



REPORT

REPORT TO: Mayor Rick Bonnette & Members of Council

REPORT FROM: Ted A. Drewlo, P. Eng., Manager of Engineering Services

DATE: November 15, 2011

REPORT NO.: INF-2011-0057

RE: Halton Hills Transportation Master Plan

RECOMMENDATION:

THAT Report No. INF-2011-0057, dated November 15, 2011, regarding Halton Hills Transportation Master Plan, be received;

AND FURTHER THAT Council adopt the Transportation Master Plan Study dated November 2011, including the policies in the study, as the recommended strategy to manage transportation growth in Halton Hills;

AND FURTHER THAT a Transportation amendment to the Town's Official Plan be prepared based on the recommendations of the Transportation Master Plan;

AND FURTHER THAT staff be directed to pursue the immediate uploading to Halton Region of Winston Churchill Boulevard from 32 Side Road to Guelph Street (Highway 7) for both jurisdictional and financial responsibilities, due to its Regional Road function of carrying a significant amount of long distance traffic that is not locally generated or destined;

AND FURTHER THAT the Clerk be authorized to forward a copy of this report to the Town of Milton, the Region of Halton, the Ministry of Transportation, the County of Wellington, the Town of Erin, the Region of Peel, the City of Brampton and Metrolinx for their information.

BACKGROUND:

The 2008 Capital Budget provided funding for this study over a two-year period. The study was delayed until the results of the Sustainable Halton planning process determined the population and employment projections in Halton Hills to the year 2031.

The Region established the Urban Area and growth management policies, including the distribution of growth in the December 2009 approval of ROPA 38.

The Terms of Reference for the Halton Hills Transportation Master Plan (TMP) study were approved by Council on March 22, 2010, and are included in Attachment '1'. A report awarding the study to the consulting firm of Hatch Mott MacDonald was adopted by Council on June 28, 2010.

COMMENTS:

The purpose of the TMP is to develop an integrated transportation plan and associated policies to meet the transportation challenges to 2031. A broad, strategic level of assessment was undertaken to provide a transportation system that is sustainable, integrated and encourages a healthy and active lifestyle.

The Halton Hills road network complements and supports the Regional and Provincial transportation systems that carry larger volumes of traffic. Where possible, traffic and truck movements are directed to the periphery of the urban centres along the upper tier roadways.

The TMP provides a basis for moving forward with road classifications and designating appropriate road allowance widths. Typical road design standards were developed to establish the Active Transportation components in the road allowance. Key road network improvements were determined and an implementation plan developed. These projects would be proposed in the Town's Capital Forecast and the Development Charges By-law Review study.

An integral component of the TMP is the review of the plan every 5 years. This allows the plan to be dynamic and responsive to changes in the community.

The TMP study Executive Summary is Attachment '2' to this report and highlights the key strategies developed to implement the recommended road network.

Road Jurisdiction and Road Classifications Designations

The TMP study recommends several actions related to road jurisdiction and new road classification designations. These are noted in the table on page vi of the Executive Summary.

The recommended Road Jurisdiction and Road Classification changes are shown on Figure 17, Attachment '3' to this report.

The transfer of Winston Churchill Boulevard from 32 Side Road to Guelph Street (Highway 7) in Norval, to Halton Region jurisdiction is recommended by the TMP. This road is a boundary road with half the road jurisdiction shared between Halton Hills and the Region of Peel. Maintenance of the road is performed by Peel Region and Halton Hills is responsible for 50% of the maintenance costs. The capital projects associated with this road are proposed by Peel Region and often conflict with the requirements of Halton Hills. The road classification was determined during a road rationalization process by Halton Region. The Halton Hills TMP study provides a basis for a road jurisdiction change.

Transit

The TMP examined the need for local transit in Halton Hills and concluded that there currently is insufficient transportation demand to warrant a system. The TMP, through policy, did recognize that a future need may emerge and as such recommended a transit policy as follows:

The Town shall review the need for municipal transit system, as permitted by its financial capacity, and desire of the residents, and if and when provided, integrate and support other transit systems and coordinate transportation planning efforts with Regional, Provincial and Federal transportation initiatives. The Town shall encourage improvements to inter-municipal and inter-regional transit services, in particular the GO Transit system. The Town shall encourage transit-supportive land uses in nodes, corridors and new development areas.

Active Transportation

A variety of facility types are proposed for Active Transportation in the TMP including on-street bicycle lanes, paved shoulder bicycle lanes, signed-only bicycle routes, bicycle priority routes and off-road multi-purpose paths. Most of these facilities are used in urban areas. Paved shoulder bikeways and signed-only bicycle routes are recommended for rural roadways. The study includes the Cycling Master Plan and confirms that non-motorized modes of transportation are a feasible means of commuting and for leisure and recreational purposes.

On Halton Region roads, the Town is responsible for Active Transportation facilities not on the roadway. Multi-purpose paths are budgeted and constructed by the local municipality. Comments on the Halton Region TMP were sent from Halton Hills Council that recommended Halton Region take financial responsibility for the Active Transportation components on Regional roads.

