

APPENDIX

EXHIBITS A - G

EXHIBIT A

2.0 STATE OF THE REGION



The Region of Halton is located in the western edge of the Greater Toronto Area, encompassing a land area of approximately 967 square kilometres with a 25 kilometre frontage along Lake Ontario. The Region is comprised of four municipalities that vary in size, population, and character; they are the City of Burlington, the Town of Oakville, the Town of Halton Hills, and the Town of Milton. The City of Burlington and the Town of Oakville make up the urban area to the south of the Region, while the Town of Halton Hills and Town of Milton make up the largely rural area in the north end of the Region.

2.1 Year 2001 (Current) Conditions

Population

In 2001, the Region of Halton had a population of 375,229. The largest concentration of population in the Region is in Burlington and Oakville respectively, making up 79 percent of the population of Halton, while encompassing only 34 percent of the land area. Within these two municipalities, most of the population is concentrated south of Dundas Street. Within the Town of Halton Hills and Milton, the majority of the population is clustered around smaller urban areas, including urban Milton, Georgetown, and Acton.

Between 1996 and 2001, the Region of Halton grew in population by approximately 10 percent. The largest percent growth in the municipalities of Halton occurred in the Town of Halton Hills, which grew by 14 percent. The largest absolute growth occurred in the Town of Oakville, which grew by over 16,000 (or 13 percent). The Town of Milton experienced a slight population decline over the five-year period. However, recent population forecasts suggest a reverse in this trend, with the population of Milton expected to nearly triple to 85,000 by the year 2016. **Table 1** presents the growth in population in the Region by municipality. **Table 2** presents the anticipated population by 2021.

Table 1 - Population Growth Between 1996 and 2001

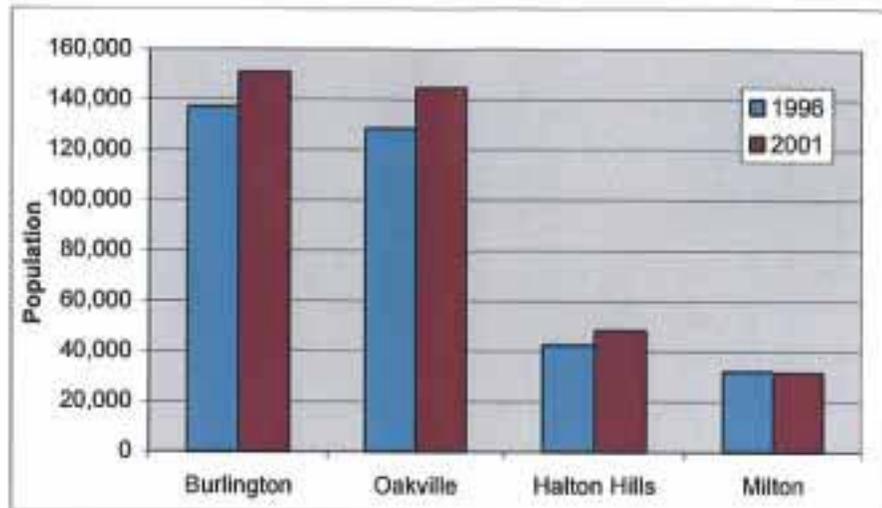
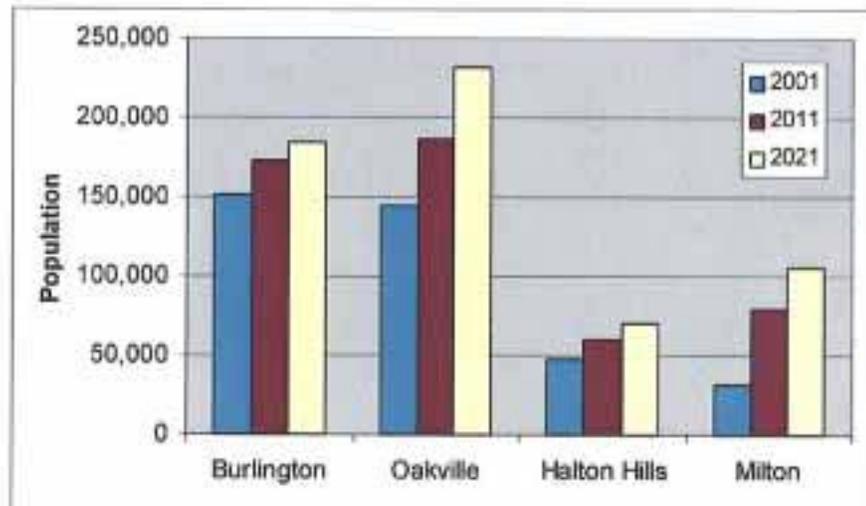


Table 2 - Population Growth to 2021



Employment

Table 3 outlines population and employed labour force statistics by municipality, based on current data.

