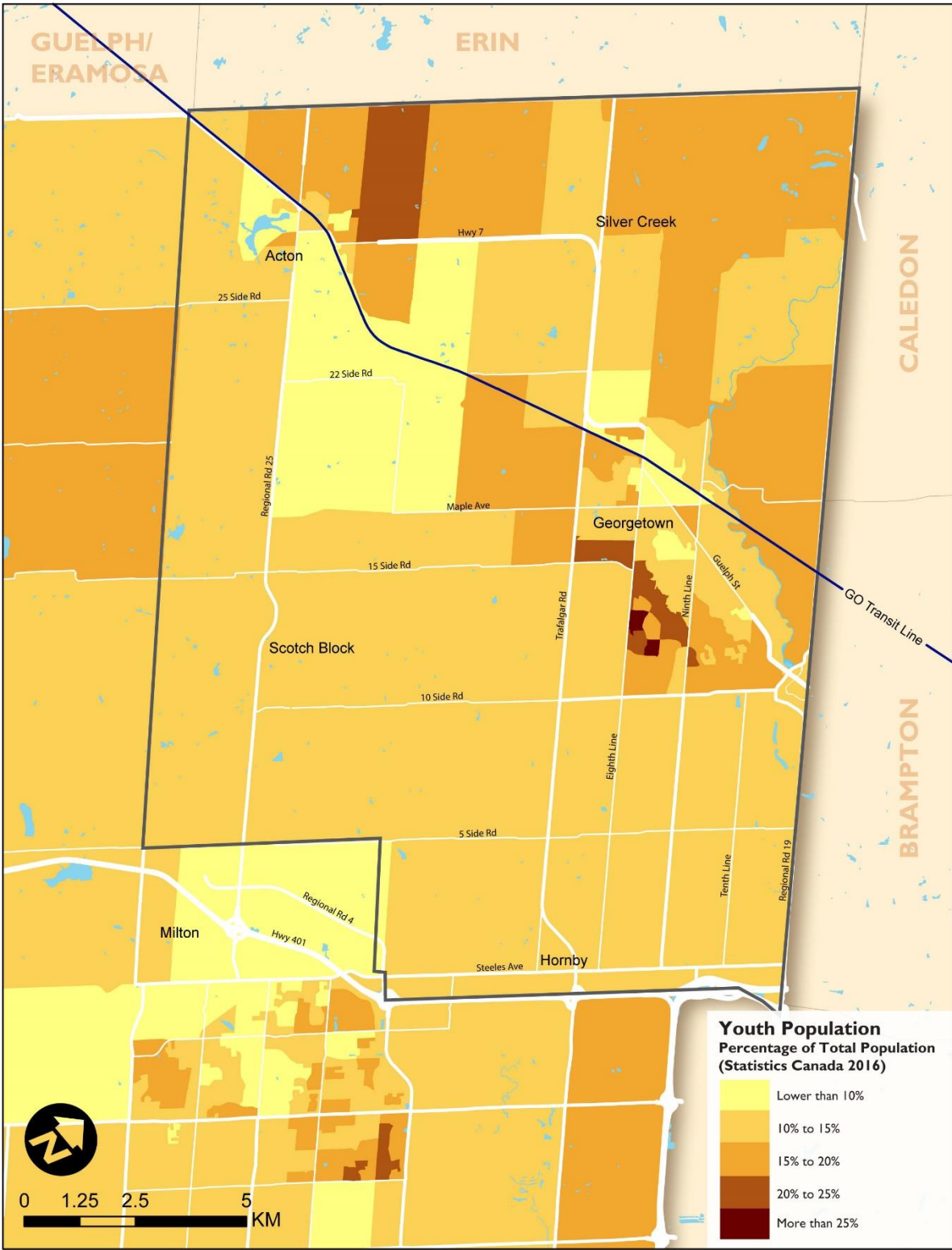


Figure 17: Halton Hills Youth Population Percentage, Statistics Canada 2016 Census

INCOME

Income levels in Halton Hills are significantly above the Canadian average. Median individual income for a working age person in Halton Hills in 2016, was \$43,568, 18 percent more than the Canadian median of \$36,900. Median household incomes in Halton Hills were 43% above the Canadian median, with the Halton Hills median of \$106,349 in 2016, compared to the Canadian median of \$74,287. This indicates a greater prevalence of households with two-or-more earners than the Canadian average. There were 2,315 low income individuals in Halton Hills in 2016, representing less than 5% of the Town's population. Figure 18 shows the percentage of the population in each zone with low incomes, defined as persons living in households in which the income level is half or less of the Canadian median of adjusted household after-tax income, multiplied by the square root of household size. In most of the Town, including most zones in Georgetown and Acton, the percentage of the population with lower incomes is below 10 percent. The population with low incomes reaches the 20-to-25 percent range in one small zone in the core area of Acton and two small zones in the core area of Georgetown. These zones also had higher percentages of elderly residents, suggesting that some of the lower income residents are retirees. Some lower-density zones in the Town's southern tier – again, zones with somewhat higher percentages of older residents – have percentages of low-income residents in the 10-to-15 percent range.

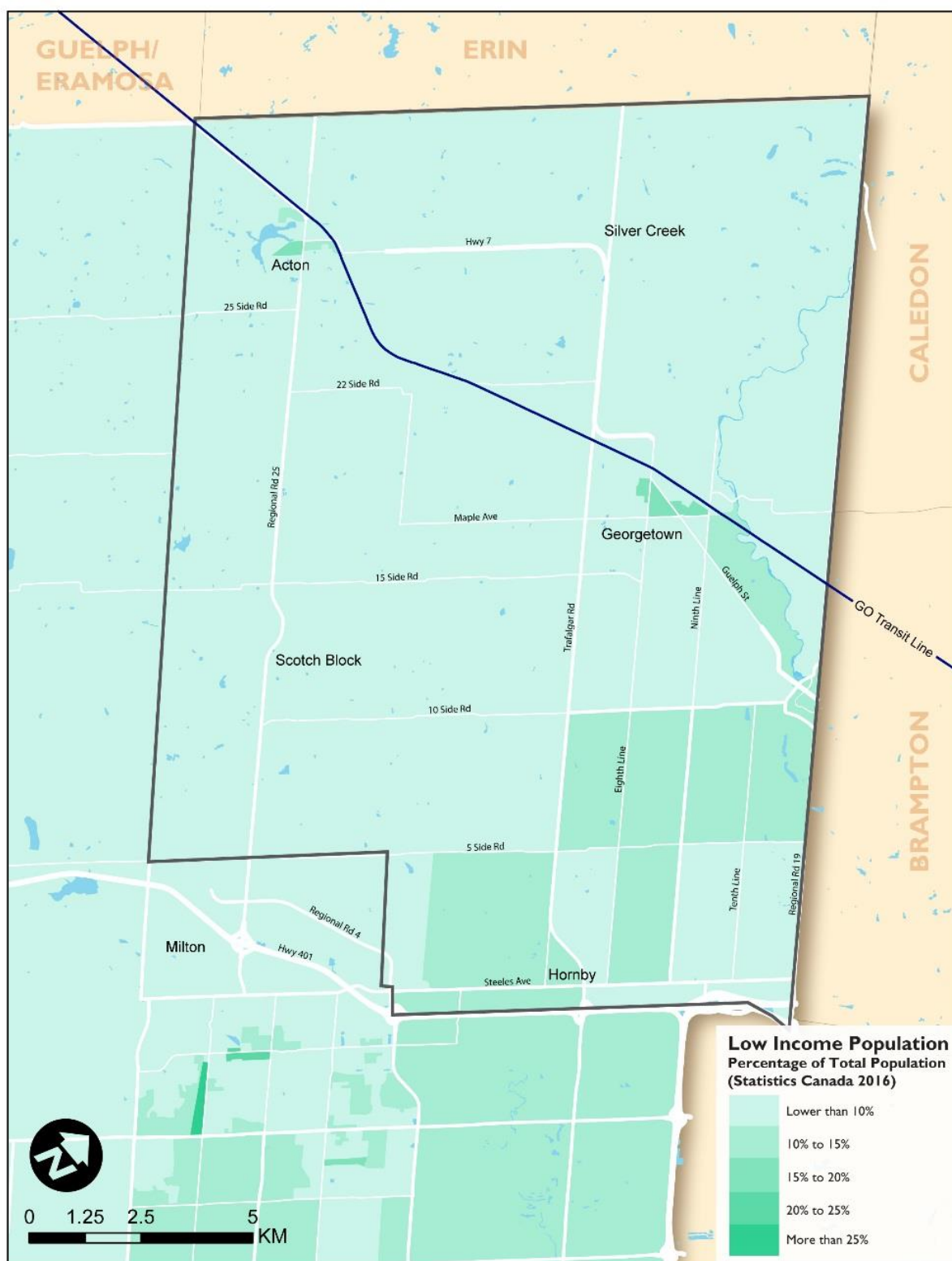


Figure 18: Halton Hills Low Income Population Percentage, Statistics Canada 2016 Census

VISIBLE MINORITY

Figure 19 shows the percentage of the population in each zone identified as members of visible minority groups. Members of these groups, often recent immigrants to Canada, tend to use public transit at a higher rate than the general population, sometimes due to economic challenges and often due to preferences established in their countries of origin. In most of Halton Hills, the percentage of the population identified as members of a visible minority group is below ten percent. Fewer than 4,500 Halton Hills residents, less than 10% of the population, are members of visible minority groups. Asians represent the largest percentage of visible minorities. Members of these groups are somewhat more likely than the broader population to have children in the household and to live in larger, multi-family households, and may be attracted by the larger houses available newer, suburban areas of Halton Hills. The areas with the highest percentage of visible minorities were in the southern tier of the Town adjacent to Oakville and Brampton, where in several zones the percentage of visible minorities exceeds 40 percent. The percentage is between 30 and 40 percent in several zones in the southern tier and around Scotch Block, near Milton. Several areas of Georgetown and Acton had percentages of visible minorities between 10 and 20 percent. Several of these areas of higher percentages of minorities corresponded with areas of lower incomes and higher percentages of younger residents.

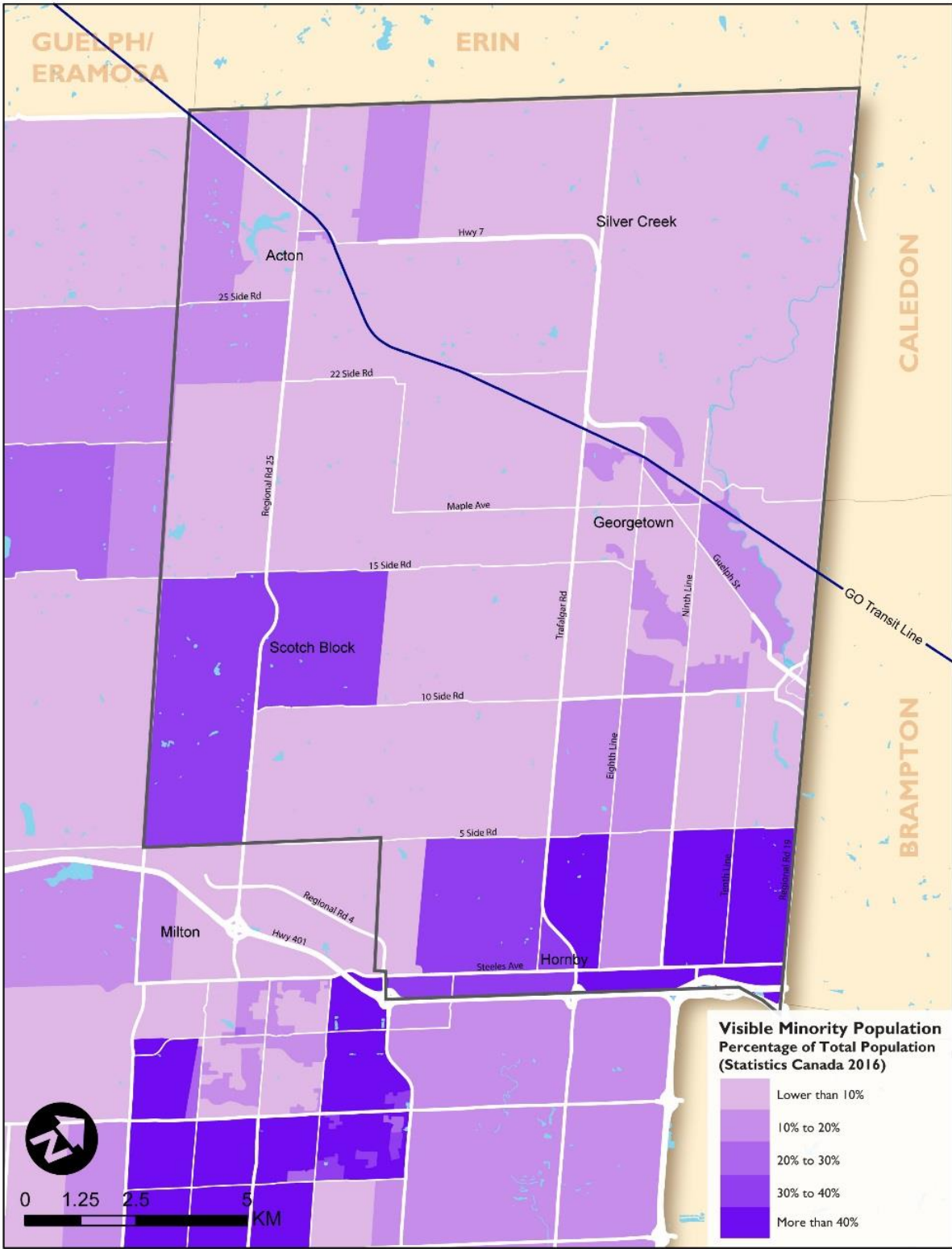


Figure 19: Visible Minority Population Percentage, Statistics Canada 2016 Census

VEHICLE AVAILABILITY

Figure 20 shows the percentage of households in each zone that lack an automobile. Lack of an available auto is an obvious indication of potential dependence on transit. Automobile ownership in Halton Hills is very high. In most of the Town, less than four percent of households lack an automobile. Several zones in the Town's southern tier have between four and seven percent zero-car households, while in a few zones in Acton and a few zones west of Trafalgar Road in Georgetown more than 10 percent of households lack a car. Several zones along Trafalgar Road north of Georgetown had 7 to 10 percent zero car households.

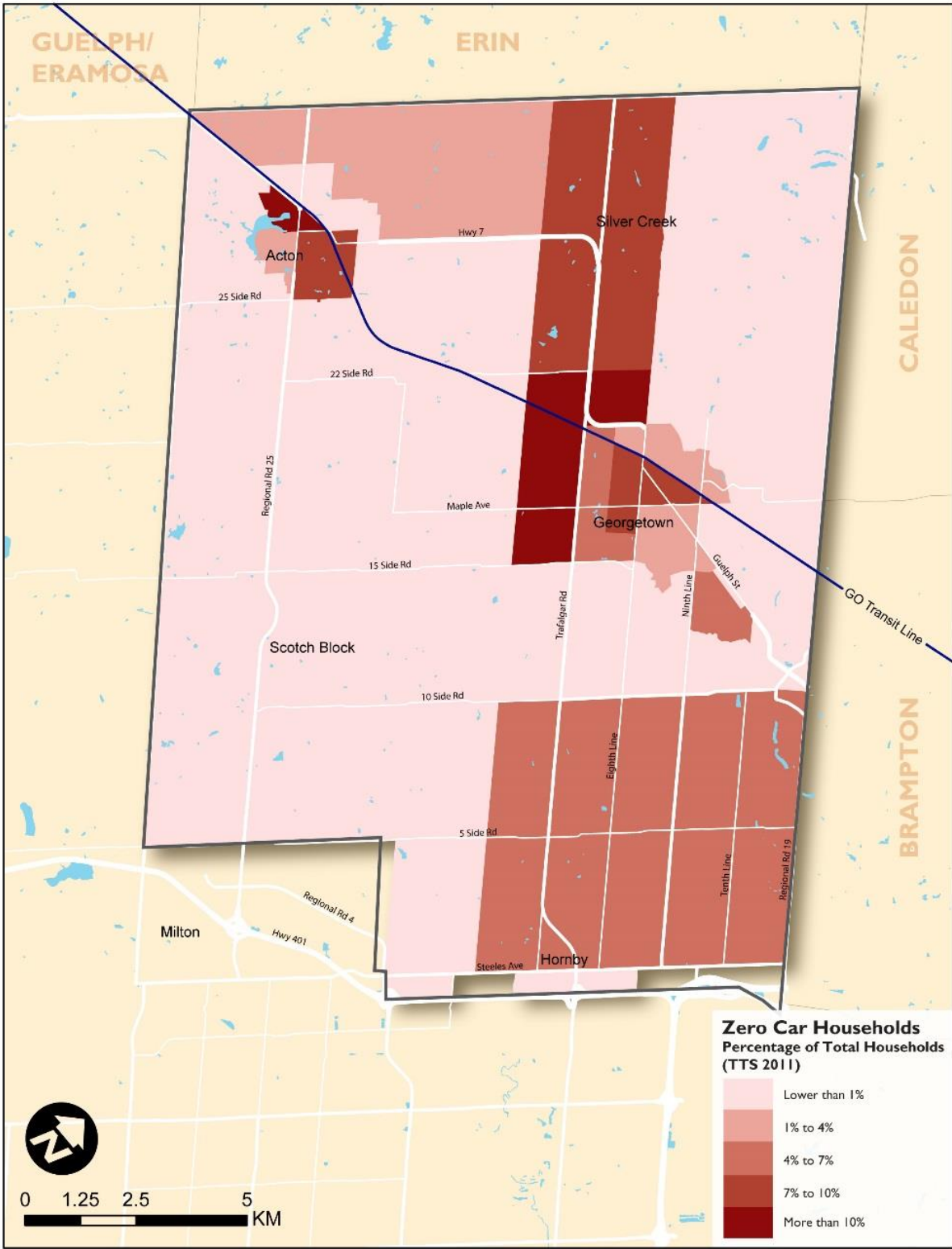


Figure 20: Zero Car Household Percentage, 2011 Transportation Tomorrow Survey

EMPLOYMENT

As in the rest of the GTHA, employment is expected to grow significantly in Halton Hills through 2031. Employment is expected to grow at a rate even faster than population, due to the combination of employment growth in portions of Acton and Georgetown, and additional jobs located in the employment lands along Steeles Avenue in the southern tier of the Town, just north of Highway 401. This increased employment will expand and change the patterns of demand for travel to, from and within Halton Hills, increasing the volume of travel and traffic congestion, particularly during peak travel periods. It also will increase potential demand for public transit, for trips within Acton and Georgetown, trips among communities within Halton Hills, and trips to Halton Hills from surrounding municipalities within and outside Halton Region.

EMPLOYMENT GROWTH

Figure 21 below shows Halton Hills employment for the years 2006 and 2011, and then projects employment for every fifth year from 2016 to 2031, based again on Halton Region's Best Planning Estimates (2011).

As the graph shows, existing employment in Halton Hills is estimated to be 20,750. As with the population, growth is projected to be modest through 2021, with employment growing to 22,936 in 2021, an increase of less than 2,200, or 11 percent. However, employment growth is projected to explode between 2021 and 2031, growing to more than double the 2016 level by 2031. The number of jobs in the town is projected to grow to nearly 32,400 by 2026, an increase of more than 9,500, or 41 percent, over the 2021 level and 56 percent over the 2016 level. Between 2026 and 2031, Halton Hills is projected to add more than 9,500 more jobs, growing to nearly 42,000 employees by 2031. This represents an increase of 30 percent from the 2026 level, or an increase of 102 percent from the current number of jobs. These estimates project that the town will add an average of more than 1,900 jobs each year between 2021 and 2031.