Table 3 - Current Population

Municipality	Population (2001)	Employed Labour Force (2001)
Burlington	150,836	77,130
Halton Hills	48,184	15,860
Milton	31,471	21,910
Oakville	144,738	74,040
TOTAL	375,229	188,940

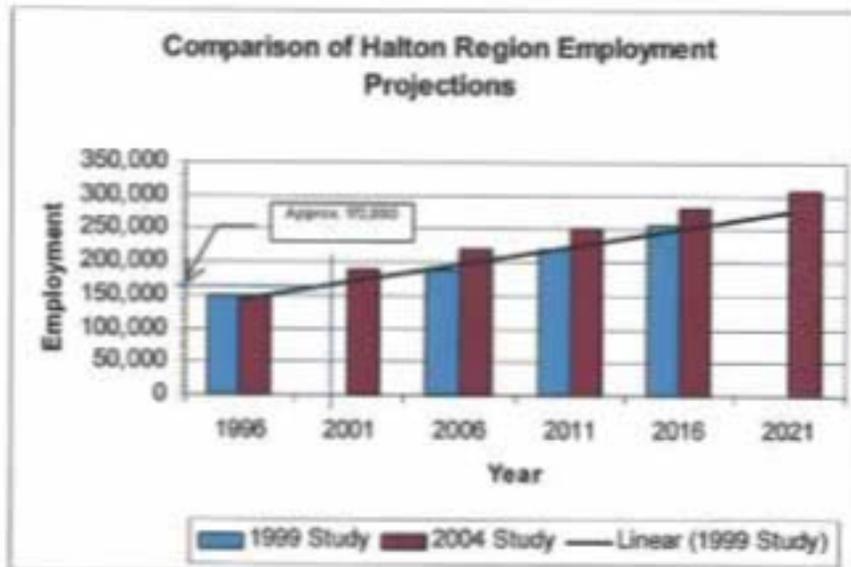
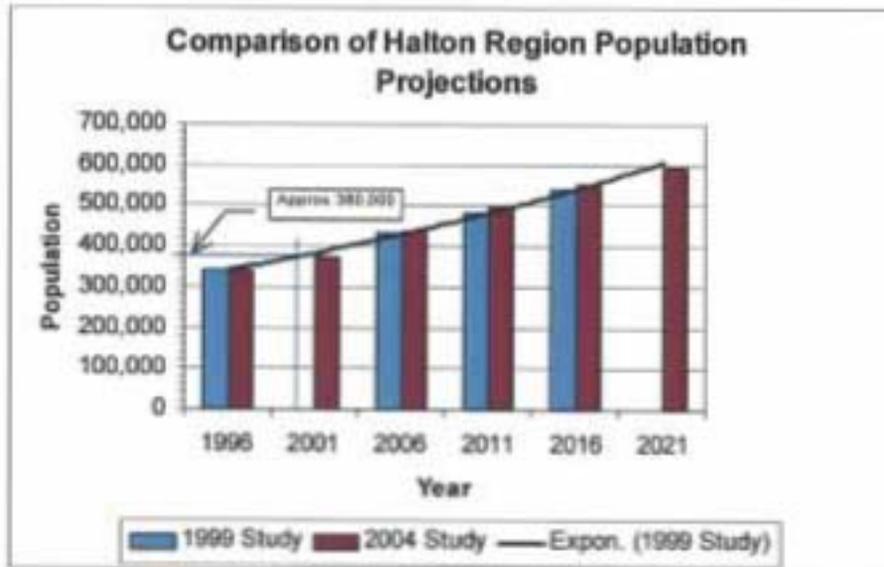
A key factor to the development of the transportation strategy is the "quality" of the population and employment projections for the study planning horizon and interim periods. The statistics used in the analysis are based on the *Best Planning Estimates of Population, Occupied Dwelling Units, and Employment, 2002-2021* approved by Regional Council and the local municipal Councils.

To confirm the confidence in these statistics, the 1999 equivalent to this study was revisited in terms of its projections and how these compared to actuals.

"The Halton Functional Road Network and North Halton Transportation Study", May 1999, contained population and employment projections for the years 2006, 2011, and 2016. Its base year was 1996. *Figure 1* illustrates the comparison of the total Regional population and employment projections for the 1999 and 2004 (HTMP) transportation studies. Since the 1999 Study did not have data for 2001, trend lines were developed for the population and employment projections to estimate the 2001 values. The population projections for the 1999 Study fit an "exponential" trend line that, when applied, yielded a 2001 population value of approximately 380,000. Compared to the 2001 data used in this study, the estimates back in 1999 were "on-the-mark" (~380,000 estimated for 2001 vs. 375,229 actual). The employment projections fit a more "linear" trend. Applying this trend yielded approximately 70,000 employment for 2001. Actual data for 2001 indicates a regional employment force of approximately 188,940 (a variance of approximately 10%).

Based on this comparison, one may conclude the projections are reasonable. This "looking back" and checking is one of the key reasons why master transportation plans need to be conducted every five years.

Figure 1 – Comparison of Population and Employment Estimates and Actuals



Roadways

The Region of Halton contains a network of roads from Provincial freeways to local roads. The Provincial freeway network consists of:

- Highway 401 - running east-west through Halton Hills and Milton, between Highway 6 and the City of Mississauga;
- The Queen Elizabeth Way (QEW) - running east-west through Burlington and Oakville, between Hamilton and Mississauga;
- Highway 407 electronic toll route (ETR) - running primarily east-west in Burlington, Oakville, and Halton Hills, between Hamilton and Mississauga; and
- Highway 403 - spans the southern limits of the Region – east/west through the City of Burlington and the Town of Oakville and then north/south along the eastern boundary of Oakville to Highway 407. The section between the Freeman Interchange and the east limit of Oakville, commonly referred to as the "QEW" is actually QEW/403 – as these facilities run concurrently in this section of the Region.

The province also has jurisdiction of a number of highways that function as arterial roads. These include:

- Highway 7 running primarily east-west in Halton Hills between Guelph and Brampton; and
- Highway 6 running north-south in Burlington between the QEW and Highway 5.

The Region of Halton is responsible for maintaining and operating the Regional Road System for the transport of goods and people in a safe and efficient manner as well as delivering physical improvements to the Regional Road system that meet growth needs and improve the level of service. The Regional Road Network connects both rural and urban centres to each other as well as the Provincial Highway System. The primary east-west Regional arterials include Dundas Street through Burlington and Oakville; and Derry Road and Steeles Avenue through Milton. The primary north-south Regional arterials include Regional Road 25, Trafalgar Road and Guelph Line. These roadways provide connectivity to Highways 7, 401, 407 and the QEW/403.

"State of the Region"

The 2003 *Halton State of Regional Road System Report* identifies several congested corridors during the peak periods. Congestion was determined by taking the average volume of traffic during the six busiest hours of the counting period (7:00 a.m. to 7:00 p.m.) compared to the capacity of the roadway in that location.

The majority of these congested corridors are east-west reflecting the dominant travel pattern between Halton Region and the City of Mississauga, Brampton and Toronto. Most of the north-south roads that are congested are short segments that lead to primary east-west routes.

2.2 Transit

The Region of Halton does not operate a transit service; although it is actively promoting and provides the necessary infrastructure to accommodate this service as the majority of transit routes utilize the Regional road network of major arterials. Three local municipalities Burlington, Milton and Oakville offer transit service in the Region of Halton. The following briefly describes the transit service offered in each of these municipalities.

Oakville Transit

Oakville Transit is Halton's largest system, operating 35 standard buses, 22 low floor buses, and 3 community buses (community buses are low-floor small vehicles aimed at providing service to the elderly).

The main transit terminal in the system is located adjacent to the Oakville GO station, which provides convenient connections to GO Transit and VIA Rail. Oakville also operates under the GO Fare Integration Program. The system service area is concentrated on the urban area of Oakville, south of Dundas Street, with inter-municipal connections to Burlington Transit and Mississauga Transit.

Oakville also operates a door-to-door Car-a-Van service for passengers unable to use the regular system.