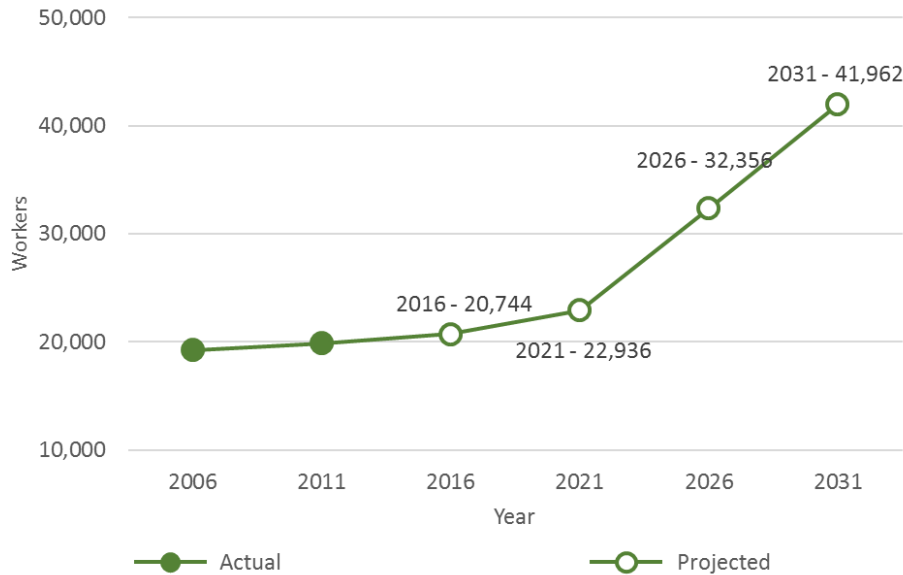


Figure 21: Halton Hills Employment 2006-2011 and Projected to 2031, Halton Region Best Planning Estimates, June 2011

Figure 22 is a set of two maps showing employment density for Halton Hills and adjacent Halton Region municipalities, from 2011 Best Planning Estimates for 2016 and 2031. The maps show employment density growth in several areas of existing development within Acton and Georgetown. These include several parcels on the northern side of Acton in the area south of the intersection of 32 Side Road and 3 Line/Churchill Road North. Employment is anticipated to grow in some relatively undeveloped areas of Acton as well, including some areas between Main Street and Churchill Road South just south of the existing development along Hwy 7 and Churchill Road South (and south of the Acton GO Rail Station), and in the triangle formed by Hwy 7, Main Street (Regional Road 25) and 32 Side Road on the western side of Acton. In Georgetown, employment density is projected to increase in several areas of existing development including the area on the north side of Guelph Street on the eastern side of Georgetown; the area formed by the triangle of Hwy 7 (Guelph Street), Maple Street and Mountainview Road North near the center of Georgetown; and the area around the Georgetown GO Rail Station in the triangle formed by John Street, King Street and Mountainview Road North on the northern side of Georgetown.

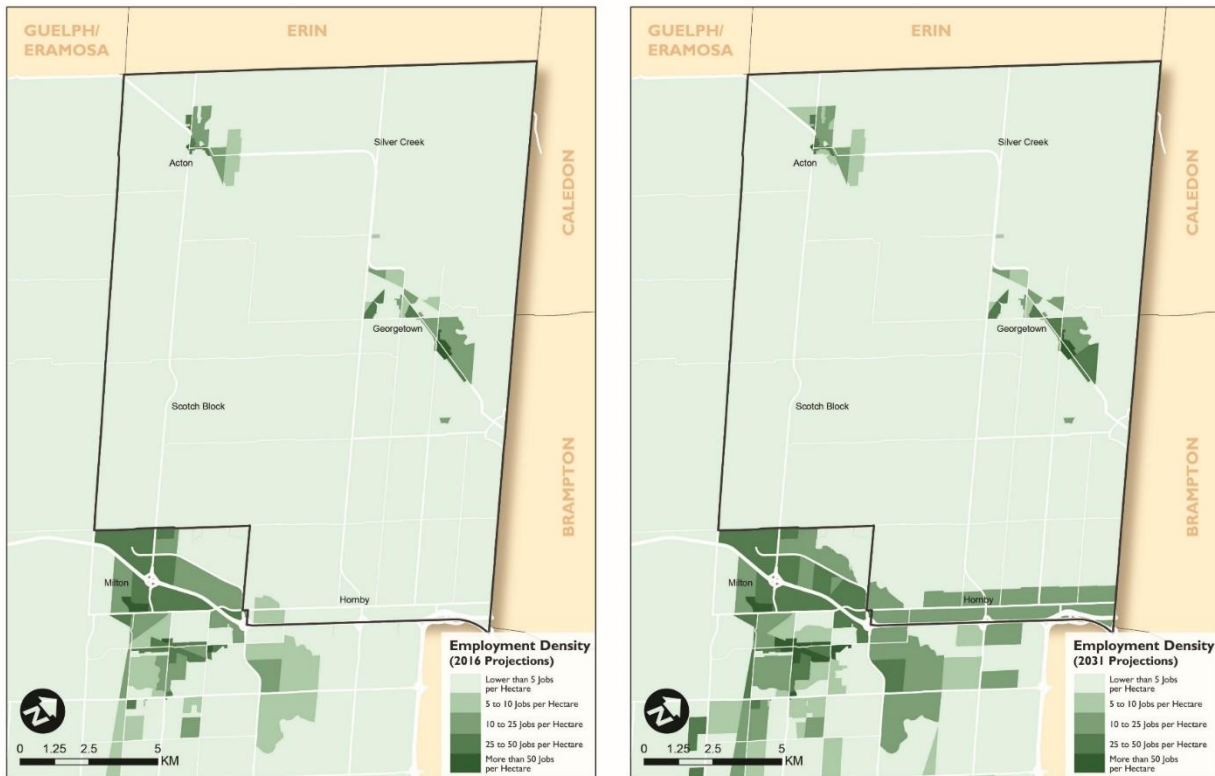


Figure 22: Projected Employment Density for 2016 and 2031, Halton Region Best Planning Estimates, June 2011

Employment growth in these areas, however, will be dwarfed by the employment growth projected in the designated employment lands located along the town's southern edge. An area about nine-kilometres long and one-kilometre wide, straddling Steeles Avenue just north-west of Highway 401 and running from Milton to Brampton, will increase from rural density to a medium level of employment density between 2016 and 2031. This area is now largely undeveloped except for the Toronto Premium Outlets Mall (TPO), located between Steele's Avenue and the 401 on the north-eastern side of Trafalgar Road, and development that is underway in the other three quadrants of the Steeles-Trafalgar intersection. This employment area, which is around 10 kilometres from the centre of Georgetown and about 30 kilometres from the centre of Acton, is more conveniently located to some surrounding communities than it is to the areas of existing and future population growth in Halton Hills. The area is adjacent to Milton's town centre, about seven kilometres west of from TPO along Steeles Avenue. It is adjacent to heavily developed areas of Brampton and Mississauga in Peel Region; indeed, the nearest GO Rail Station to TPO is the Lisgar station on the Milton Line in northwestern Mississauga, less than six kilometres away. It is closer to the core area of Milton than it is to Georgetown or Acton.

Comparing the areas of population and employment growth in Halton Hills, it is clear that despite significant movement towards higher density, mixed-use development in areas adjacent to older development in Acton and Georgetown (discussed in more detail later in the Land Use section), there is some disparity between the location of new population and new employment even within Acton and Georgetown. In both communities, increasing employment density is situated more in the northern and eastern areas, while population growth is focused on southern and western areas. While the scale of

Georgetown and Acton will allow some walking from residential to employment areas, much of the growth is at peripheral parts of the developed areas, meaning that many jobs will be well beyond reasonable walking distance of many of the residences.

As the analysis above noted, Halton Hills' employment base is projected to grow at a faster rate than its population over the next 15 years, and the ratio of jobs per resident will likewise grow over the period from just over one job for every three residents in 2016 to nearly one job for every two residents in 2031. When accounting for the proportion of the population that is not in the workforce (for example, children and retirees), there will be significantly more people working in Halton Hills than there are employed people there by 2031. However, many of the new jobs located in the town – those located in the employment lands along Steeles Avenue, for example - will be more difficult to access for Halton Hills residents, and will be more easily accessed by people living in nearby areas of Milton, Mississauga and Brampton.

This mismatch between employment locations and population growth will generate growth in the number of trips and kilometres of travel that residents must make to complete their daily work trips. New jobs within Georgetown and Acton will tend to be located slightly further from existing residential development and even more distant from new residential development, reducing the likelihood that trips will be made by bicycle or on foot regardless of improvements to the active transportation network. The growth in both population and employment within Acton and Georgetown will increase the volume of travel between the two communities. As the populations of Acton and Georgetown grow, travel by residents of the two communities to the employment area along Steeles Avenue, and to employment locations in other municipalities within Halton and to locations outside Halton Region, also will grow. This will include travel to relatively close employment areas in Milton, Mississauga, Brampton, and Guelph, and travel to jobs in Toronto and more distant areas throughout the western GTHA and as far away as Kitchener-Waterloo and the Niagara region.

When more frequent and more convenient, two-way, all-day GO rail service commences, a greater number and a greater proportion of the total number of these trips will use the GO rail service than do today. The GO improvements will increase the number of standard commuters (who travel to Toronto in the morning and back in the evening) as well as those traveling from Halton Hills to interim stations along the line in Toronto and Peel Region, and outbound to Guelph and Kitchener. Inbound trips to jobs in Acton and Georgetown also will increase. However, most employment trips—within, to, and from Halton Hills—will continue to be made by car, greatly increasing the volume of traffic on the region's roads.

Several of these population and employment trends suggest a need for fixed-route transit service within Halton Hills. These include:

- Increasing numbers of employment trips within Acton and Georgetown
- Increasing numbers of employment trips between Acton and Georgetown
- Increasing numbers of Georgetown and Acton residents traveling to workplaces in the Steeles Avenue employment corridor.
- Increasing numbers of residents using GO rail service from Acton and Georgetown stations to job locations outside Halton Hills or Halton Region
- Increasing numbers of inbound travelers from outside Halton Hills requiring transportation from the Acton and Georgetown GO stations to their workplaces in Halton Hills

In addition, employment growth in Halton Hills, particularly in the Steeles Avenue employment area but also in Georgetown and Acton, will generate increasing demand for transit service to Halton Hills from surrounding communities including Milton, Mississauga, Brampton, and Oakville. Transit systems in these communities already receive requests from their residents for transportation to TPO, for both employment and shopping. These requests will dramatically increase as development and employment grow in this area over the next 15 years.

EMPLOYMENT STATUS

Figure 23 shows the percentage of the total population that is employed in each zone. As the map shows, there is only one zone where employed persons represented less than 40 percent of the population – an area north of Georgetown with few residents. In most of the town, the percentage of residents that are employed is between 50 and 70 percent, and in several zones in Acton and Georgetown it exceeds 80 percent. There do not appear to be significant areas of low employment participation. Nearly 70 percent of Halton Hills residents is employed, which is significantly higher than Canada's average employment rate of under 60 percent. This further confirms that the population currently has a higher-than-average proportion of working age adults. Given Halton Hills' relatively higher-than-average income and auto-ownership levels, the primary transit market for working age adults is longer-distance commuting, mostly to locations outside Halton Hills. A significant number of Halton Hills residents already use GO's rail and bus services to complete their daily commute trip, and this is likely to grow as GO implements two-way, all-day service and increases service frequencies on their service. Local fixed-route transit can play an important role in enhancing GO service and expanding transit ridership in the Town by providing commuters, particularly within Acton and Halton Hills, with an alternative to using GO's station park-and-ride lots to access GO commuter rail. Employment concentrations in surrounding municipalities, within Halton Region and in surrounding regions, are another potential market that can be served by local fixed-route transit.

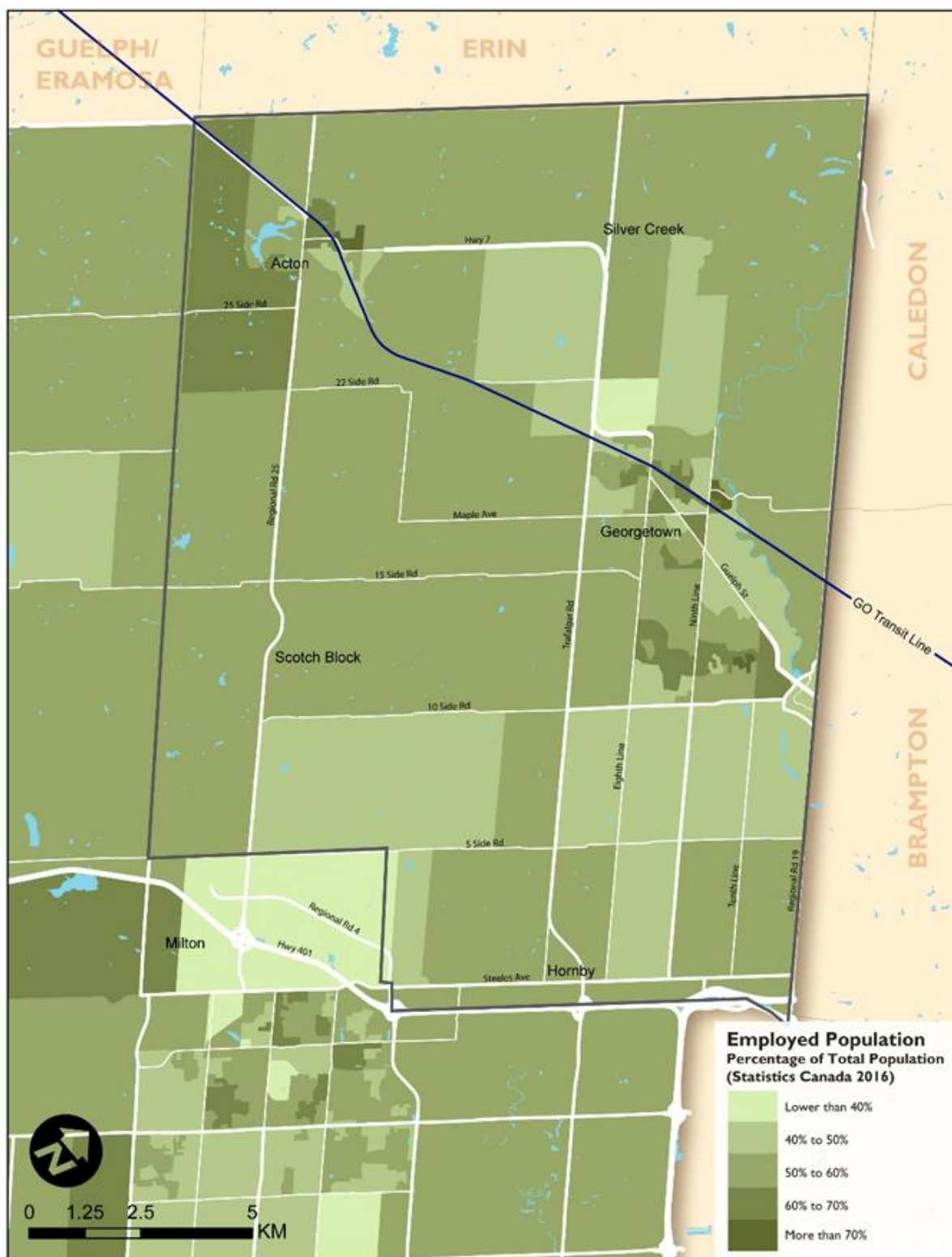


Figure 23: Halton Hills Employed Population Percentage, Statistics Canada 2016 Census

LAND USE AND DEVELOPMENT

In the past ten years or so, the types and forms of development in the GTHA has begun to change, from the suburban patterns that evolved since the 1950s, to new patterns that feature higher density, mixed-use, and often pedestrian-oriented development served by a connective network of narrower streets that accommodate pedestrians and bicycles as well as cars, trucks and buses. Built-out communities are incorporating infill development and retrofitting sidewalks, pedestrian paths, and bicycle lanes in existing developments to increase the density and mix of uses and to create more walkable, vibrant environments. Communities with greenfield sites are concentrating their growth in more densely-developed, mixed-use and pedestrian areas, often adjacent to older, traditionally-developed areas like their older town or village centres.

While the architectural styles and building materials may be very different, this new development often resembles older areas of Georgetown and Acton, and parts of other Canadian towns and cities developed in the 19th and early 20th centuries. This type of development accommodates population and employment growth with fewer impacts to transportation and utility infrastructure, preserves rural land and the natural environment, encourages personal health and community cohesion, and caters to changing public tastes and preferences for pedestrian-and bicycle-friendly environments with more uses located within walking distance of home and work. Higher-density development with a range of uses within walking distance also has many transportation benefits. It reduces vehicle trips, hours and kilometres of travel and creates favorable conditions for use public transit, by placing more people within walking distance of transit stops and providing an environment that makes it easy for them to access those stops on foot and by bicycle.

The map in Figure 24, on the next page, shows major land use categories in Halton Hills. With a significant part of the Town located in the GTHA's Green Belt, most of Halton Hills is designated as open or green space, with a significant amount of land dedicated to rural (agricultural) or industrial use. Residential, commercial and mixed-use development is primarily oriented around Acton and Georgetown and in the designated employment lands areas straddling Steeles Road and adjacent to the 401 freeway in the Town's southern tier. As noted above in the discussion of population and employment growth, there is a spatial mismatch between the present and anticipated future residential areas of the Town, primarily in Georgetown and Acton, and the large volume of commercial and mixed-use development in this southern tier, a considerable distance to the south and separated from the residential areas by many kilometres of roadways passing through designated green and open space. As we will see in the discussion of the transportation system, this can be expected to generate significant traffic volumes on these roads. In addition, because some of these roads (like Trafalgar and Steeles) are designated by Halton Region for installation of transit-supportive infrastructure, these new employment centres along Steele, and the residential-employment area mismatch, will generate demand for longer-distance transit service to provide expedited employment trips, both to save commuters time and to reduce volumes attempting to use roads serving the employment area.

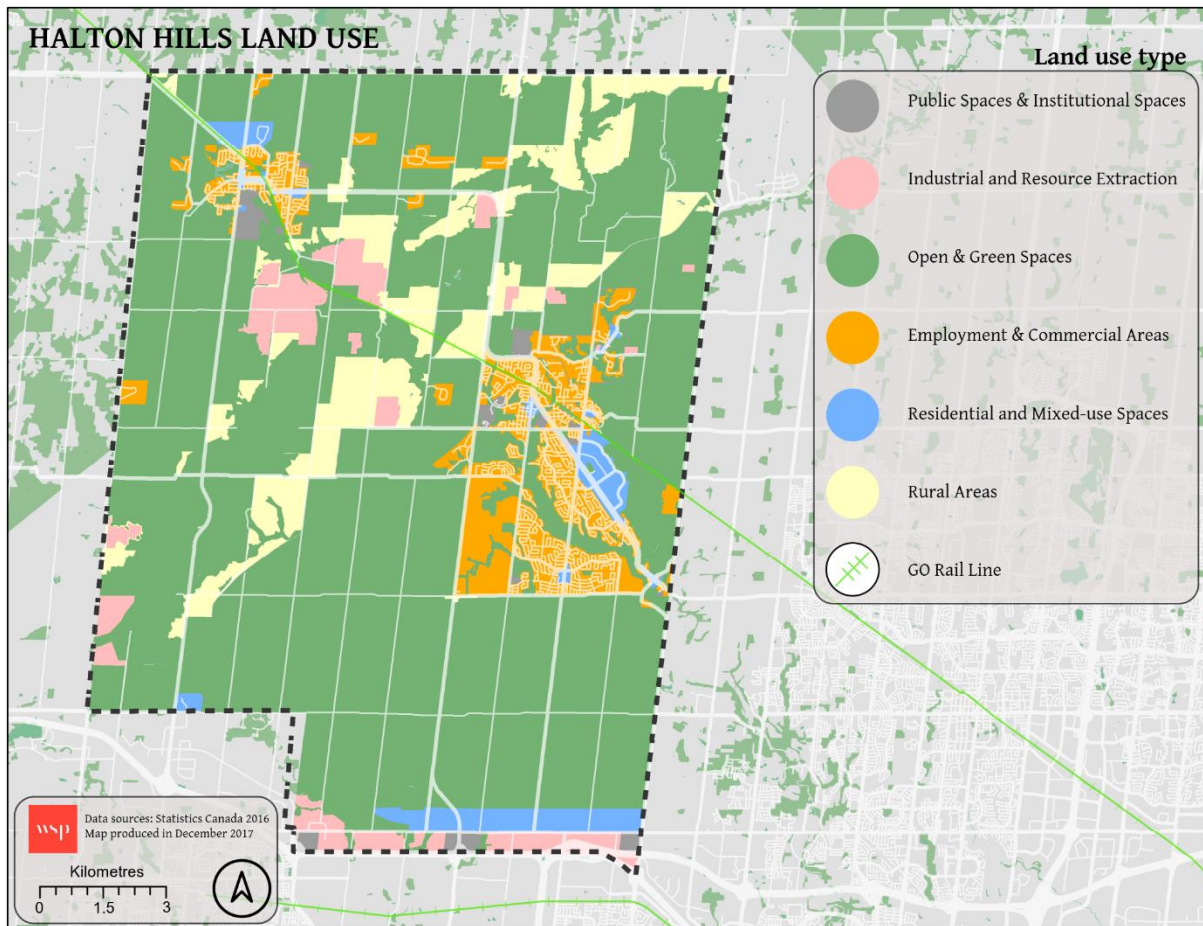


Figure 24: Halton Hills Land Use

Halton Hills' most recent land use plan reflects this change in, with much of the development, population and employment growth through 2031 focused in a small number of relatively densely-developed areas around Acton and Georgetown. The following section provides details on those plans and how they will reshape development patterns through 2031. These changes to development will both increase demand for public transit service and make it possible to provide cost-effective fixed-route transit service in existing and future developed areas of the town.