Burlington Transit

Burlington Transit operates Halton's second largest transit system. According to statistics published in CUTA's 2001 Canadian Transit Fact Book, Burlington Transit operates 32 active buses and 13 community buses carrying a ridership of approximately 1,540,700 annual revenue passengers. The service operates seven days a week, with reduced service on weekends. Burlington offers a variety of services, from base routes running seven days a week primarily along major arterials, local routes which serve lower density corridors at lower headways, and feeder routes which connect to the GO Transit stations. During off-peak hours, Burlington Transit operates a Dial-a-Ride service in areas where ridership is low. This is a demand responsive service that is fully integrated with Burlington Transit's regular service. Burlington also offers direct connections into Oakville and Hamilton under service and fare agreements with these municipalities, allowing passengers to pay single fare for inter-municipal service.

Burlington Transit also operates a door-to-door "Handivan" and "Taxi-Script" for qualified passengers.

Milton Transit

Milton operates a small Dial-a-bus service, GO feeder, and school bus service within the urban area of Milton. The Dial-a-bus serves the area bounded by Highway 401, Derry Road, Thompson Road and Bronte Street. In addition, it also serves Milton Memorial Arena, Milton District Hospital and the Milton Leisure Centre.

Milton also operates a school bus service to serve high school students within the urban area of Milton and an accessible van service for qualified passengers.

Halton Hills

Halton Hills does not currently operate a transit service. It does operate a curb-to-curb "Activan" service for qualified individuals.

GO Transit

GO Transit is the interregional transit system that operates commuter train and bus services centred on the Greater Toronto Area, with operations extending into Hamilton, Orangeville, Guelph, and Barrie.

Within the Region of Halton, GO Transit provides modern commuter rail and bus service to the City of Toronto and other destinations in the Greater Toronto Area and City of Hamilton from Burlington, Halton Hills, Milton, and Oakville.

GO Transit statistics in Halton Region include 27,044 daily passengers on the rail services and 1,510 daily passengers on the bus services.

GO Rail Service

Three GO Rail lines provide services within Halton Region:

- Lakeshore West GO Rail line;
- Georgetown GO Rail line; and
- Milton GO Rail line.

The **Lakeshore West GO Rail line** is GO Transit's most frequent and used service. It provides two-way, all-day east-west service along the Lakeshore between the City of Hamilton and Union Station in downtown Toronto.

There are 5 GO Train stations on this line within Halton Region: Aldershot, Burlington, Appleby, Bronte, and Oakville.

The **Milton GO Rail Line** provides weekday peak-period, peak direction train services between downtown Milton and Union Station through the City of Mississauga supplemented by train-bus services.

The Milton GO station is the only station within Halton located on this line.

The **Georgetown GO Rail Line** provides weekday peak-period, peak direction train services between Guelph and Union Station through the City of Brampton and Mississauga supplemented by train-bus services.

The Georgetown GO station is the only station within Halton located on this line.

GO Bus Service

GO Bus routes provide interregional express services within the Greater Toronto Area, typically operating on the provincial highway network and major arterials. There are five GO Bus routes that provide service within the Region of Halton:

Route 15 McMaster University GO Bus Service – connecting to the Burlington GO station with a link to the Lakeshore West GO Train line into Union Station.

Route 19 Oakville Hwy 403 GO Bus Service – connecting Oakville GO station to Finch subway station with stops at the Mississauga City Centre and Yorkdale subway.

Route 27 Milton Hwy 401 GO Bus Service – with service between the Milton GO station and the York Mills subway station with connections to Meadowvale and Yorkdale subway station.

Route 33 Guelph – Georgetown GO Bus Service – service between the Guelph Bus Terminal and York Mills subway station with limited connections to Acton, Georgetown GO station, Brampton GO station, and Yorkdale subway station.

Route 46 Hwy 407 GO Bus Service – connecting Hamilton and Halton Region to Durham Region along Highway 407. One run connects the Hamilton Bus Terminal with the Pickering GO station with stops along Highway 407 in Burlington at Dundas Street/Appleby Line, Oakville at Bronte Road and Trafalgar Road, Mississauga City Centre, the Bramalea GO station, York University, Scarborough Town Centre, and the University of Toronto Scarborough Campus.

*GO Transit Inter-Region
Bus Rapid Transit (BRT)
Study*

In December 2002, a GO Transit Inter-regional Bus Rapid Transit (BRT) Study was completed. This study was initiated to identify a feasible inter-regional bus rapid transit alignment and implementation strategy that complements and supports GO Transit's existing rail and bus network. Resulting from the study was an interregional BRT network throughout the GTA from Oakville to Pickering. This BRT network would be supported by buses in mixed traffic and in HOV lanes, where ridership does not warrant BRT. Extensions and connections to the TTC subway and GO Rail lines were also proposed through the BRT study.

Via Rail Service

VIA Rail operates passenger rail services through Halton Region, which allows passengers to travel by train across Canada and to the United States through connections with AMTRAX. The rail line operates on the same corridor as the GO Train Lakeshore West Line, with stations at Aldershot station in Burlington and Oakville station in Oakville. A line also runs along the Georgetown line with stops at the Brampton GO station and Guelph. There are no stops in the Region of Halton on this line.

2.3 Halton Residents' Travel Behaviour

Halton Region has the highest auto driver modal split in the Greater Toronto Area, at 80 percent. This is followed by transit ridership at 9 percent (including GO Transit), auto passenger at 6 percent and an estimated seasonal 2 percent by cycling. The following figures illustrate the modal split of each of the municipalities in Halton. It is evident in these figures that the municipalities within Halton with the most transit services (both local and GO Transit) have the highest transit modal splits.

Figure 2 illustrates the travel mode choice by local municipality.

Compared to the other GTA municipalities, Halton Resident's:

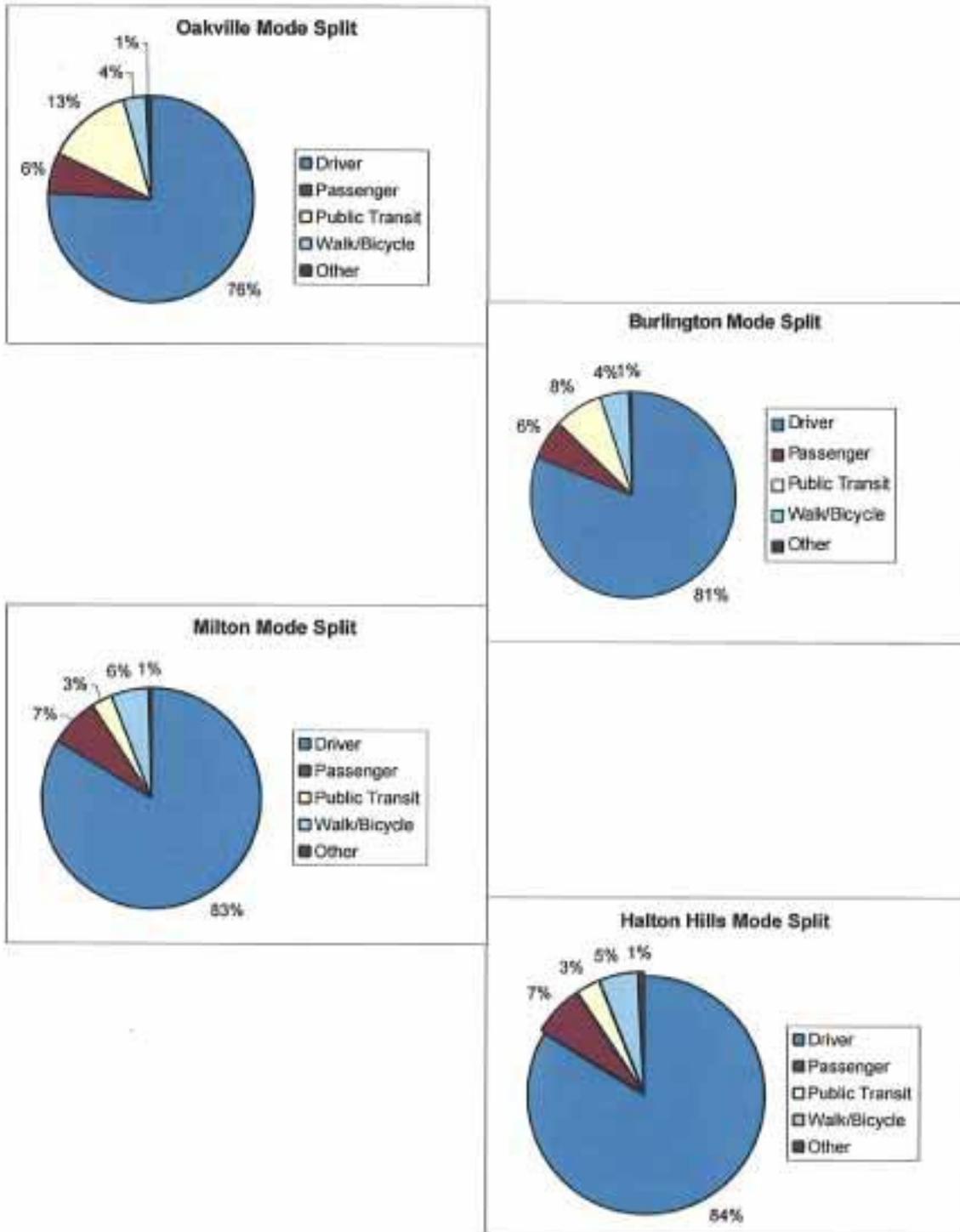
- have one of the highest car ownership (0.82 cars per driver);
- use transit least frequently;
- are increasing their usage of the automobile for travel;
- use transit the most, along corridors with the highest frequency and fastest service;
- have longer work trips – primarily to the City of Mississauga and downtown Toronto.