DESTINATIONS

Introduction of conventional transit services in the Town of Halton Hills will need to serve the current demands in the Town while also anticipating its future needs. The following analysis of potential destinations for conventional transit service is thus based on existing travel demand data collected from the Town's ActiVan service, locations of known major destinations and transit nodes, and locations of proposed developments (both commercial and residential) in Halton Hills.

The potential conventional transit service destinations described in this Section are categorized as follows:

- Healthcare Services, e.g., medical centres/offices, hospitals
- Schools / Community Hubs, e.g., community centres, churches, and libraries
- Commercial areas, e.g., business parks and/or shopping centres
- Recreation, e.g., sport facilities, large parks, and conservation areas
- Existing transit connections
- Existing hubs (major nodes) of other nearby transit services
- Proposed developments, both commercial and residential

The majority of the identified destinations are within Halton Hills; however, some destinations outside Halton Hills, particularly existing transit nodes in neighbouring municipalities, have been identified as potential destinations for Halton Hills transit service.

Few individual destinations are likely to generate enough transit demand to merit operation of conventional transit service. However, clusters of destinations in proximity to one another may be able to induce enough transit demand to justify conventional transit service. Ultimately, for conventional transit services to succeed, the destinations presented herein would need to be served as part of a destination cluster. Potential destinations and destination clusters in and around Halton Hills have been identified and are shown in Figure 25.

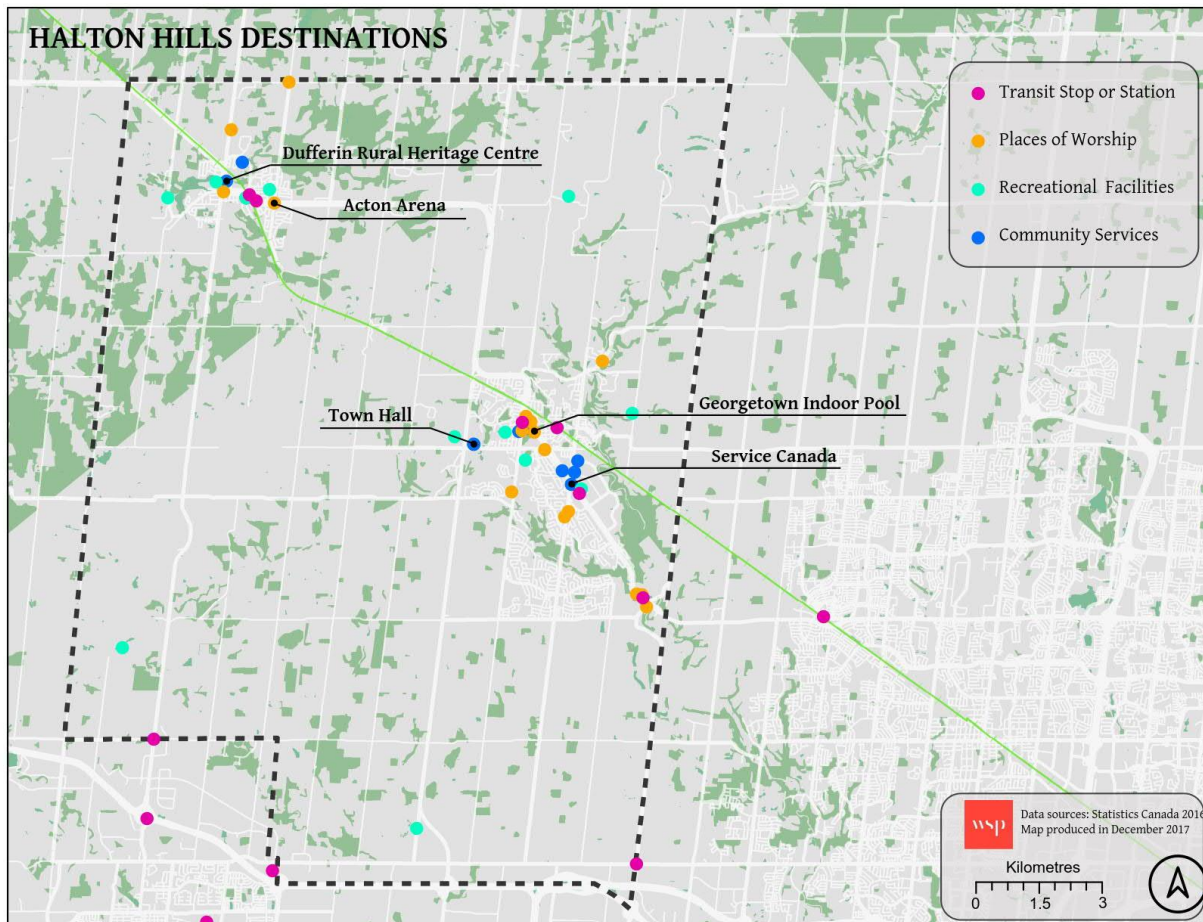


Figure 25: Key Destinations

HEALTHCARE SERVICES

There are several healthcare facilities within and around Acton and Georgetown which serve as major destinations for ActiVan services, and which may merit service by conventional transit. The majority of these destinations are within Acton or Georgetown. In Acton, there is one main healthcare centre: the Acton Medical & Urgent Care Clinic. In Georgetown, there are a number of medical centres, the majority of which are located along the Guelph St. corridor. Further, the Georgetown Hospital and Bennett Health Care Centre are located near the Guelph St. corridor, adjacent to one another, and could be served easily by conventional transit. Healthcare destinations are summarized in Table 6 on the next page.

Table 6: Halton Hills Healthcare Centres

Acton Medical & Urgent Care Clinic	Cornerstone Health Centre
Georgetown Hospital	Halton Hills Women's Health Centre
Bennett Health Care Centre	Primacy Halton Hills Family Health
Midwifery Care of Peel & Halton	MedRehab Group – Georgetown Clinic
Extendicare Halton Hills	Dr. Carla Ockley
Downtown Georgetown Dental	South Georgetown Dental Care
Georgetown Dental Clinic	Still Waters Dental Group
Miller Family Dental	Genesis Walk-in and Family Clinic
Hillsview Active Living Centre - Georgetown	

SCHOOLS, SERVICE, AND COMMUNITY HUBS

Halton Hills is home to a number of schools, child care centres, community centres, places of worship, and libraries, in addition to Town services such as the Town Hall. Providing conventional transit access to these facilities would serve to meet existing travel demand while making them easier for all demographics to access. The majority of schools and other community facilities are located close to Highway 7 in or around Acton and Georgetown.

Student and senior populations are typically over-represented in transit ridership counts relative to the total population. The student and senior populations of Halton Hills were approximately 13,000 and 8,200, respectively, in 2016, representing more than a third of the total population of the municipality.¹ Schools which may serve as conventional transit destinations are identified in Table 7 below.

Table 7: Halton Hills Public Schools

McKenzie-Smith Bennett Public School	Acton District High School
Robert Little Public School	St. Joseph Catholic Elementary School
Stewarttown Public School	Georgetown District High School
Holy Cross Catholic Elementary School	Gary Allen High School
Christ the King Catholic Secondary School	Centennial Middle School

¹ [Statistics Canada 2016 Census](#)

Silver Creek Public School	St. Brigid Elementary School
Gardiner Public School	St. Catherine of Alexandria Catholic Elementary
Park Public School	Joseph Gibbons Public School
Halton Hills Christian School	George Kennedy Public School
Sacré-Coeur Catholic Elementary School	

Additionally, Halton Hills has over 20 places of worship, a number of community centres (some connected to churches and others stand-alone), two primary public libraries, and other services. The majority of these are located centrally within Acton or Georgetown, however there are a number in more remote locations. These are described in Table 8 and Table 9 below.

Table 8: Halton Hills Community Centres, Libraries, and Town Services

Town Hall	Halton Hills Public Library (Georgetown)
Halton Hills Public Library (Acton)	Service Canada
Service Ontario	Community Living North Halton (2)
Dufferin Rural Heritage Community Centre	Community Resource Services
Cedarvale Community Centre	Halton Hills Speech Centre
Wastewise Community Resource Centre	

Table 9: Halton Hills Places of Worship

St. Alban's Anglican Church	Jehovah's Witnesses Church
Knox Presbyterian Church	Evangel Family Church
Crossing Community Church	Churchill Community Church
Bethel Church	St. Joseph Patron of Canada
Trinity United Church	Limehouse Presbyterian Church and Cemetery
St. John's United Church	Sacre-Coeur Church
Maple Avenue Baptist Church	St. Andrew's United Church
Christian Reformed Church Georgetown	St. John's Anglican Church
Living Hope Alliance Church	Immanuel Lutheran Church

St. George's Anglican Church	Norval Presbyterian Church
St. Paul's Anglican Church	Norval United Church
Boston Presbyterian Church	

COMMERCIAL AREAS

There are three primary business parks in the town – Halton Hills Premier Gateway Business Park, Georgetown Industrial Area, and Acton Industrial Park. Each of these locations is home to a number of established and diversified businesses, with space to increase development in the future.² Transit access to each of these locations would improve access for employees and customers. In addition to the three business parks, there are also popular consumer destinations including: Toronto Premium Outlets, Georgetown Market Place Mall, Northview Centre, and other popular destinations along the Guelph St. corridor.

RECREATION

There are many recreation, conservation, and park areas scattered throughout Halton Hills. These areas include many conservation areas and parks, as well as golf clubs, trails, sports fields, pools, arenas, and adult recreation centres. Significant recreation facilities are identified in Table 10 below.

Table 10: Halton Hills Recreation Centres and Facilities

Acton Arena	Georgetown Indoor Pool
Mold-Masters SportsPlex	Acton Lions Club Swimming Pool
Cedarvale Park	Trafalgar Sports Park
Blue Springs Golf Club	Georgetown Fairgrounds
Gellert Community Park	Hillview Active Living Centre (2)
Limehouse Conservation Area	Silver Creek Conservation Area
Eagle Ridge Golf Club	Hornby Glen Golf Course
Greystone Golf Club	Rotary Park / Prospect Park / Fairy Lake
Granite Ridge Golf Club	

² <http://www.haltonhills.ca/industrialAreas/industrialHaltonHills.php>

CONNECTIONS TO EXISTING TRANSIT SERVICES

Conventional transit services are most functional and attractive when they provide access to a wider transit network. Existing transit nodes, such as GO Transit stations and bus stops, as well as neighbouring local transit systems, such as Milton Transit, Brampton Transit, and MiWay (Mississauga), provide obvious destinations/origins for a potential Halton Hills conventional transit service. Providing good connectivity between transit systems can provide a solution to many first- and last-mile challenges for Halton Hills residents.

Existing regional transit nodes within the Town of Halton Hills include the GO Transit stations and bus stops shown in Table 11. Existing transit nodes located just outside Halton Hills in adjacent municipalities include GO Transit stations, as well as stops and stations belonging to local transit agencies. GO transit nodes which may provide attractive destinations/origins for a potential Halton Hills conventional transit service are also shown in Table 11.

Table 11: Regional (GO) Transit Nodes in and Near Halton Hills

WITHIN HALTON HILLS	OUTSIDE HALTON HILLS
Acton GO station	Mount Pleasant GO station (Kitchener corridor)
Acton GO bus stop	Meadowvale GO station (Milton corridor)
Georgetown GO station	Lisgar GO station (Milton corridor)
Norval GO bus stop	Milton GO station (Milton corridor)
Georgetown Main & Wesleyan GO bus stop	Regional Road 25 / Highway 401 GO bus stop (Milton bus corridor)
Georgetown Market GO bus stop	

Mount Pleasant GO station and the Regional Road 25 / Highway 401 GO bus stop provide all-day hourly service to and from Union Station in Toronto along the Kitchener GO rail corridor and the Milton bus corridor, respectively. The other stations are served by inbound trips (towards Union Station) during morning peak periods, and outbound trips (towards Milton/Kitchener) during the afternoon peak. Conventional transit service in Halton Hills could be designed to accommodate these schedules and provide timed bus service accordingly.

Beyond GO Transit nodes, Milton Transit (MT), Brampton Transit (BT), and MiWay nodes could serve as attractive destinations/origins for a Halton Hills transit service. Potential nodes include those shown in Table 12.

Table 12: Municipal Transit Nodes Near Halton Hills

TRANSIT NODE	EXISTING MUNICIPAL TRANSIT SERVICE PROVIDER
Meadowvale Town Centre	MiWay (Bus Rapid Transit [BRT] and Local Bus Route)
Mount Pleasant GO station	Brampton Transit (BRT and Local Bus Route)
Lisgar GO station	Brampton Transit and MiWay (BRT)
Bus Stop at Steeles & Winston Churchill Blvd.	Brampton Transit (BRT and Local Bus Route)
Regional Road 25 / Highway 401 GO Bus Stop	Milton Transit
Regional Road 25 / No. 5 Sideroad Bus Stop	Milton Transit
Milton Crossroads	Milton Transit

PROPOSED DEVELOPMENTS

In addition to existing potential destinations, the proposed conventional transit service should be designed to consider planned developments within the Town that would benefit from transit service. In Acton, there is a large, low/medium-density development planned along the east side of Main St. South, from Cobblehill Rd. in the north to 25 Side Rd. in the south, stretching roughly half way to Churchill Rd. South. There are also a number of smaller planned developments, both medium and high-density, that are centred in and around the downtown area, with the Mill St. at Elgin St. intersection being the centre point.

MARKET ANALYSIS SUMMARY

A combination of relatively rapid population growth (59 percent increase through 2031) and demographic changes including the aging of the existing population and increasing ethnic diversity among newcomers, will drive increased demand for both ActiVan special transportation service and for fixed-route transit service within Halton Hills.

Halton Hills is a relatively affluent community, with higher-than-average incomes and high levels of auto ownership, and the average population density is very low. However, the town's population is concentrated around the core areas of Acton and Georgetown. These core areas include significantly sized zones in which population and employment density are high enough to support fixed-route transit service.

Many of these same core areas are among those with the highest concentration of households with lower incomes and low levels of car ownership, concentrations of older people and youth, and other

populations that tend to use mass transit at higher rates. Concentrations of important community destinations in Acton and Georgetown further reinforce their potential for local fixed-route transit service building on existing travel patterns of ActiVan users within the town.

Employment in Halton Hills is projected to more than double between 2016 and 2031, growing at a much faster rate than the population. While some of this growth is expected to occur in existing developed areas, including Acton and Georgetown, much of it will be concentrated along Steeles Avenue in the town's southern tier, taking advantage of the proximity of the 401 Highway interchanges and building on the growth around TPO and adjacent employment areas in Milton and Brampton. This employment growth, particularly in areas near adjacent communities, will prompt increased demand for transit service from those communities to Halton Hills.

The growing mismatch between employment and residential areas, with both existing and future populations concentrated in the central and northern areas of the Town, and employment increasingly concentrated in the Town's south Town, will likely increase demand for transit service connecting Acton, Georgetown and the Steeles Avenue corridor.

Halton Hills' land use plan reinforces this increasing concentration of residential land use in and adjacent to existing developed areas in Georgetown and Acton, which will increase demand for transit within those areas (travel between the two will presumably be accomplished using GO rail service) and between those areas and the growing commercial and industrial area planned for along Steeles Road.

PUBLIC ENGAGEMENT

Development of the service strategy included three rounds of public consultation. Each round included consultation meetings with technical agencies, stakeholders, and members of the public; the second also included engagement with youth at two local secondary schools. The public was engaged through public information centre (PIC) meetings and online platforms that allowed members of the public to conveniently provide input. Each round was followed by a report to the Town's senior management team and to the Mayor and Council in open session, which provided the public with additional opportunities to engage with the project team and public officials about the project.

KEY THEMES

The key themes at the first round of public consultation were establishing the need for public transit in Halton Hills, and discussion of the elements, characteristics and parameters of the proposed service. There was widespread acknowledgement that some level of additional transit is needed today, and that this need is likely to increase in the future. Many participants in the meetings and PICs had specific requests for connections or service types, however, concerns about cost and large buses changing the small-town atmosphere of the Town were also common comments. Discussions of destinations for transit service often included TPO and locations outside Halton Hills, including Trafalgar Memorial Hospital in Oakville, Square One Shopping Centre, Mold-Masters SportsPlex, Sheridan College, and other locations in Brampton, Guelph, Milton and Mississauga. Town staff and members of the consultant team presented service options, including various specific fixed-route services as well as alternative service strategies that coalesced into the proposed Universal Access Service over the course of the project. While many stakeholders and residents expressed interest in and support for the Universal Access Service, others requested that a fixed-route service is a necessary part of the plan and should be included from inception of service.

PUBLIC CONSULTATION WORKSHOPS

Development of the Transit Service Strategy included three consultation meetings with Technical Agencies, Stakeholders and the public. The public was engaged through workshops, presentations, Public Information Centre (PIC) meetings which were held on February 15, 2018; May 14, 2018 and March 27, 2019 and through the online platform 'Let's Talk Halton Hills' that allowed convenient opportunity to provide comment and input through surveys and interactive engagement tools. Each public meeting, presentation and workshop provided key project information and acquired necessary feedback on where transit is required in the community and the opportunities and challenges associated with it.

The initial survey process received 983 responses. Combined with the survey results and consultation through workshops, the following key points were identified:

- Widespread acknowledgement that some level of additional transit is needed today in Halton Hills
- Request for connections to other regions and municipalities
- Desired destinations of transit included Downtown Georgetown, TPO, employment areas along Steeles Avenue and Armstrong Avenue, Trafalgar Memorial Hospital in Oakville, Sheridan College and Square One Shopping Centre in Mississauga

The third round of public consultation included a second survey for public input. The survey received 314 responses which provided significant input to the process, including the following:

- The top three identified contributors of implementing transit in Halton Hills are:
 - Reduces carbon footprint
 - Facilitates travel throughout the Town
 - Facilitates travel to surrounding areas
- 16% of participants of the survey said while living in Halton Hills they had to pass on employment or educational opportunities due to lack of transit in Halton Hills.

In addition, based on results in the second survey, it was determined that the following phases of transit that are ‘supported’ or ‘not supported’ in Halton Hills are shown in Figure 26.

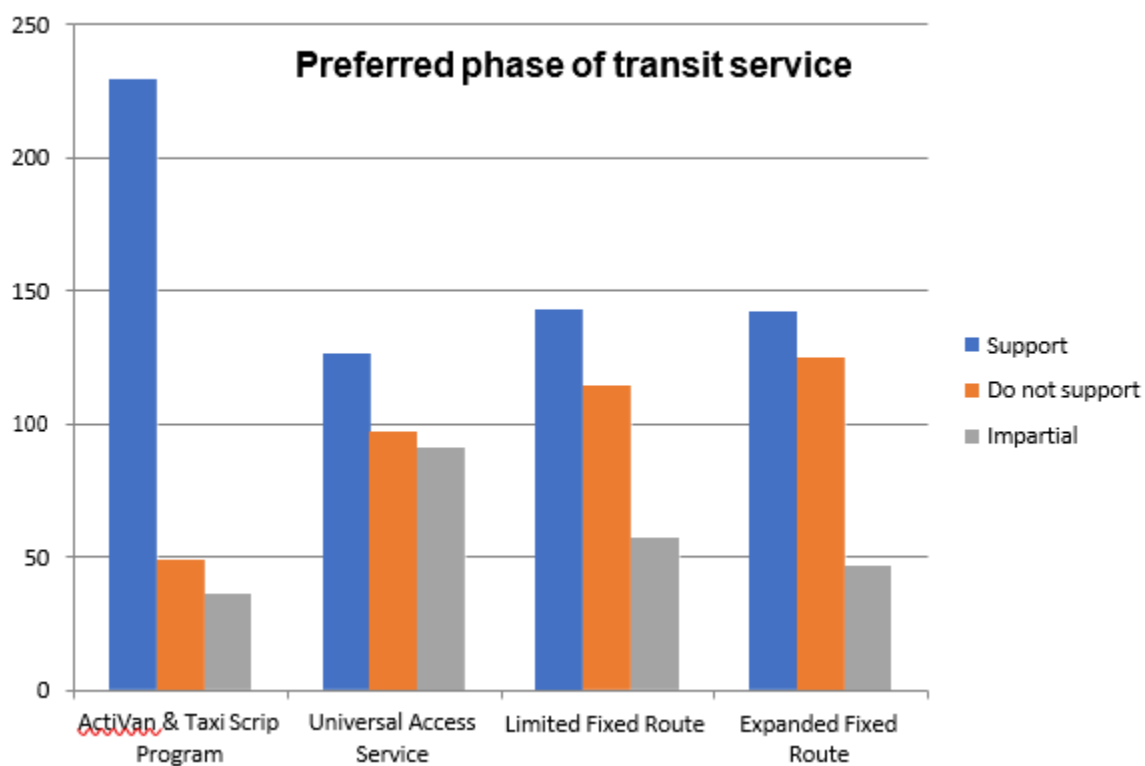


Figure 26: Preferred phase of transit service

All public engagement conducted followed the Town’s fundamental principles for the Public Engagement Charter and remained consistent in the Town’s commitment to the promise of Transparency, Notification and Participation.