Within the Region of Halton proper, there is also a trend towards an increase in:

- discretionary trips;
- the number of trips per day; and
- the number of trips made by seniors.

These trends can be attributed to the fact that transportation is a key to social interaction within a community. Viable transportation choices are required to allow for seniors, the disabled, and low-income families to integrate within the community and access required services.

Figure 2 – Travel Mode Choice by Local Municipality



*Travel Demand
Projections*

Central to the development of a transportation strategy for the future is the accurate forecasting of future travel demands over the transportation network. The Regional Travel Demand Model (the Model) is the source of travel demand forecasts. The Model is based on the population and employment levels enumerated in the 2001 Transportation Tomorrow Survey, and the 2001 Canada Census. The model was recently calibrated against the 2001 Greater Toronto Area Cordon Count Program. Future travel demands are projected based on regional Best Planning Estimates of future population and employment levels.

By applying the Model to projected future population and employment levels and assigning the future trips over the existing transportation network, it is possible to identify future capacity deficiencies and network constraints.

The Halton P.M. Peak Model Documentation and User's Guide documents the development and calibration of the Regional Travel Demand Model. The calibration of the Model involved ensuring a consistency between the projected existing travel demands on study area roadways with the traffic volumes enumerated in the 2001 Greater Toronto Cordon Count Program. This document forms *Appendix B* of this report.

The model was calibrated on a "screenline" basis. A screenline is a cross-section through a principal transportation corridor. At key roadways along the screenline, the roadway capacities and traffic volumes are noted. It is then possible to compare the volume moving across the screenline with the screenline capacity.

Figure 3 present the anticipated capacities in the network in 2021 with the "do-nothing" scenario; that is, a scenario where the population and employment growth takes place without any improvements to the base (2001) roadway network.

**Figure 3a: East-West Screenline Analysis
of Projected Traffic Demand (Year 2021)**

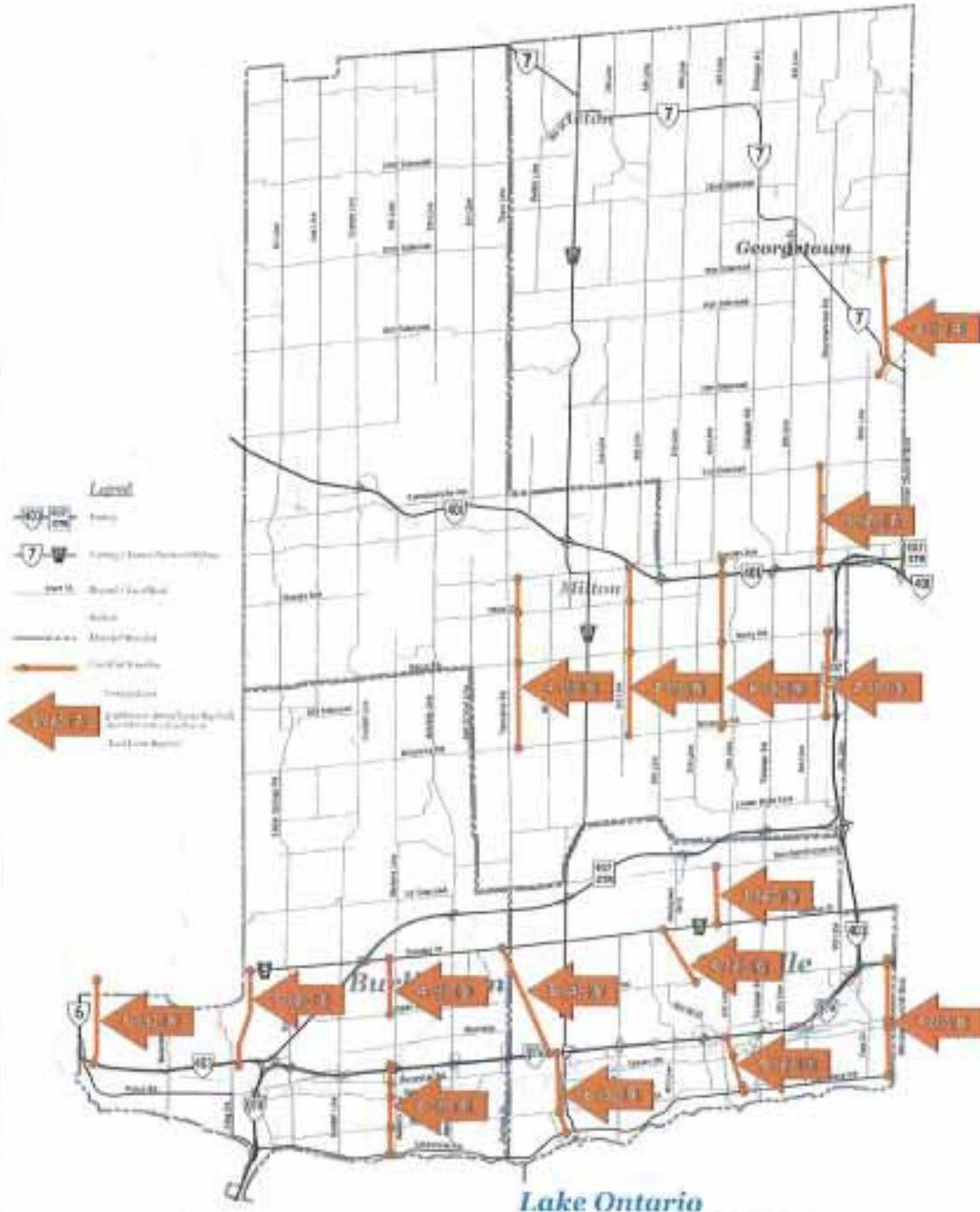
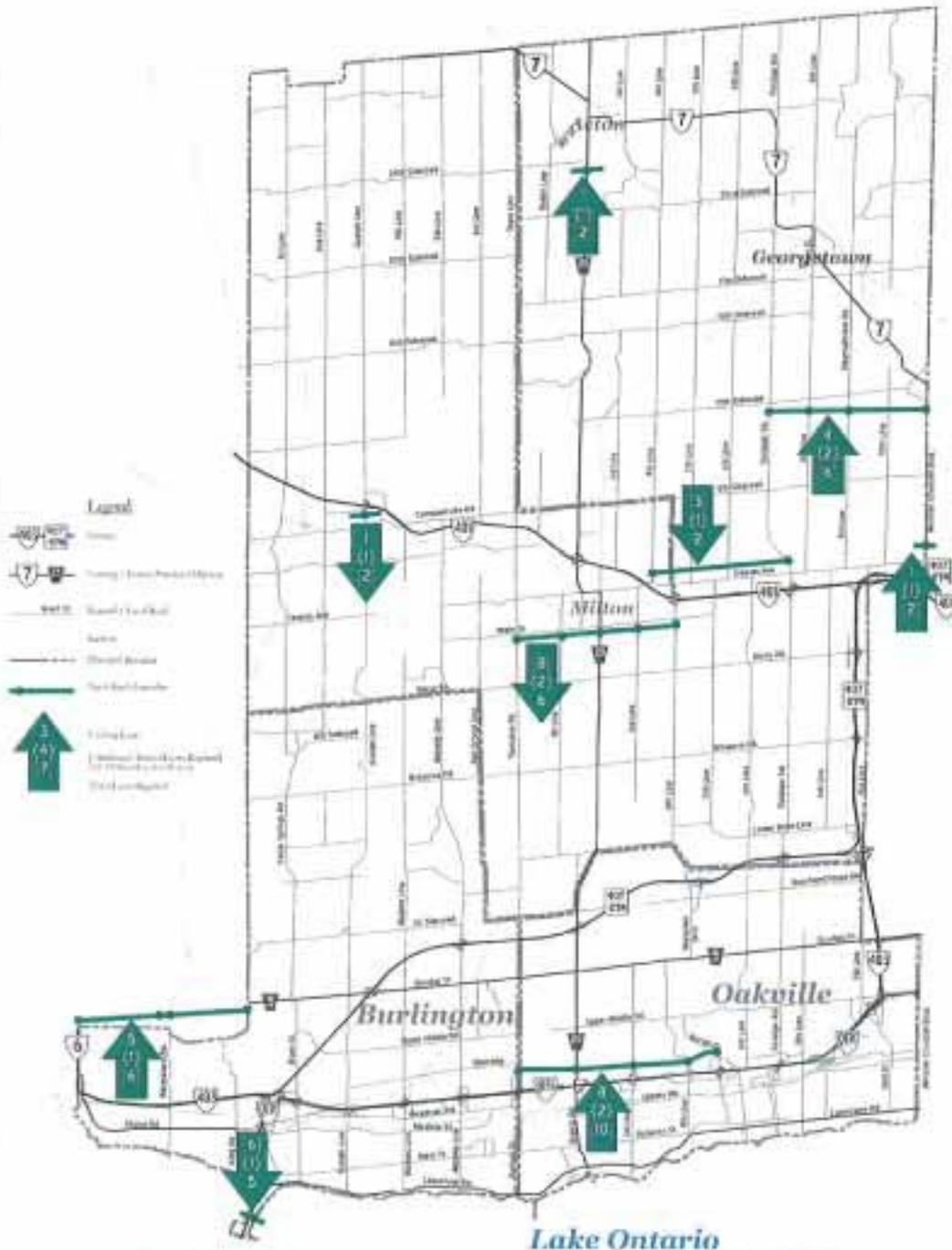