The public consultation workshops also received some media coverage, which contributed to the consultation process. Figure 27 on the next page shows an example of media coverage from The Independent Free Press (TheIFP.ca), covering the first public consultation workshop.

Barrage of questions at first Halton Hills transit study meeting

Residents eager to see a vision for transit system, voice concerns about affordability

NEWS Feb 22, 2018 by [Alexandra Heck](#) Independent Free Press



Georgetown resident John Cooke checks off boxes of things that he feels are important in transit services. - Alexandra Heck

Figure 27: An example of media coverage on a public consultation workshop

SERVICE EVALUATION

Based on Halton Hills' existing specialized transit services, the consultant team developed three additional levels of transit service to meet the Town's transit needs and fulfil the its transit vision through 2031. Each level is based on the previous one to deliver solid service improvements with incremental budget, with the elements of Level 2 containing the elements of Level 1, Level 3 containing the elements of Level 1 and 2, and so on. The ActiVan service for seniors and persons with disabilities in Halton Hills would be retained and improved in all levels. Figure 28 illustrates the phasing of the proposed service levels, and the elements in each level of transit service. As Level 1 represents Halton Hills' existing service, which is discussed in detail in the Service Review chapter, the section below will be dedicated to the proposed services – Level 2 to Level 4.

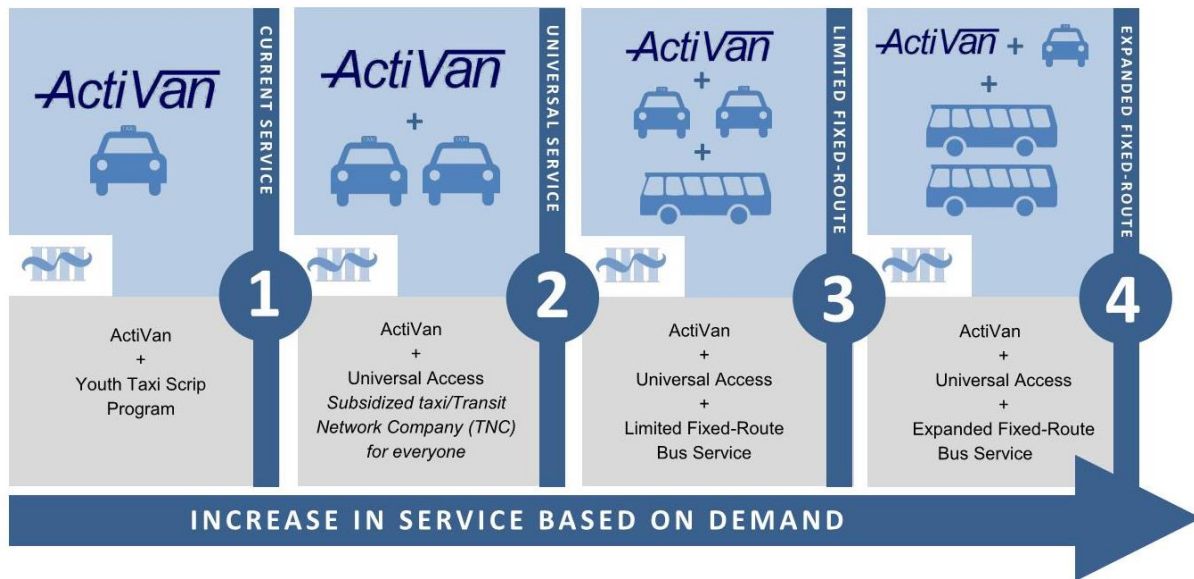


Figure 28: Levels of transit service

LEVEL 2 – ACTIVAN + UNIVERSAL ACCESS SERVICE

While most residents, workers and visitors to Halton Hills travel in or near the main population centres of Acton and Georgetown, Halton Hills is a geographically diverse community that has many residents and businesses located in rural areas and in many hamlets, small population centres, many dating from the 19th Century, located at rural crossroads throughout the Town. Universal Access Service, illustrated in Figure 29, is a concept for providing a basic level of transit service to all residents, workers and visitors in Halton Hills, regardless of disability status or income. The service would be available for trips to-and-from any location within Halton Hills, including both the Acton and Georgetown areas and the rural and hamlet areas. The service also could be introduced, perhaps at a limited scale, relatively easily and in a short period of time, allowing some level of service to be in place well in advance of 2021. Service area would include all of Halton Hills and key destinations outside Halton Hills (Lisgar, Milton, and Mount Pleasant GO stations), as shown in Figure 30 on the next page.

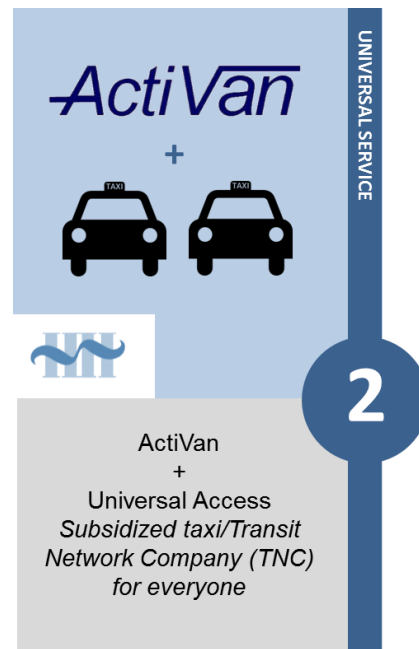


Figure 29: Universal Access Service to provide basic service to the entire Halton Hills

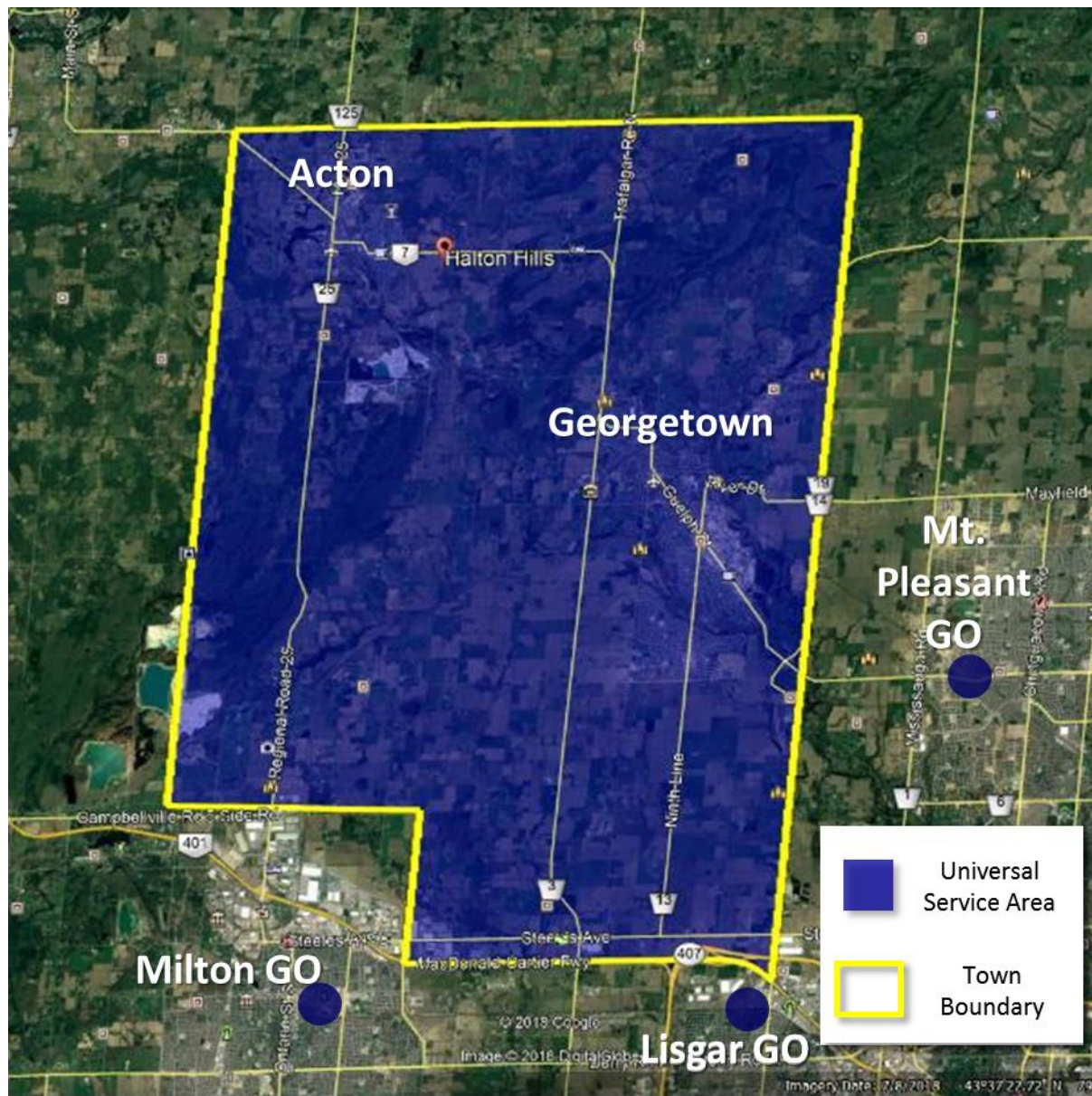


Figure 30: Universal Access Service area

The Universal Access Service would provide curb-to-curb service, similar to ActiVan. Customers would be picked up at their homes or pickup points and would be dropped off at their final destinations. With the implementation of fixed-route services later, some trips could be converted from curb-to-curb to “home-to-hub” services, in which customers are picked up at their homes or origin points and dropped off at a bus stop or transit hub, where they can access fixed-route bus service or connect to other Universal Access vehicles to complete their trips. Vehicles picking up Universal Access Service customers could pick up multiple customers going from nearby origin points traveling to nearby destination points. Direct, private curb-to-curb service would not be guaranteed.

Like ActiVan, customers would arrange for pickup days or hours in advance. Contact could be made by phone, though an on-line or mobile application. The requirement for pre-arrangement could differ from

that of ActiVan service and could vary over time, depending on the capabilities of the scheduling and dispatch system, customer interface applications, fleet and operator availability and other variables.

The service could be operated by various or multiple operators, including the private or public operator of the ActiVan service, taxi companies, transportation network companies like Uber and Lyft, and/or other private or public transit providers.

Using private operators such as Taxi and/or TNCs would lead to lower operating costs, little or no up-front cost, and less administrative and facility demand. Service could also be more flexible as the Town could discontinue or change the service at the end of the contract period without the hassle of dealing with change in vehicles and staff members requirements. However, using private operators also means that the Town has less control over the service quality, especially for customers with accessibility needs. Maintaining consistent customer service could also be a challenge as different service requests have to be directed to different operators (e.g. the Town handles service reservation but the service operator handles passenger complaints), causing frustrations. Using private operators also means the service would depend on the future presence and financial healthiness of the operator. In particular, TNCs have been pressing the taxi industry with lower fares by reducing overhead cost and with lower wages for drivers. However, neither of the two TNCs operating in North America – Uber and Lyft - has successfully recouped their cost with their current pricing model. As both have become public-traded companies and in need to reverse the losing trend and become profitable, the risk of price increase should not be ignored. On the contrary, operating the service in-house means the Town would have full control of the service quality, the entire customer service, availability of service and the entire loop of operations and maintenance, and this could therefore lead to more consistent customer experience. However, this also means that the Town would need to absorb all the costs including capital costs for vehicles and facilities, and operating costs such as operators / dispatchers / customer service representatives and administrative staffs.

Despite many disadvantages of using private operators, the plan does not recommend Halton Hills to operate the Universal Access Service in-house using the ActiVan fleet, as the operation cost is higher. The estimated cost to operate the service in-house would be an additional \$1 - \$1.4 million per year. Moreover, expanding the ActiVan service to provide Universal Access Service could risk the Town's ability to maintain ActiVan's service quality. As the plan envisions, the Universal Access Service would be provided through a subsidized taxi and TNC program, and ActiVan would remain in house to provide the same "well-loved" service that it is today. Administration and dispatch of the program is recommended to remain in-house for Universal Access Service in order to control customer service standard and monitor ridership and growth of the program.

FARE POLICY, RIDERSHIP ESTIMATES, AND COST

The plan recommends that the fare for both ActiVan and the Universal Access Service be set at \$3.75, with Universal Access Service customers pay \$1 for each additional kilometre over 10 kilometres, similar to current Uber pricing. This reflects the premium nature of a curb-to-curb service, while still provide a reasonable price for customers to use the service. Based on current ActiVan and Taxi Scrip travel pattern, most of the trips would be well within the initial 10-kilometre range, capping the town subsidy at \$6.25. However, the rural nature of Halton Hills means some of the trips could be longer than 10 kilometres. Table 13 below provides a few extreme examples of long-distance trips travelled using the

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Universal Access Service, and the costs for both the customers and the Town. The requirement for customers to pay an initial fee for all trips, and the cap on the public subsidy, along with other controls, should prevent the program from being over-subscribed or too costly for Halton Hills to continue to operate.

Table 13: Examples of Universal Access trips and pricing

DESTINATION	UBER COST ESTIMATE	USER FARE	TOTAL TOWN COST
Acton GO to Georgetown GO = 13.6 km	\$17-\$22	\$3.75 fare + \$3.60 each additional km travelled = \$7.35	Town to subsidize the remaining amount = \$14.65
Georgetown Marketplace to TPO = 11.1 km	\$16-\$21	\$3.75 fare + \$1.10 each additional km travelled = \$4.85	Town to subsidize the remaining amount = \$16.15
Acton Library to Milton GO = 20.7 km	\$25-\$33	\$3.75 fare + \$10.70 each additional km travelled = \$14.45	Town to subsidize the remaining amount = \$18.55
Limehouse P.S. to Ethel Gardiner P.S. = 11.4 km	\$16-\$21	\$3.75 fare + \$1.40 each additional km travelled = \$5.15	Town to subsidize the remaining amount = \$15.85

Ridership for the Universal Access Service was estimated based on the current use of ActiVan and the Taxi Scrip programs, while using the per-capita demand for the service in Innisfil as a reference. The estimates assume that existing Taxi Scrip ridership would be absorbed into the Universal Access Service ridership, and that some ActiVan ridership also would shift to the Universal Access Service.

The cost estimates assume that the service would be operated by Taxi and TNC services. The cost estimates for the services using Taxi and TNC operation assume a cost of \$10 per trip, despite subsidy cap of \$6.25 per trip (all costs are presented in circa 2018 dollars). The additional cost would cover the Town's costs from the occasionally longer trips, costs associated with managing the program, and any dispatching, call-taking, or customer service responsibilities that arise as a result of the program. Taxi and TNC operation of the service makes the operators responsible for maintenance and staffing, reducing the financial and administrative stress on Halton Hills and its staff. If the service is operated In-house, the initial cost will be increased by about \$1 million per year. Projected ridership and associated operating costs from 2020 to 2028 are shown in Table 14 below.

Table 14: Universal Access Service ridership and costs estimates

	2020	2024	2028
Absorbed Taxi Scrip Ridership	33,000	38,000	45,000
Universal Service (new ridership)	34,000	40,000	46,000
Total Universal Service Trips	67,000	78,000	91,000
Cost Per Trip	\$10 per trip		
Annual Universal Service Operating Cost	\$700,000	\$800,000	\$950,000

As demand for the Universal Access Service grows, service standards would trigger implementation of fixed-route bus services to replace Universal Access Service trips on common trip patterns. Fixed-route service becomes more cost effective than Universal Access Service when the number of Universal Access Service trips from one area or in one travel corridor reaches between 200 to 250 daily trips. The service standards then would be used to monitor the service to ensure that it progresses towards achieving productivity standards. Figure 31 below illustrates the threshold to implement fixed-route service based on weekday Universal Access trips.

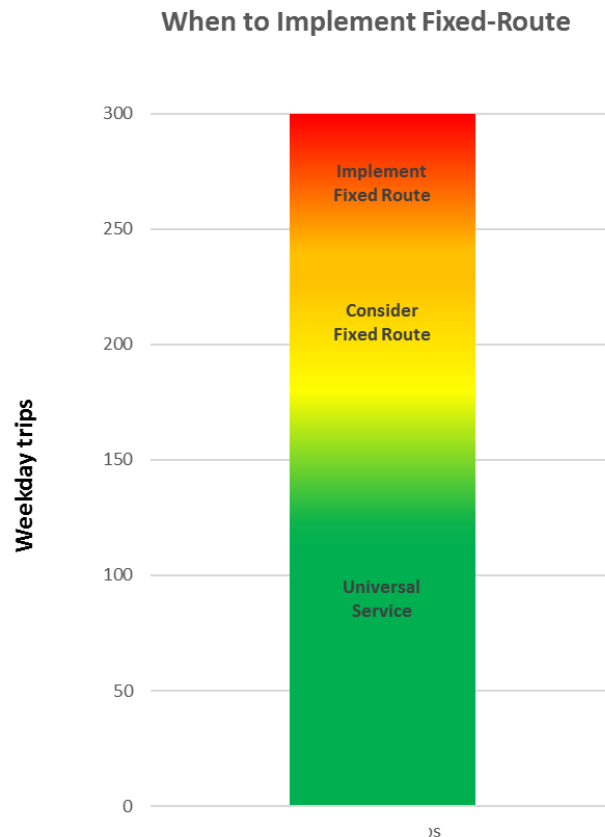


Figure 31: Implement fixed-route transit service based on Universal Access Service usage

STAFFING

While the Universal Access Service would require hiring no drivers, mechanics or other operating staff, additional Town staff would be necessary to manage the program and to provide additional customer service support for the program. The Plan recommends Halton Hills to add two full-time employees for an annual cost of \$154,000 and multiple part-time staff members for an annual cost of \$211,000 to assist in the operations of the Universal Access Service.

COST SUMMARY

The estimates of annual operating cost and capital expenditure to operate the Universal Access Service and ActiVan are shown in Table 15 and Table 16. These estimates assume growth of the program generated by the Town's population growth, and include separate costs for the Universal Access Service and ActiVan services. Capital costs are limited to computer and dispatching equipment and software, and vehicles for the ActiVan system, as no vehicles are required for the Universal Access Service. The costs also include costs for a vehicle and storage facility for the ActiVan service and any future service expansion.

Table 15: Annual operating costs for Universal Access Service (taxi/TNC contracted) + ActiVan (in-house)

ANNUAL OPERATING COSTS	2020	2024	2028
Universal Service	\$700,000	\$800,000	\$950,000
ActiVan Specialized Service	(\$1 - \$1.2 mil)	(\$1.2 - \$1.4 mil)	(\$1.4 mil - \$1.7 mil)
Additional Staffing	\$365,000	\$556,000	\$665,000
Scheduling-Dispatch Software	\$50,000	\$50,000	\$50,000
Total Operating Cost	\$1.1 mil	\$1.4 mil	\$1.7 mil
Universal Service Revenue	\$0	\$0	\$0
ActiVan Revenue	\$200,000	\$250,000	\$300,000
Total Net Operating Cost	\$900,000*	\$1.15 mil*	\$1.4 mil*

*Additional Gas Tax and other subsidies are not included

Table 16: Capital expenditures for Universal Access Service (taxi/TNC contracted) + ActiVan (in-house)

CAPITAL EXPENDITURES IN YEAR OF INVESTMENT	2020	2024	2028
Vehicles for ActiVan Service	\$0	\$200,000	\$200,000
Vehicles for Universal Service	\$0	\$0	\$0
Computer Equipment and Software	\$350,000	\$100,000	\$100,000
Vehicle Storage and Maintenance Facility	\$1.8 mil*	\$10 mil**	
Total	\$2.15 mil	\$10.3 mil	\$300,000

*Environmental clearance and design fees, 2020 – 2022

** Land acquisition, construction, construction management, 2023-2024

If the Universal Access Service were to be operated in house, not only would operating costs be higher, but administrative costs would increase, and the additional vehicles required to operate the additional service would add to the capital costs.

LEVEL 3 – ACTIVAN + UNIVERSAL ACCESS SERVICE + LIMITED FIXED-ROUTE

While Universal Access Service provides a balance between service level and cost when the demand is moderate, cost of operating such service could skyrocket when demand increases, as experienced in Innisfil. When demand warrant, Halton Hills should implement a limited level of local bus service in addition to the ActiVan and Universal Access Service, the concept is illustrated in Figure 32 and the proposed initial route network is illustrated in Figure 33. The fixed-route service would provide regularly-scheduled service connecting key destinations within Halton Hills and surrounding communities. Fixed-route service could serve high-demand connections more efficiently than ActiVan or Universal Access Service. Fixed-route service also is more visible in the community, and can be accessed without advance arrangement, allowing customers to use the service more spontaneously. Both factors tend to increase transit ridership while helping to control transit costs. With the introduction of limited fixed-route service, some Universal Access Service trips could be converted from curb-to-curb trips to 'home-to-hub' trips, which would connect customers between their point of origin or destination to/from a nearby transit stop or transit hub. Universal Access Service would also cover the entire town outside of fixed-route service hours.

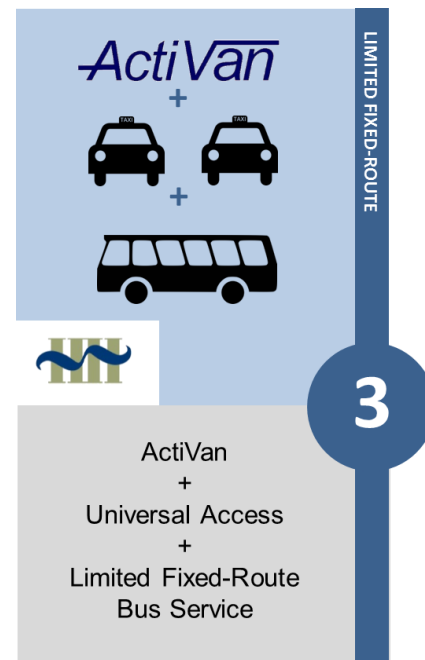


Figure 32: Universal Access Service + Limited Fixed-Route Service

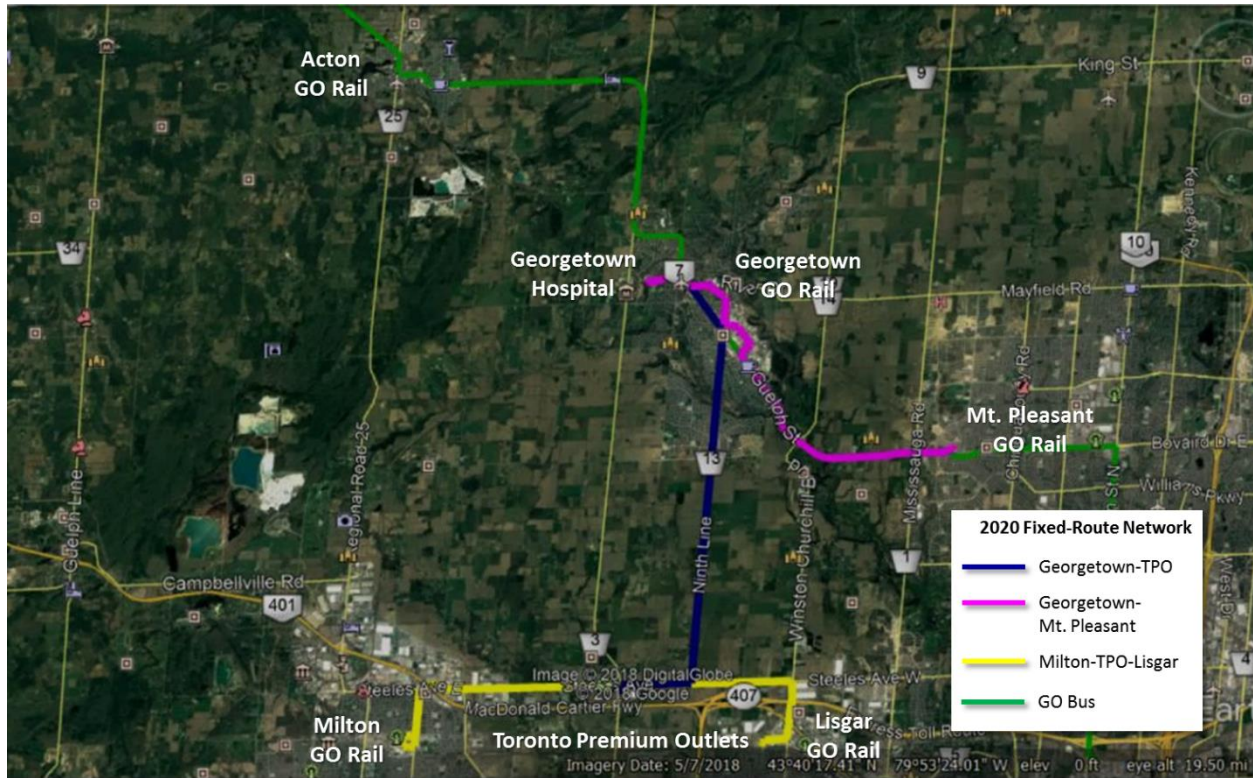


Figure 33: Limited fixed-route network

MILTON – TORONTO PREMIUM OUTLETS (TPO) - LISGAR

The plan recommends that Halton Hills partner with Milton Transit, and possibly with MiWay and Brampton Transit, to implement the Milton GO – TPO – Lisgar GO fixed-route service, as shown in Figure 34 below. And Table 17 shows the ridership and operating cost estimates for 2020, 2024, and 2028, and proposed service frequency for the route. The route operates between the Milton GO Station and Lisgar GO Station via Steeles Avenue, and serve TPO in the middle. As discussed in the Market Analysis Chapter, Steeles Avenue is projected to accommodate significant amount of employment. Brampton, Milton and Mississauga also have received requests for service to TPO from their jurisdictions. This route has the potential to be a “quick win” for Halton Hills, as both operation and maintenance will be handled by Milton Transit. While Halton Hills would potentially need to cover half (actual cost/revenue share TBD) of the operation and maintenance cost as well as the initial capital cost for additional vehicles required to operate this route, the Town does not need to expand its administrative and operation staff or to make any upgrade to its existing technology to enjoy the benefits of having a fixed-route transit service. As such, the Plan recommends that Halton Hills pursue this route as its first fixed-route service presence in the Town.

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019



Figure 34: Milton GO - TPO - Lisgar GO Route

Table 17: Ridership and operating cost estimates, and proposed service frequency of Milton GO – TPO – Lisgar GO Route

MILTON-TPO-LISGAR	2020	2024	2028
Passenger Trips:			
Daily	2,800	2,800	2,900
Annual	770,000	770,000	797,000
Annual Operating Cost	\$1.0 m	\$1.0 m	\$1.5 m
Service Frequency (mins)			
Weekday AM-PM Peak	30	30	30
Weekday Midday, Evenings	30	30	30
Saturday (No Sunday)	30	30	30
Weekday Service Day	6 AM – 8:30 PM	6 AM – 8:30 PM	6 AM – 8:30 PM
Saturday Service Day	9 AM – 6 PM	9 AM – 6 PM	9 AM – 6 PM

GEORGETOWN – MT. PLEASANT

This route operates between Georgetown Hospital and Mt. Pleasant GO Station, and stops at Georgetown GO Station in the middle. Majority of the route operates on Guelph/Bovaird between Georgetown Market and Mt. Pleasant GO Station. West of Sinclair Avenue, the route operates on Todd Road, Mountainview Road, and King Street to access the Georgetown GO Station, then uses Queen Street, back on Guelph Street, Main Street, and Princess Anne Drive to access Georgetown Hospital. The

route operates bi-directionally on the same streets. Figure 35 shows the alignment of the route, and Table 18 shows the ridership and operating cost estimates for 2020, 2024, and 2028, and proposed service frequency.

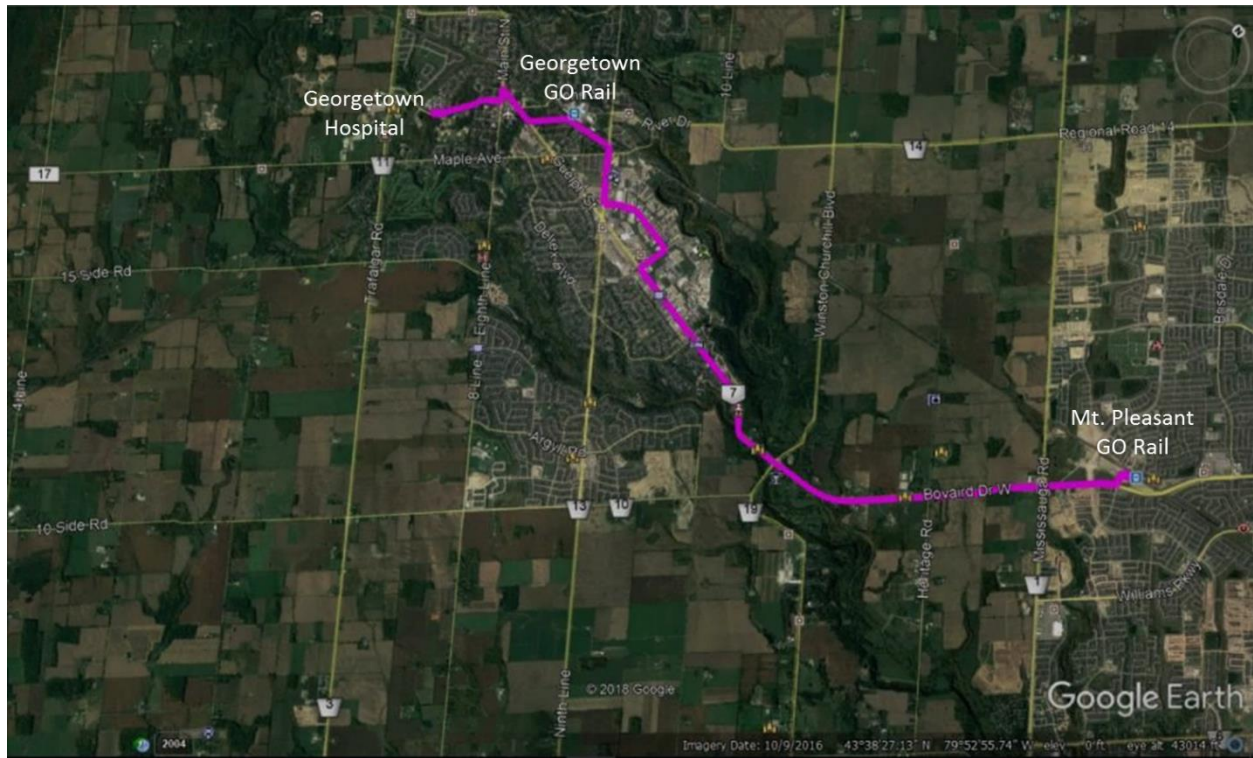


Figure 35: Georgetown Hospital - Mt. Pleasant Route

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Table 18: Ridership and operating cost estimates, and proposed service frequency of Georgetown Hospital - Mt. Pleasant Route

GEORGETOWN-MT. PLEASANT	2020	2024	2028
Passenger Trips:			
Daily	800	800	1,500
Annual	220,000	220,000	413,000
Annual Operating Cost	\$500,000	\$550,000	\$550,000
Service Frequency (mins)			
Weekday AM-PM Peak	60	60	60
Weekday Midday, Evenings	60	60	60
Saturday (No Sunday)	60	60	60
Weekday Service Day	6 AM – 7 PM	6 AM – 7 PM	6 AM – 7 PM
Saturday Service Day	9 AM – 6 PM	9 AM – 6 PM	9 AM – 6 PM

GEORGETOWN GO – TPO

Shown in Figure 36, the Georgetown GO – TPO Route operates bi-directionally on the same street between the Georgetown GO Station and TPO, via Guelph Street, Mountainview Street / Ninth Line, and Steeles Avenue. Table 19 shows the ridership and operating cost estimates for 2020, 2024, and 2028, and proposed service frequency.

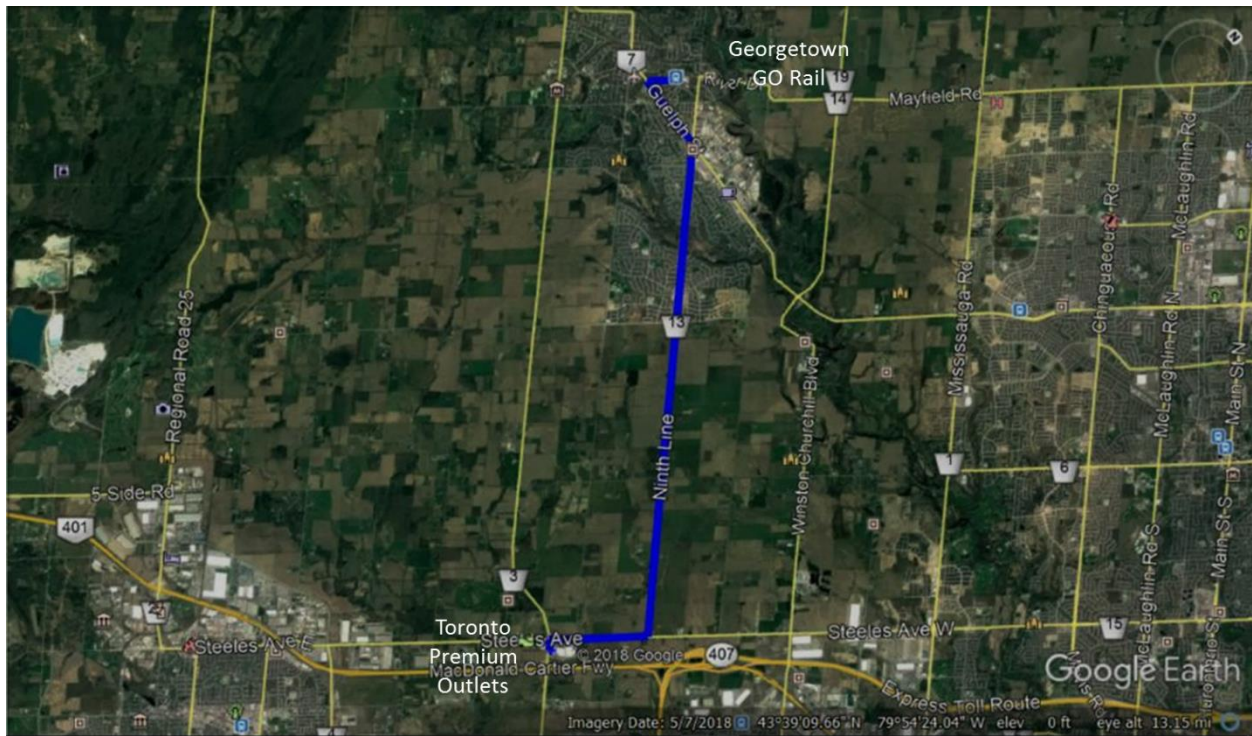


Figure 36: Georgetown GO - TPO Route

Table 19: Ridership and operating cost estimates, and proposed service frequency of Georgetown – TPO Route

GEORGETOWN-TPO	2020	2024	2028
Passenger Trips:			
Daily	500	500	1,100
Annual	138,000	138,000	303,000
Annual Operating Cost	\$550,000	\$550,000	\$700,000
Service Frequency (mins)			
Weekday AM-PM Peak	60	60	60
Weekday Midday, Evenings	60	60	60
Saturday (No Sunday)	60	60	60

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Weekday Service Day	6 AM – 7 PM	6 AM – 7 PM	6 AM – 7 PM
Saturday Service Day	9 AM – 6 PM	9 AM – 6 PM	9 AM – 6 PM

At this level of transit service, Universal Access Service will be provided for trips that begin or end more than 500 meters away from a fixed route bus service, and for areas within 500-metre radius when the fixed-route service is not operating. Therefore, it is expected that the number of trips on Universal Access Service will be lower. With the Universal Access Service and the Limited Fixed-Route network in place, ActiVan use will be reduced by approximately 10,000 trips in 2020, further reduce the operating cost on demand-response services. As fixed route service coverage improves, the population living beyond transit access will shrink and demand for Universal Access Service / ActiVan will decrease. Table 20 below summarize the estimated annual operating cost of Universal Access Service when a limited fixed-route service in operation.

Table 20: Universal Access Service ridership and costs estimates

	2020	2024	2028
Universal Service Trips	44,000	55,000	65,000
Cost Per Trip	\$10 per trip		
Annual Universal Service Operating Cost	\$450,000	\$550,000	\$650,000

TECHNOLOGY

Additional software and hardware are needed to operate fixed-route services. These include:

- CCTVs on buses, both internally and externally facing cameras (security and insurance claim prevention)
- Fare System (Automatic Fare Collection)
- Fare Integration (integration of Fare system with Core software)
- CAD/AVL dispatch console and software;
- Automatic Passenger Counters
- Covert Alarm System
- Cellular or wireless local area networks (LANs) for communicating data to/from buses in real-time or when in the garage;
- Web-based portals (with firewalls) for the public (real-time bus arrivals and Transit App and Website);
- Web-based portals (with firewalls) for disseminating information to third party users (Bus / Taxi companies); and
- Scheduling software to include (add) fixed route or a completely new system that will encompass all the ITS features required.

VEHICLE REQUIREMENTS TO OPERATE THE LIMITED FIXED-ROUTE NETWORK

Table 21 below shows the estimated vehicle requirements to operate the limited fixed-route network and to maintain service level on the ActiVan service. The fixed-route services could be provided using smaller cutaway-style buses similar to those currently used for the ActiVan service. These vehicles have been acceptable to the community and, outfitted to carry up to 20 passengers plus several wheelchair tie-down spots, would provide adequate passenger capacity on fixed-route based on the ridership estimates. In addition, Halton Hills should consider replacing vehicles based on their designed useful life. For example, the design useful life of an eight-metre cutaway-style bus is 7-8 years, or 300,000 kilometres, whichever comes first.

Table 21: Vehicle requirements to implement the recommendations for limited fixed-route service

	2020	2024	2028
Milton-TPO-Lisgar**	N/A	N/A	N/A
Georgetown-Mt. Pleasant	1		
Georgetown-TPO via Mountainview	1		
Spares	1		
ActiVan Service		1	1
Total Required in Year	3	1	1
Estimated Cost Per Vehicle	\$200,000*		
Vehicle Capital Expenditure	\$ 600,000	\$200,000	\$200,000

* Based on 8-metre low floor cut-away style bus recommended to supply service.

** Vehicle supplied by Milton Transit

STAFFING

The Plan recommends Halton Hills to add five full-time employees for an annual cost of \$423,000 and multiple part-time staff members for an annual cost of \$242,000 to operate the limited fixed-route service, to manage and operate the Universal Access Service, and to maintain the service level on the ActiVan service.

COST SUMMARY

The estimates of annual operating cost and capital expenditure to operate the Universal Access Service, ActiVan, and the limited fixed-route service are showing in Table 22 and Table 23. These estimates assume that the Universal Access Service and the limited fixed-route service will reduce demand for

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

ActiVan, and that more people will live within the fixed-route service coverage area as the population grow. Capital costs include additional vehicles required to operate all the services, and also include costs for a vehicle and storage facility for the ActiVan service and any future fixed-route bus service.

Table 22: Annual operating costs for Universal Access Service (taxi/TNC contracted) + ActiVan (in-house) + Limited Fixed-Route Service

ANNUAL OPERATING COSTS	2020	2024	2028
Universal Service	\$450,000	\$550,000	\$650,000
ActiVan Specialized Service	(\$950,000 - \$1 mil)	(\$900,000 - \$1.1 mil)	(\$850,000 - \$1 mil)
Milton-TPO-Lisgar (Net Cost)	\$400,000	\$400,000	\$590,000
Limited Fixed-Route Service	\$1 mil	\$1 mil	\$1.5 mil
Additional Staffing	\$525,000	\$644,300	\$665,000
Scheduling-Dispatch Software	\$50,000	\$50,000	\$50,000
Bus Stop Signs-Shelters, Maintenance	\$50,000	\$50,000	\$50,000
Total Operating Cost	\$2.5 mil	\$2.7 mil	\$3.5 mil
Universal Service Revenue	\$0	\$0	\$0
ActiVan Revenue	\$200,000	\$200,000	\$150,000
Limited Fixed-Route Revenue	\$360,000	\$360,000	\$520,000
Total Net Operating Cost	\$1.9 mil*	\$2.1 mil*	\$2.8 mil*

** Additional Gas Tax and other subsidies are not included*

Table 23: Capital expenditures for Universal Access Service (taxi/TNC contracted) + ActiVan (in-house) + Limited Fixed-Route Service

CAPITAL EXPENDITURES IN YEAR OF INVESTMENT	2020	2024	2028
Vehicles for ActiVan Service	\$0	\$200,000	\$200,000
Vehicles for Universal Service	\$0	\$0	\$0
Vehicles for Limited Fixed-Route	\$600,000	\$0	\$0
Computer Equipment and Software	\$700,000	\$250,000	\$250,000
Bus Stop Sign & Shelter Parts	\$100,000	\$25,000	\$25,000
Vehicle Storage and Maintenance Facility	\$1.8 mil*	\$10 mil**	
Total	\$3.2 mil	\$10.5 mil	\$475,000

*Environmental clearance and design fees, 2020 – 2022

** Land acquisition, construction, construction management, 2023-2024

LEVEL 4 – ACTIVAN + UNIVERSAL ACCESS SERVICE + EXPANDED FIXED-ROUTE

At this level, fixed-route transit service would be improved to connect to additional destinations and neighbourhoods, or to provide more frequent service, based on higher ridership levels on existing services. The concept is illustrated in Figure 37 and expanded fixed-route network is shown in Figure 38. ActiVan and Universal Access service would remain in place but would be modified to provide more home-to-hub services and less curb-to-curb service in areas where fixed-route transit service is good. Both ActiVan and Universal Access service could be expanded to provide connections to nearby areas of surrounding communities like Brampton and Milton, and connections to important paratransit destinations further afield, like the new Oakville Hospital. Budgets would necessarily require expansion beyond what support the previous level, and the vehicle fleet likely would require expansion as well to account for more routes operating more frequent levels of service. As the demand and ridership grows, standard 30-foot (9.1 metre) or 40-foot (12.2 metre) transit buses similar to those used in surrounding communities could gradually replace the cutaway vehicles on some or all routes, to provide greater capacity and to take advantage of the higher durability and reduced maintenance of standard transit vehicles.