Figure 3b: North-South Screenline Analysis of Projected Traffic Demand (Year 2021)



Breaking the "Vicious Cycle"

Development in the Greater Toronto Area (GTA) has traditionally followed a predictable cycle. Acres and acres of uniform lower density housing is developed further and further away from where residents work; leading to more dependence on auto use and low efficiencies of transit services. This leads to congestion, which leads to building and maintaining more roads, which leads to extending development - accommodating more auto use, and so on. This "Traditional approach" (building more roads and providing less transit) encourages low transit use and single occupant vehicle (SOV) travel.

We need to break this "Vicious Cycle".

A new Growth Management transportation approach, which encourages and supports pedestrian-friendly developments, provides more cost-efficient service and higher transit usage, and provides transportation choices, is required. Alternative non-auto travel choices, such as transit and cycling, need to be made more competitive (i.e. convenient, cost effective) with the automobile.

What has to Change?

We need to change (or evolve) the current thinking. To some degree this is happening through the Growth Management/Smart Growth initiatives, which encourage pedestrian friendly developments, which provide more cost efficient services and provide more transportation choices. Alternative non-auto travel choices, such as transit, are made competitive (i.e. convenient, cost effective) with the automobile. The Smart Growth approach does not look only at transit revenue-to-cost ratios. It provides for improved transit service, which leads to higher usage, which results in increased ridership per capita.

In reality, while the automobile is here to stay, for ride sharing and commercial activity, with the anticipated residential and employment growth, the transportation system in Halton cannot continue to rely on single occupant auto travel as the dominant transportation choice, especially in the peak periods. Halton residents and the community at-large need to recognize they are part of the vicious cycle and the key to the solution.

HTMP Vision

In terms of a "vision", the HTMP must be different than traditional master plan studies and encourage people to change their travel characteristics and be aware of the consequences if they do not change. The HTMP should be driven by Goals, Constraints, and Consequences. It should have an alternate approach on how to prioritize the Region's capital program and ensure that transit and other alternatives to the single occupant vehicle are maximized.

On the development and policy side, the Region is in a position to influence development and services to development. It must recognize that although "sprawl" development has been the norm to-date, this cannot continue – it is not sustainable. Halton has recognized that this continued type of development will drive higher levels of congestion and a consumption of our landscape. The recent Halton Urban Structure Plan put in place requirements for a land use form that would help us curtail this predictable cycle. However, changes in the way in which we travel cannot be successful if the full range of transportation solutions is not utilized. Policy and development decisions must support non-auto modes and must withstand the "not-in-my-backyard" concerns from the existing community about higher density and pedestrian friendly developments. Major employers and commercial nodes need to be concentrated and easily accessible to transit and other alternatives to the single occupant auto.