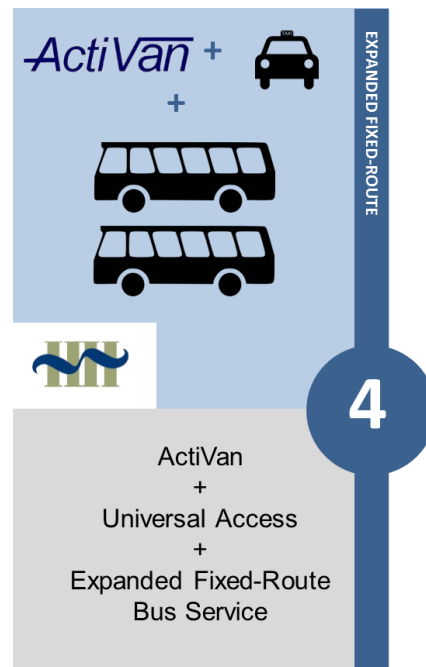


Figure 37: Universal Access Service + Expanded Fixed-Route Network

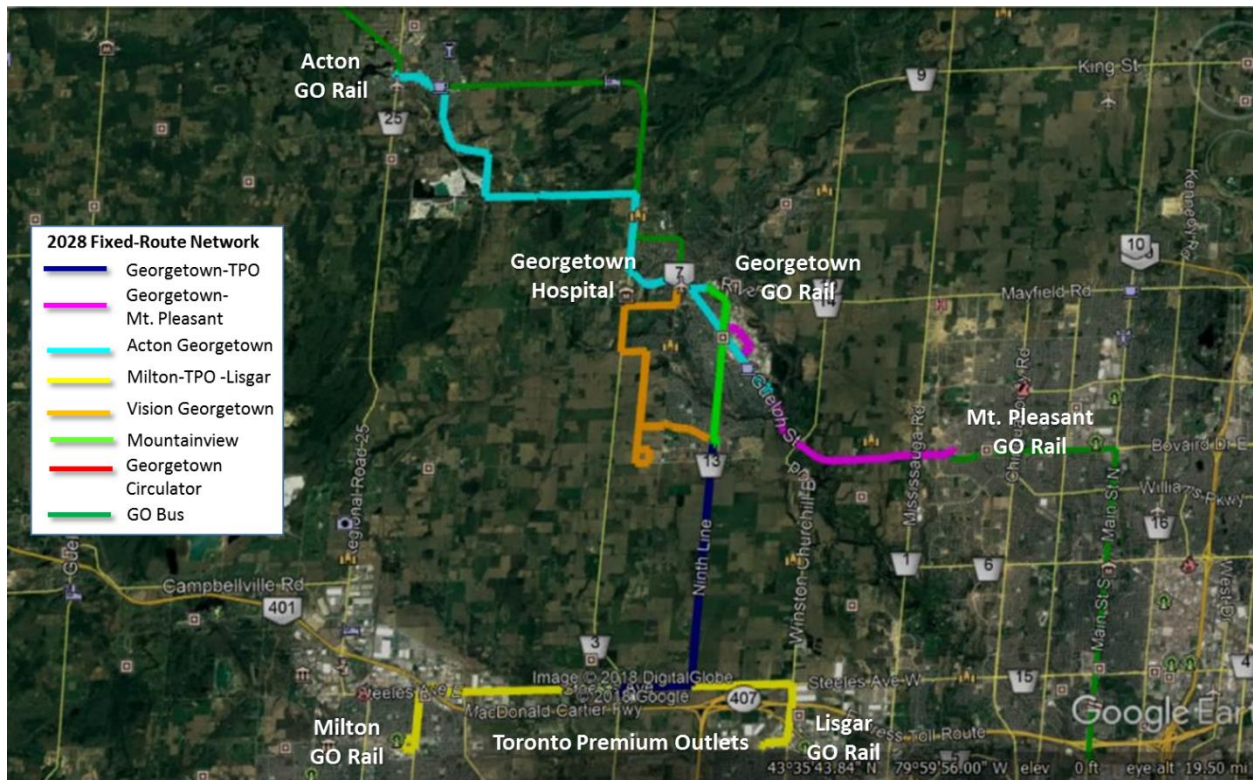


Figure 38: Expanded fixed-route network

ACTON GO – GEORGETOWN GO

This route operates between the Mill Street and Main Street at Acton and the Georgetown GO Station, and stops at the Acton GO Station and Georgetown Hospital in the middle. The route operates bi-directionally on the same street. Figure 39 shows the alignment of the route, and Table 24 shows the ridership and operating cost estimates for 2024, and 2028, and proposed service frequency.

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

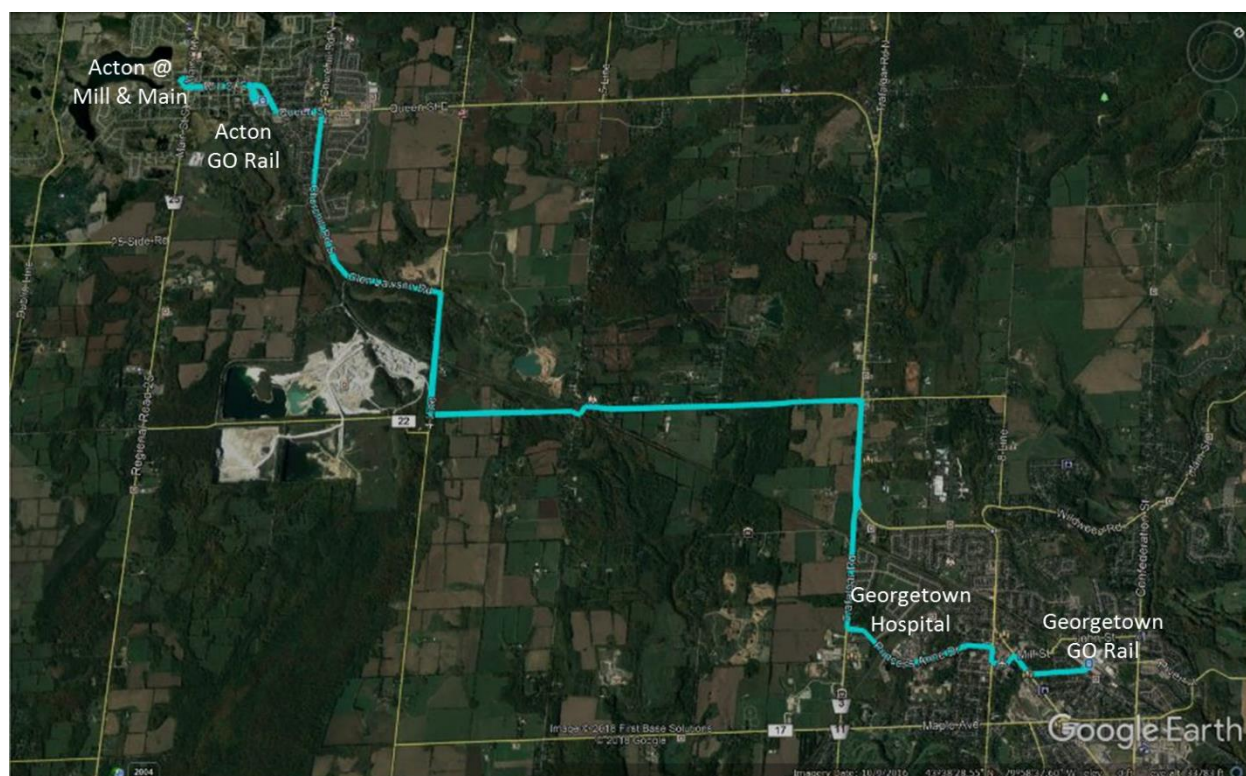


Figure 39: Acton GO - Georgetown GO Route

Table 24: Ridership and operating cost estimates, and proposed service frequency of Acton GO – Georgetown GO Route

ACTON-GEORGETOWN	2024	2028
Passenger Trips:		
Daily	200	600
Annual	83,000	165,000
Annual Operating Cost	\$575,000	\$1.5 mil
Annual Revenue	\$200,000	\$360,000
Annual Net Operating Cost	\$380,000	\$690,000

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Table 25: Ridership and operating cost estimates, and proposed service frequency of Vision Georgetown Route

VISION GEORGETOWN	2024	2028
Passenger Trips:		
Daily	100	300
Annual	28,000	83,000
Annual Operating Cost	\$900,000	\$900,000
Annual Revenue	\$310,000	\$310,000
Annual Net Operating Cost	\$590,000	\$590,000
Service Frequency (mins):		
AM-PM Peak	30	
Weekday Midday, Evening	30	
Saturday (No Sunday)	60	
Weekday Service Day	6 AM – 7 PM	
Saturday Service Day	9 AM – 6 PM	

GEORGETOWN CIRCULATOR

This route operates mostly on Guelph Street, and connects between Georgetown Hospital, Georgetown GO Station, and the Sands of Halton Hills. The route mostly operates bi-directionally on the same street. Figure 41 shows the alignment of the route, and Table 26 shows the ridership and operating cost estimates for 2024, and 2028, and proposed service frequency.

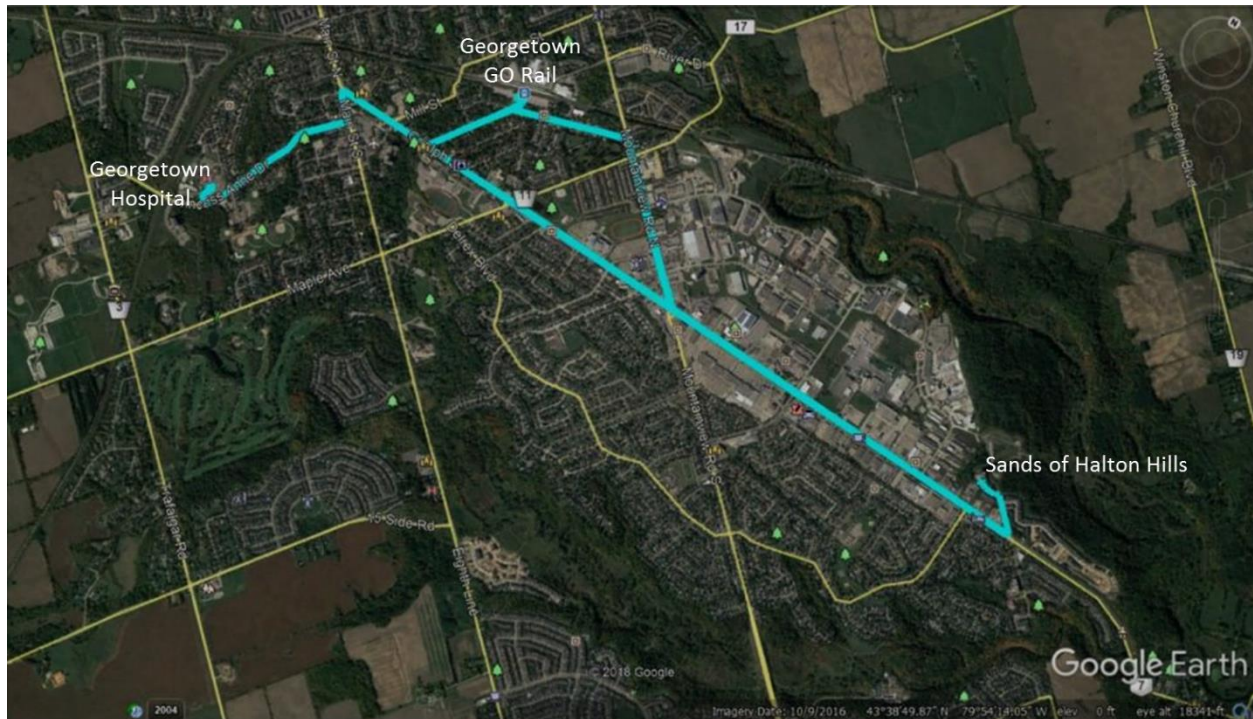


Figure 41: Georgetown Circulator

Table 26: Ridership and operating cost estimates, and proposed service frequency of Georgetown Circulator

GEORGETOWN CIRCULATOR	2024	2028
Passenger Trips:		
Daily	300	400
Annual	83,000	110,000
Annual Operating Cost	\$900,000	\$900,000
Annual Revenue	\$310,000	\$310,000
Annual Net Operating Cost	\$590,000	\$590,000

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Service Frequency (mins):	
Weekday AM-PM Peak	30
Weekday Midday, Evening	30
Saturday (No Sunday)	60
Weekday Service Day	6 AM – 7 PM
Saturday Service Day	9 AM – 6 PM

GEORGETOWN GO – MOUNTAINVIEW

This route operates between the Georgetown GO Station and the Halton Hills Village. The route mostly operates bi-directionally on Guelph Street and Mountainview Street. Figure 42 shows the alignment of the route, and Table 27 shows the ridership and operating cost estimates for 2028, and proposed service frequency.

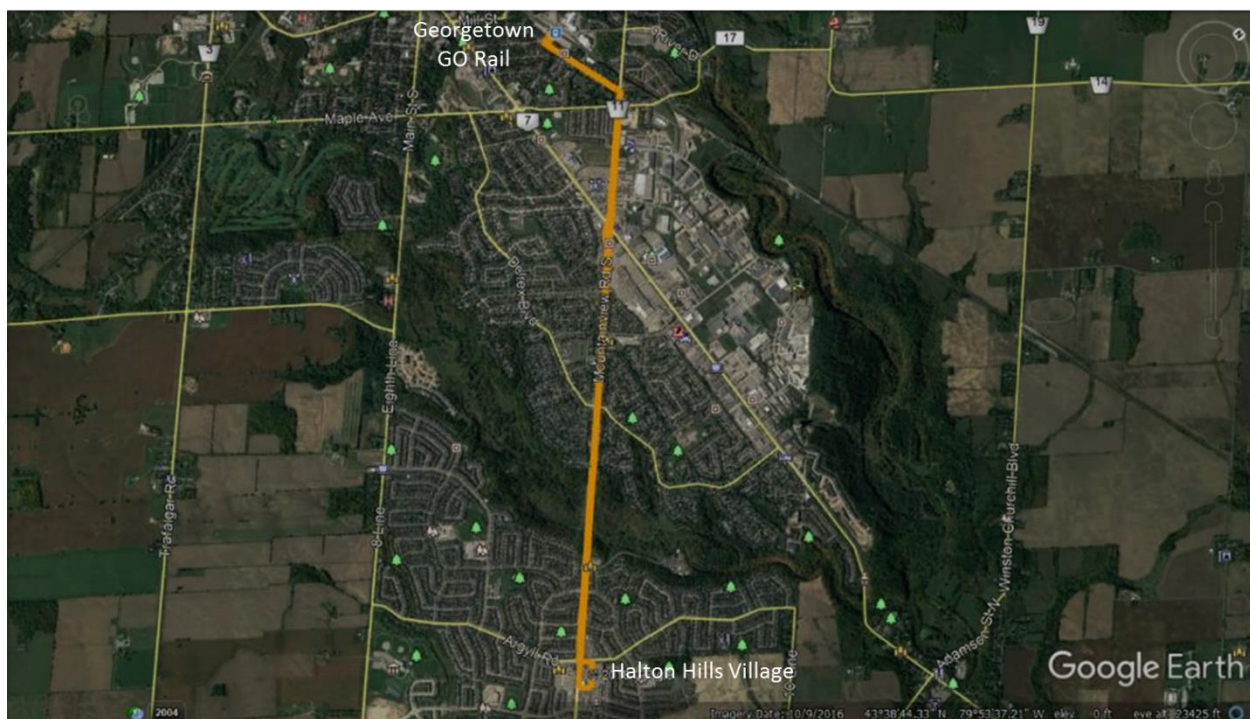


Figure 42: Georgetown GO - Mountainview Route

Table 27: Ridership and operating cost estimates, and proposed service frequency of Georgetown GO – Mountainview Route

GEORGETOWN - MOUNTAINVIEW		2028
Passenger Trips:		
Daily		600
Annual		165,000
Annual Operating Cost		\$900,000
Annual Revenue		\$310,000
Annual Net Operating Cost		\$590,000
Service Frequency (mins):		
Weekday AM-PM Peak		30
Weekday Midday, Evening		30
Saturday (No Sunday)		60
Weekday Service Day		6 AM – 7 PM
Saturday Service Day		9 AM – 6 PM

Universal Access Service and the Expanded Fixed-Route Network will further reduce demand for ActiVan Specialized Transit. As fixed route service coverage improves, the population living beyond transit access will shrink even more, and demand for Universal Access Service will decrease. Table 28 on the next page shows the estimated annual operating cost of Universal Access Service, with an expanded fixed-route network.

Table 28: Universal Access Service ridership and costs estimates

	2020	2024	2028
Universal Service Trips	44,000	24,000	26,000
Cost Per Trip	\$10 per trip		
Annual Universal Service Operating Cost	\$450,000	\$250,000	\$300,000

VEHICLE REQUIREMENTS

Table 29 below shows the estimated vehicle requirements to operate the expanded fixed-route network and to maintain service level on the ActiVan service. As the demand and ridership grows, Halton Hills could gradually replace the current cutaway vehicles with standard 30-foot (9.1 metre) or 40-foot (12.2 metre) transit buses on some or all routes, to provide greater capacity and to take advantage of the higher durability and reduced maintenance of standard transit vehicles. In addition, Halton Hills should consider replacing vehicles based on their designed useful life. For example, the design useful life of an eight-metre cutaway-style bus is 7-8 years, or 300,000 kilometres, whichever comes first.

Table 29: Vehicle requirements to operate the expanded fixed-route network

	2020	2024	2028
Milton-TPO-Lisgar**	N/A	N/A	N/A
Georgetown-Mt. Pleasant	1		
Georgetown-TPO via Mountainview	1		
Acton Connector		1	1
Georgetown Circulator		2	
Vision Georgetown		2	
Georgetown Mountainview		2	
Spares	1		2
ActiVan Service		1	1

Total Required in Year	3	8	4
Estimated Cost Per Vehicle	\$200,000*		
Vehicle Capital Expenditure	\$ 600,000	\$1.6 mil	\$800,000

* Based on 8-metre low floor cut-away style bus recommended to supply service.

** Vehicle supplied by Milton Transit

STAFFING

The Plan recommends Halton Hills to add thirteen full-time employees for an annual cost of \$1,378,000 and multiple part-time staff members for an annual cost of \$272,000 to operate the limited fixed-route service, manage and operate the Universal Access Service, and to maintain the service level on the ActiVan service.

COST SUMMARY

The estimates of annual operating cost and capital expenditure to operate the Universal Access Service, ActiVan, and the expanded fixed-route service are showing in Table 30 and Table 31. These estimates assume that the expanded fixed-route service will further reduce demand for both ActiVan and the Universal Access Service, and that more population growth will occur within the fixed-route service coverage area. Capital costs include additional vehicles required to operate all the services, and also include costs for a vehicle and storage facility for the ActiVan service and fixed-route bus service.

Table 30: Annual operating costs for Universal Access Service (taxi/TNC contracted) + ActiVan (in-house) + Expanded Fixed-Route Service

ANNUAL OPERATING COSTS	2020	2024	2028
Universal Service	\$450,000	\$250,000	\$300,000
ActiVan Specialized Service	(\$750,000 - \$900,000)	(\$700,000 - \$850,000)	(\$700,000 - \$850,000)
Milton-TPO-Lisgar (Net Cost)	\$400,000	\$400,000	\$590,000
Expanded Fixed-Route Service	\$3.4 mil	\$3.4 mil	\$5.3 mil
Additional Staffing	\$1.2 mil	\$1.4 mil	\$1.65 mil
Scheduling-Dispatch Software	\$100,000	\$100,000	\$100,000
Bus Stop Signs-Shelters, Maintenance	\$100,000	\$100,000	\$100,000
Total Operating Cost	\$5.65 mil	\$5.65 mil	\$8 mil

TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

Universal Service Revenue	\$0	\$0	\$0
ActiVan Revenue	\$150,000	\$150,000	\$150,000
Expanded Fixed-Route Revenue	\$1.2 mil	\$1.2 mil	\$1.8 mil
Total Net Operating Cost	\$4.3 mil*	\$4.3 mil*	\$6 mil*

** Additional Gas Tax and other subsidies are not included*

Table 31: Capital expenditures for Universal Access Service (taxi/TNC contracted) + ActiVan (in-house) + Expanded Fixed-Route Service

CAPITAL EXPENDITURES IN YEAR OF INVESTMENT	2020	2024	2028
Vehicles for ActiVan Service	\$0	\$200,000	\$200,000
Vehicles for Universal Service	\$0	\$0	\$0
Vehicles for Expanded Fixed-Route	\$600,000	\$1.4 mil	\$600,000
Computer Equipment and Software	\$700,000	\$250,000	\$250,000
Bus Stop Sign & Shelter Parts	\$200,000	\$50,000	\$50,000
Vehicle Storage and Maintenance Facility	\$1.8 mil*	\$10 mil**	
Total	\$3.3 mil	\$11.9 mil	\$1.1 mil

**Environmental clearance and design fees, 2020 – 2022*

*** Land acquisition, construction, construction management, 2023-2024*

RECOMMENDATIONS

Through a comprehensive service review, market analysis and extensive public consultation, the following service recommendations were developed to meet Halton Hills' goals in providing public transit to meet today and future transit demands.

TRANSIT SERVICE RECOMMENDATIONS

Based on the assessment of the alternatives or phases presented above, it is recommended that the Town of Halton Hills initiate the planning and budgeting processes for the introduction of the Universal Access Service in 2020. This will involve a number of actions required to develop a request for proposal for a private sector partner, and selection of that partner. Development or entering into an operational agreement with a ride-share transit 'app' developer will also be required.

The Town should also conduct detailed negotiations with the Town of Milton regarding planning for and cost allocation regarding the Steeles Avenue fixed-route bus service between Milton GO Station, Toronto Premium Outlets and Lisgar GO Station.

COMMUNICATION & MARKETING STRATEGY RECOMMENDATIONS

The Town of Halton Hills is embarking on a transformative program to shift community thinking and activity around transit. The Transit Service Strategy defines infrastructure and service recommendations that will achieve the community growth objectives; however, a comprehensive communication, branding and education strategy is also needed, to support future improvements, maximize the return on this investment in transit, and to help encourage societal change and up-take.

A typical strategy or master planning process considers the "five Es". The Five E's are used to provide the foundation for a stronger and more widely accepted strategy and to help guide implementation and interest. A strategy that addresses the Five E's makes reference to or provides recommendations around:

- Engineering – including the design of infrastructure and services;
- Encouragement - the implementation of initiatives which increase interest and use in the system;
- Education – the implementation of programs to increase the level of understanding of the community around specific issues;
- Enforcement – the understanding and application of safe practice based on legislation and policies; and
- Evaluation – the monitoring and management of the system as it is implemented and the adaptation as needed to address concerns.

Following the completion of the Transit Service Strategy study and at the time the Town begins to pursue implementation, there will need to be a concurrent initiative to address the necessary encouragement and educational component through a comprehensive communication, outreach and branding strategy. This reflects the reality that many Town residents may not be familiar with use of transit systems.

To help guide the Town with next steps, an overview of typical stages / tasks has been identified below:

1. Develop & Design a Communications & Marketing Strategy – work with internal staff and external consultants (as needed) to develop and design a transit specific communication and marketing strategy including but not limited to target audiences, key challenges and solutions, methods of outreach and promotion and roles and responsibilities.
2. Develop Artwork, Logos & Collateral – A look and feel should be developed to help brand the Halton Hills transit initiative and artwork should be developed to support those initiatives building on ideas generated through the transit service strategy.
3. Determine a Campaign Schedule and Milestones – Work with staff to determine a work program to plan for and implement the communication and marketing program including key milestones and community targets.
4. Coordinate Media-buys & Material Distribution – Work with providers to acquire the promotional materials as well as other media opportunities.
5. Monitor & Evaluate Program in an Annual or Bi-Annual Basis – Identify performance measures specific to public outreach and communication and identify a method of tracking measures on an annual or bi-annual basis.

Prior to the development and launch of any communication and branding exercise there should be an effort made by the Town to pursue external input in the form of public and / or stakeholder focus groups or workshop sessions. It would be in the best interest of the Town to utilize external facilitation expertise to help guide participants through a working session to help inform the identification of a preferred “look and feel” as well as methods for outreach and promotion. This not only ensures that the public will resonate with the campaign but will also establish a foundation / network of community leaders and champions who could support the Town in the future.

A strategy of this scope and scale will require resources – both budget and staff. To facilitate these next steps, the Town of Halton Hills should:

- a) Define and post for an additional FTE position to support transit staff in the development and execution of the transit specific communication and outreach strategy;
- b) Pursue the development of a transit specific website as a central portal for all transit related information and the allocation of approximately \$5,000 to design and manage the website;
- c) Allocate an annual budget of \$10,000 for transit related promotion and outreach materials and incentives for the first couple of years of promotion and outreach; and
- d) Identify staff members to undertake the monitoring program and to report back to senior staff and Council.

ADDITIONAL RECOMMENDATIONS

The transit strategy requires more than just vehicles and service planning – it must consider how transit functions in the Town. Towards that goal, the following actions are also recommended:

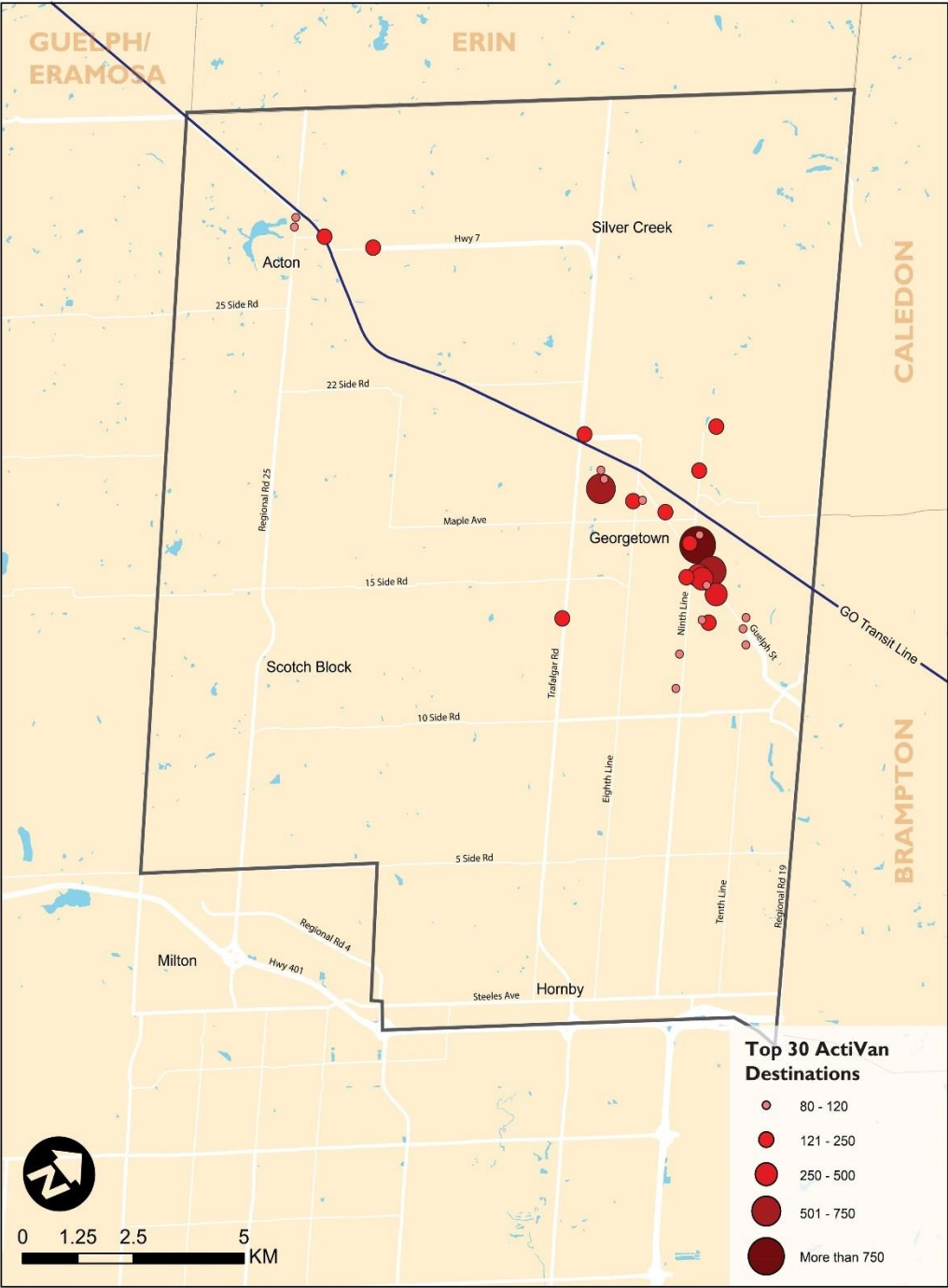
1. Monitor transit ridership annually, to identify when to introduce fixed-route services, and which services should be implemented, based on Universal Access Service performance and service standards;
2. Monitor the progress of bus technology and re-evaluate the potential for alternative fuel vehicles as the cost and performance gap narrows between diesel and alternative fuel vehicles;
3. Initiate planning for a mobility hub in the vicinity of Steeles Avenue and Trafalgar/Ninth Line. In the future, this will become a key transfer point for Halton Hills and regional services, and it would be advisable to

create a land use, urban design and transportation plan that builds on the intersection of transit services to create a hub for transit-oriented development, in accordance with the Metrolinx Mobility Hub Guidelines. There should be consideration for private sector participation;

4. Establish guidelines for population + employment density on which to base provision of fixed route service. Walking distance guidelines to a transit stop are not recommended at this point;
5. Initiate a process for defining transit stop locations and appropriate infrastructure for these stops, for any fixed route services to be implemented. This would include pads for accessible bus stops and shelters, including lighting. The Town should consider entering into a third-party contract for provision of the shelters; and
6. The Town should initiate discussions with Metrolinx regarding the potential use of PRESTO when the next generation of the fare collection system is rolled out in 2021-2022;
7. As new communities develop within Halton Hills, incoming residents should be proactively supplied with information on the transit service, as part of a Transportation Demand Management for these communities. Also, define fare discounts to allow developers to provide discounted fare media to households and businesses in their developments; and
8. Halton Hills should evaluate the potential for developer impact fees to acquire equipment and infrastructure and support new or expanded services, and implement these in the Development Charges By-law.

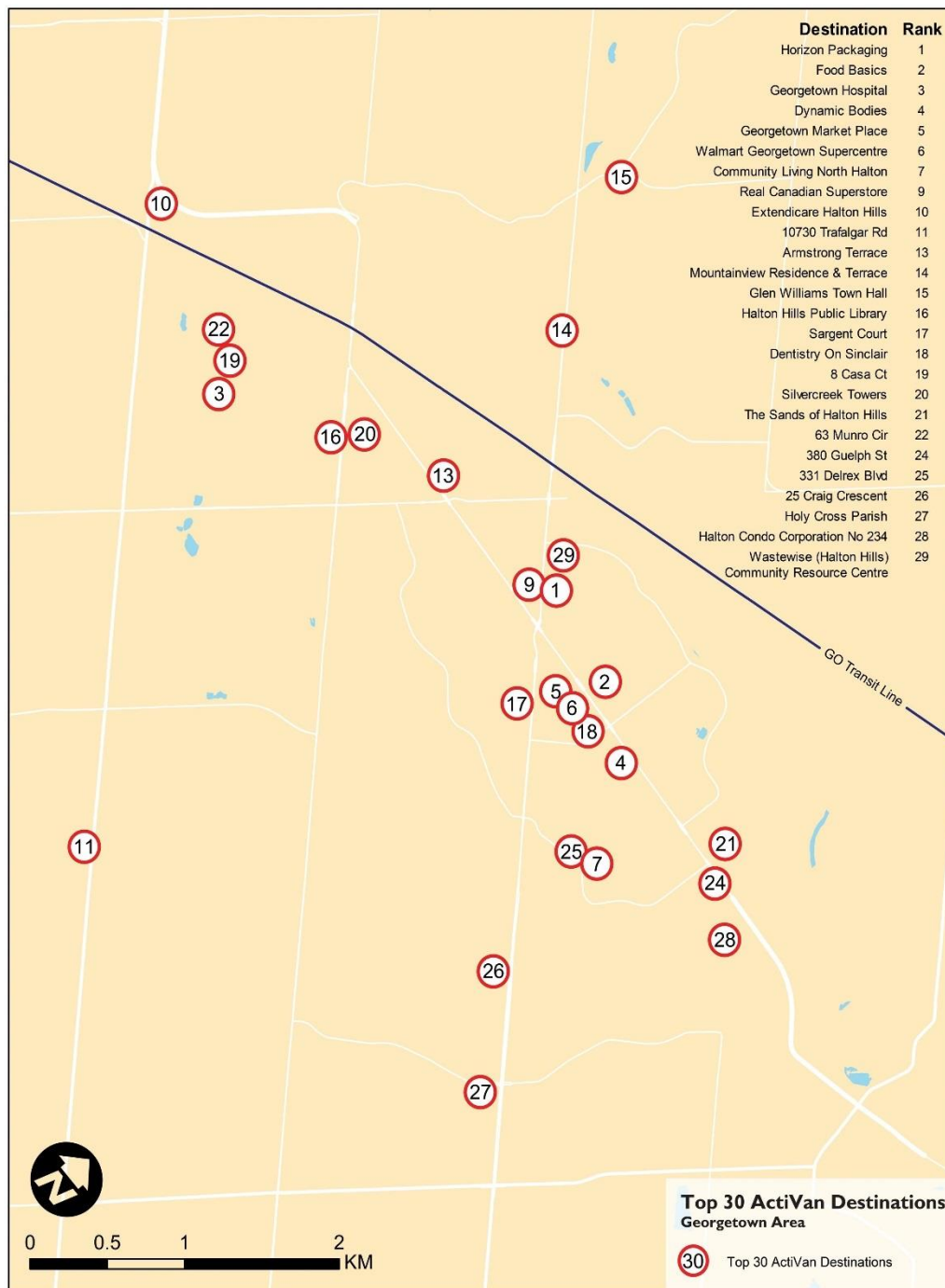
APPENDIX 1 – ACTIVAN POPULATION DESTINATIONS

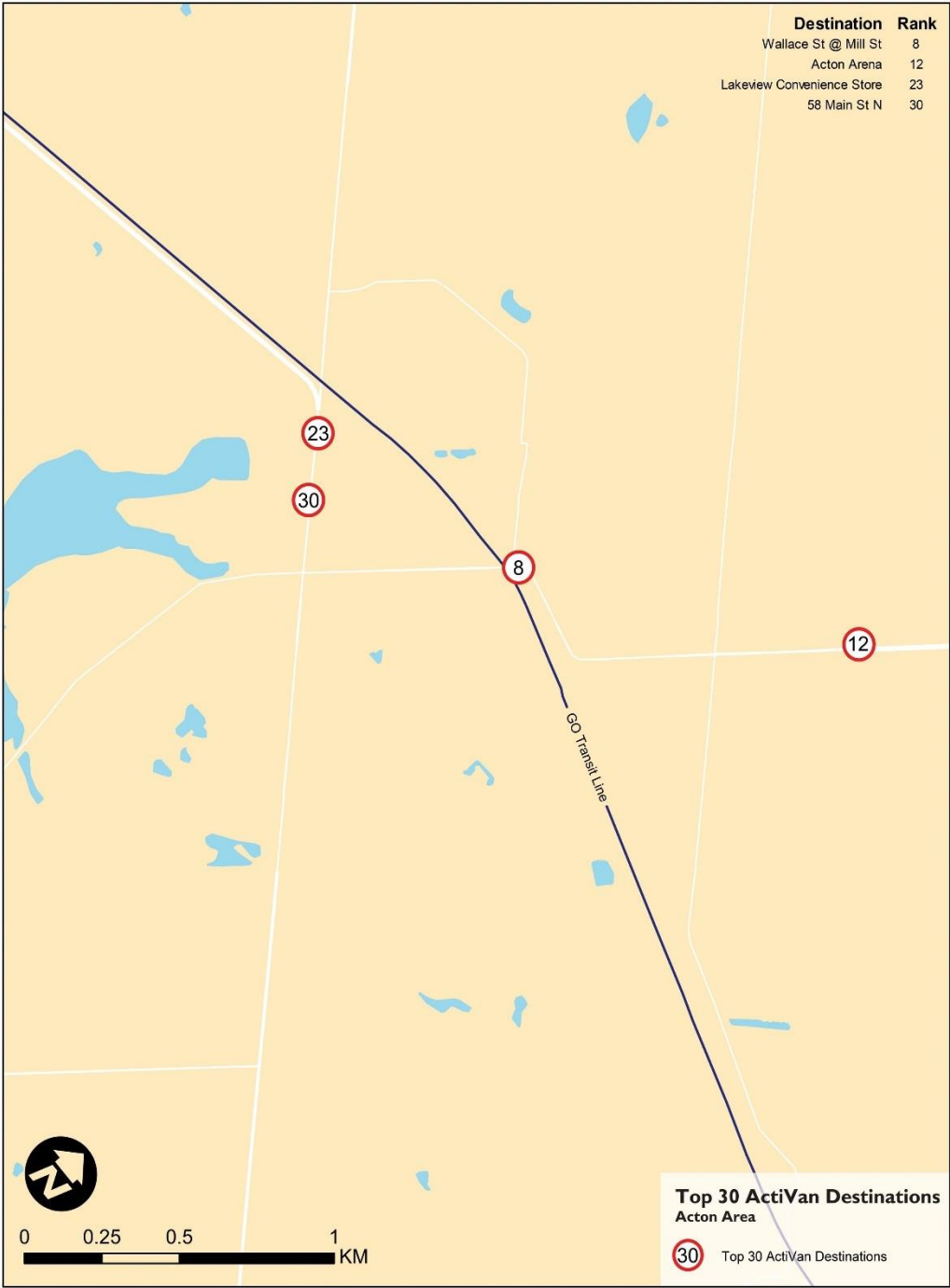
This appendix includes maps showing some of the most popular destinations and their corresponded origins in Halton Hills, for ActiVan customers.



TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

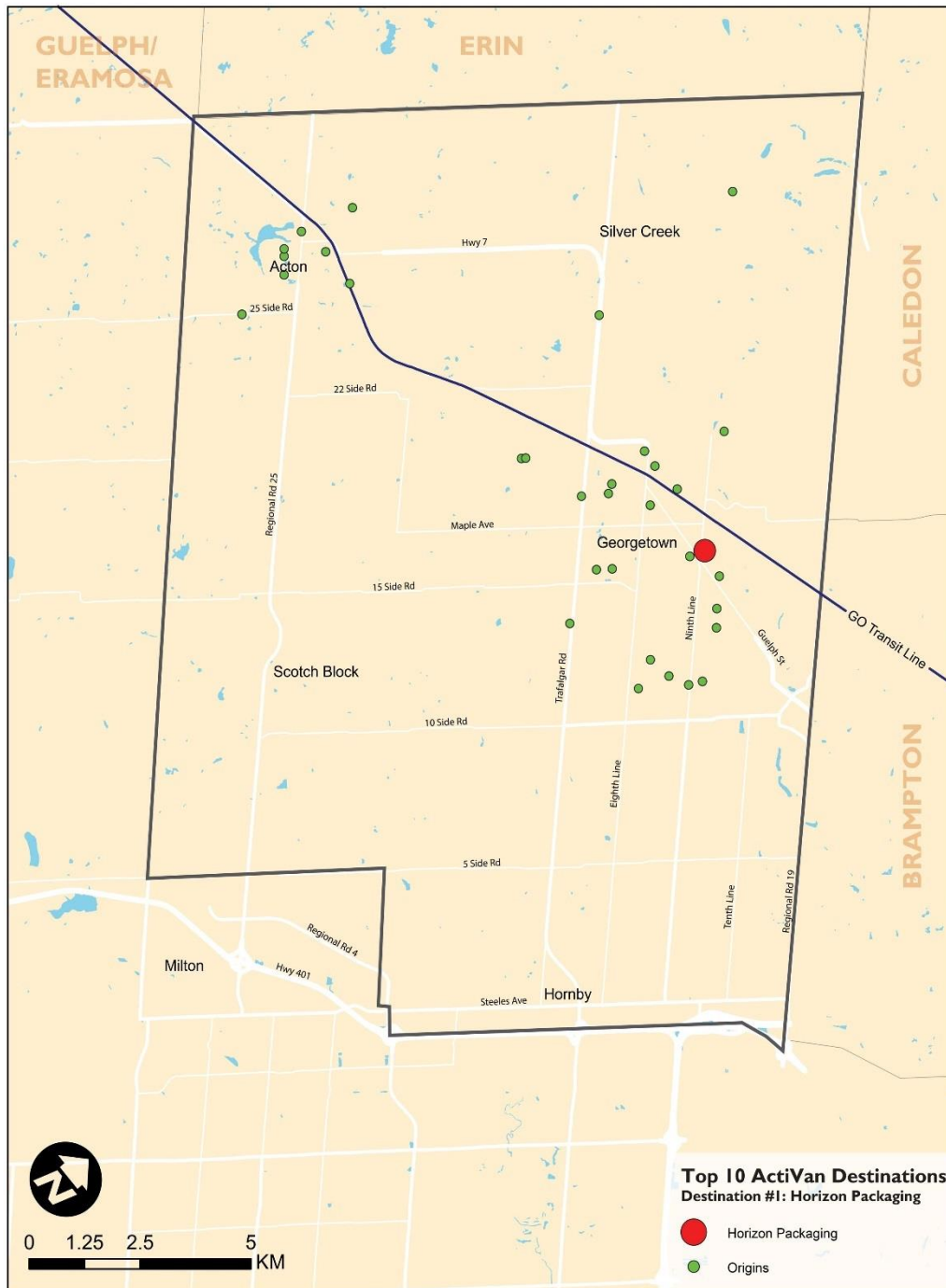
JUNE 2019

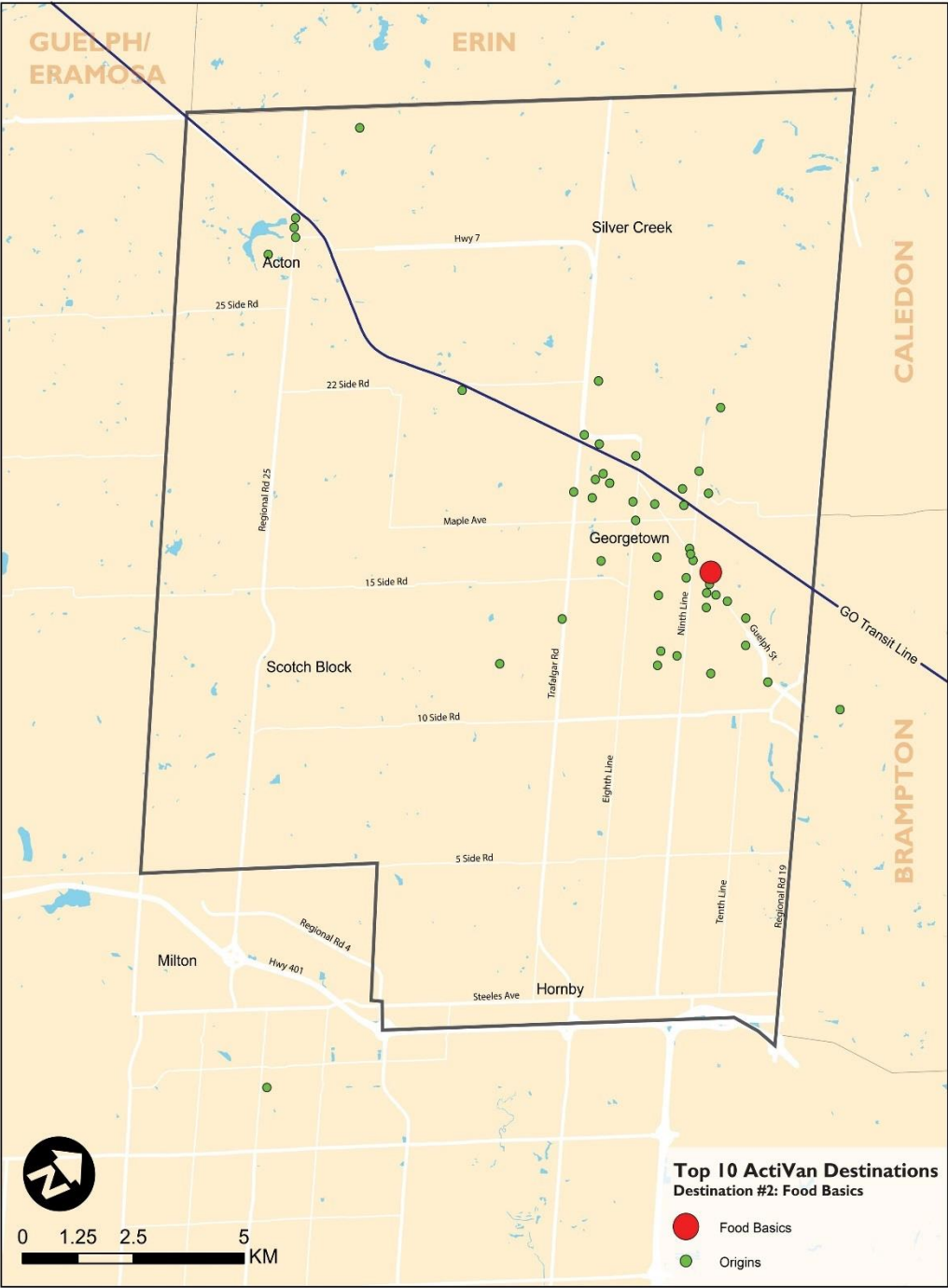




TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

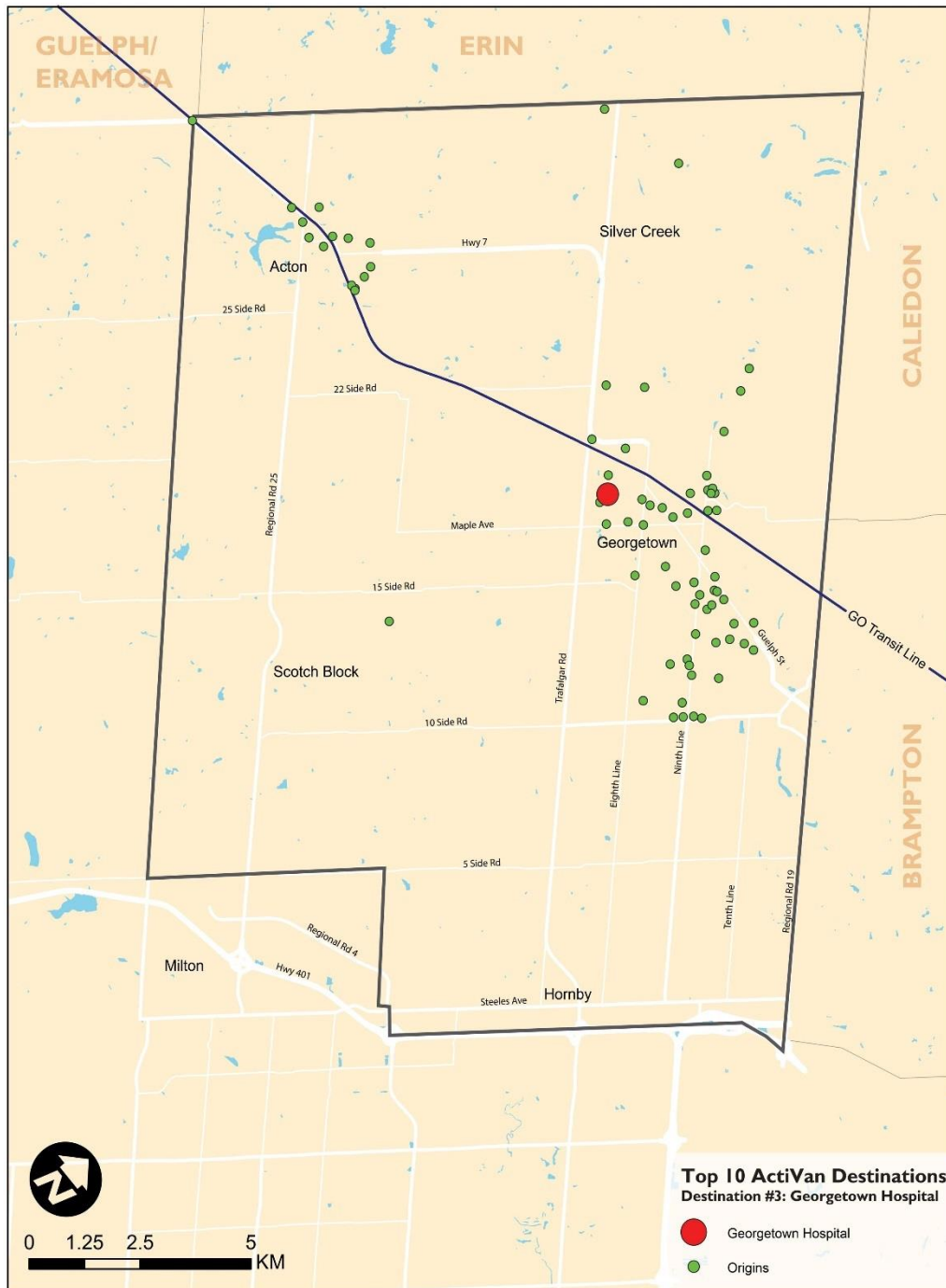
JUNE 2019

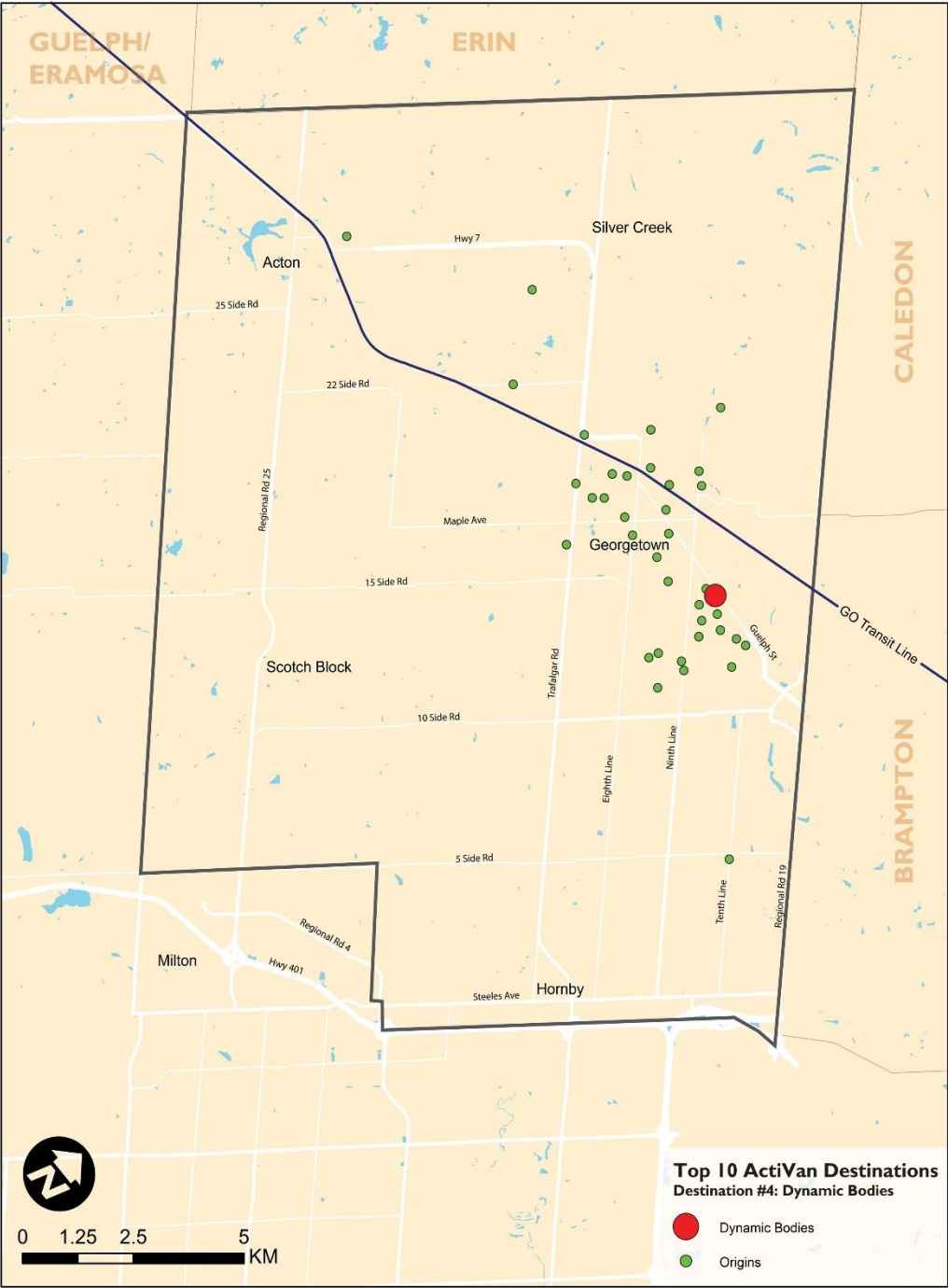




TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

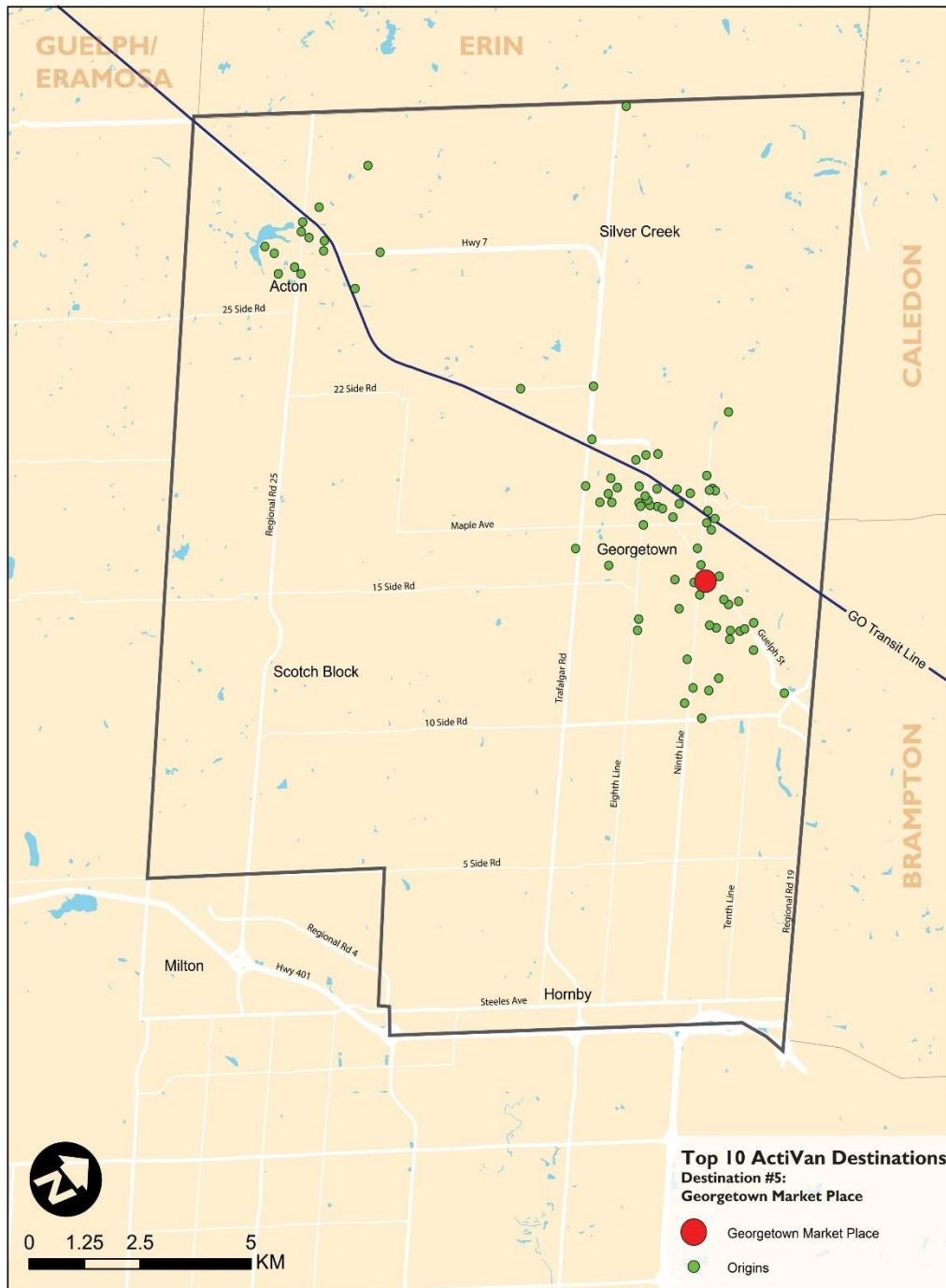
JUNE 2019

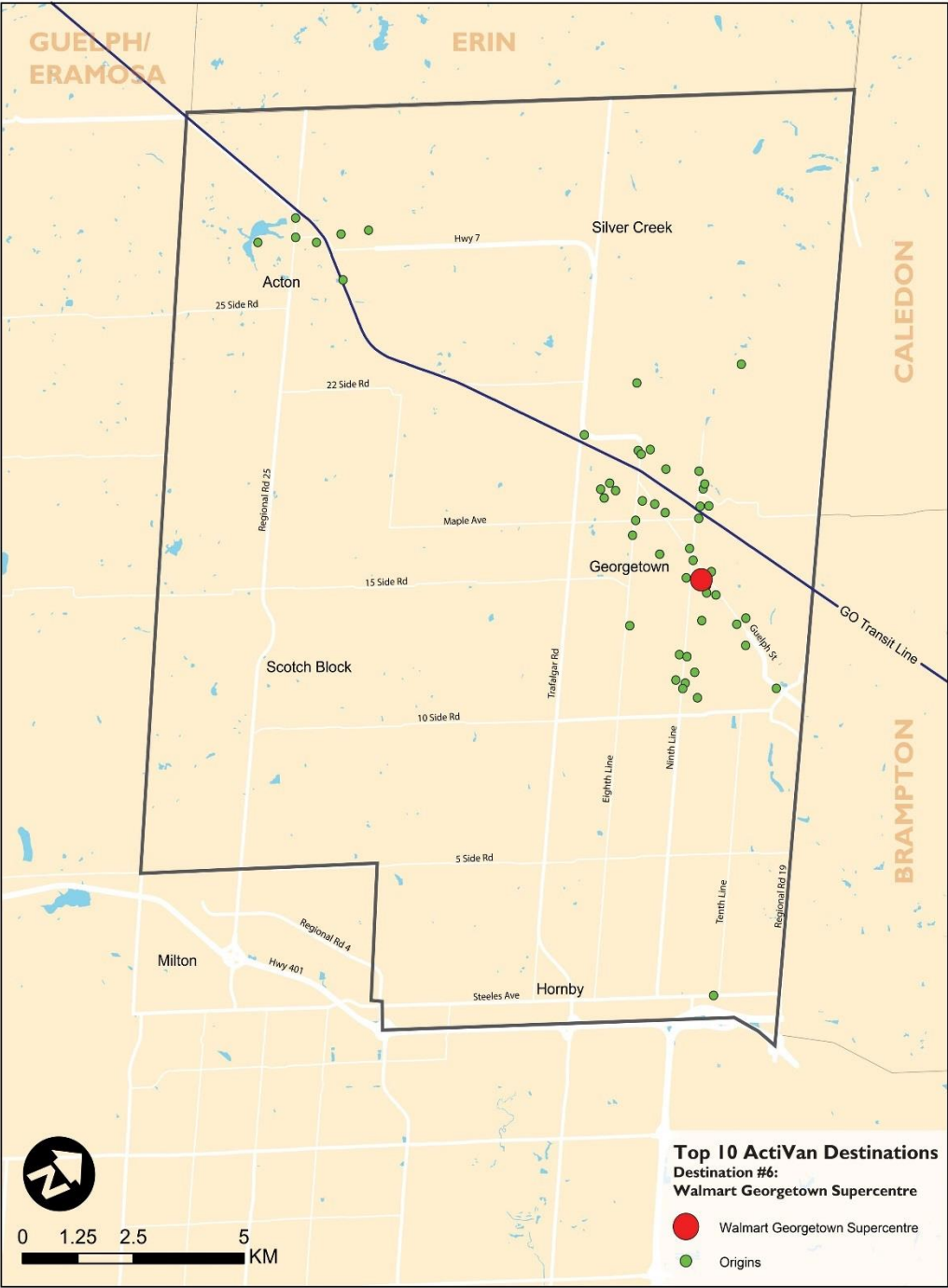




TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019





TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019





TOWN OF HALTON HILLS TRANSIT SERVICE STRATEGY

JUNE 2019