Road Improvements

Future congestion on some roadways was determined through this study. The traffic demand model is based on the recently approved Region of Halton TMP study. The model includes implementation of the road systems recommended in the Halton-Peel Boundary Area Transportation study and the Regional TMP recommendations, such as the Highway 7 bypass for Acton.

The TMP confirmed the need for the extension of Halton Hills Drive from the Civic Centre to Princess Anne Drive. This will improve the operational performance and safety of the road network. This road will be an alternate emergency response route around the Trafalgar Road railway crossing and add to community mobility with pedestrian and cycling access to Maple Avenue. The EA for this road is currently underway.

Several intersection improvements are recommended including Main Street and Mill Street in Acton, Maple Avenue and Main Street, and several Guelph Street (Highway 7) intersections through Georgetown.

The road improvement projects recommended in the TMP are listed in Attachment '4'.

Transportation Policies

The TMP is not a provincially legislated document and has no statutory authority. The authority is provided through the Town's Official Plan (OP) by incorporating the policy directions of the TMP. The Town can determine how and when to incorporate these recommendations into the OP.

The key policies to support the TMP are noted in the Executive Summary to the study.

- Transportation Demand Management
- Active Transportation
- Public Transportation
- Goods Movement
- Traffic Calming
- Roundabouts
- Road Safety

Each policy has a related set of recommended actions that implement the directive.

Implementation

The TMP provides long-term direction for the Town's transportation system. Successful implementation will require undertaking key strategies, such as creating supportive land uses, managing transportation demand and constructing the transportation infrastructure. This study provides the starting point for transportation planning. With forecasts and other assumptions that change over time, continual monitoring and updating of the TMP provides the guidance and key strategies for the road network.

RELATIONSHIP TO STRATEGIC PLAN:

The Strategic Plan for providing Sustainable Infrastructure Services promotes the developing of master plans for the Town's assets. The Transportation Master Plan is specifically mentioned in G.6 (c) in the Strategic Plan.

FINANCIAL IMPACT:

There is an indirect financial impact of the TMP. The study will guide the establishment of a capital forecast for road construction works. These projects will be utilized in the development of the Town's Capital Forecast and in the Development Charges By-law Review study.

The capital requirements of the projects identified in the TMP are about \$47 Million. Of these projects, the largest, at \$19.5 Million, is for Winston Churchill Boulevard, which is being recommended for jurisdictional change. All projects will be reviewed on an individual basis during the normal Town budget process for reviewing and adopting capital and associated operating budgets.

There is a staffing impact identified regarding Active Transportation. The new position is required to champion and coordinate Active Transportation and TDM initiatives locally and assist with the growing involvement of the community in traffic issues. These additional costs should be considered as part of the operating budget process.

COMMUNICATIONS IMPACT:

With the approval of this report a notice of study completion will be advertised in the local papers and distributed to all agencies and other parties involved in the study. A thirty day period for comments will be made available to the public.

The TMP will be available on the Town's website. This is a focal point for dissemination of information to the public and other agencies.

Transportation related decision making will be guided by the TMP and provide direction for discussions and negotiations with other agencies and governments.

SUSTAINABILITY IMPLICATIONS:

A transportation system is proposed that reduces the environmental impact of vehicles. The Transportation Master Plan Study completed Phases 1 & 2 of the Municipal Class Environmental Assessment Act. A review of the TMP study every five years is recommended.

Several alternatives were developed prior to the final recommended strategy. The study vision was, in part, to provide for efficient traffic flow and goods movement that meets the needs of businesses and reduces impacts on urban areas. Driver frustration can be prevented by the adoption of the transportation policies to effectively reduce the amount of single occupant commuter vehicles. The environment was considered extensively in the study process. The Town's TMP concurred with the need for Halton Hills Drive extension to Princess Anne Drive. The future needs of the residents are addressed in this study.

CONSULTATION:

Public consultation is a key component in the development of a TMP. Two Public Information Centres were held. A public opinion survey and a follow-up newsletter were distributed during the process. Several technical and agency meetings provided expectations that directed the results of the study.

The consultant will be at the General Committee meeting to present the findings of the TMP.

CONCLUSION:

A Transportation Master Plan study provides a broad and strategic level of assessment of the Town's road network. It integrates municipal transportation planning with environmental assessment objectives and land use planning.

A coordination of this study with the proposed Capital Forecast and Development Charges By-law Review study provides a planned approach to constructing a transportation system that meets the needs of the Town in 2031.

Respectfully submitted,

Ted A. Drewlo, P. Eng.
Manager of Engineering Services

Chris G. Mills, P. Eng.
Director of Infrastructure Services &
Town Engineer

Dennis Y. Perlin
Chief Administrative Officer



TERMS OF REFERENCE

TRANSPORTATION MASTER PLAN STUDY

1.0 EXECUTIVE SUMMARY

1.0 SUMMARY OF THE REQUIREMENTS

The Town of Halton Hills, in the Regional Municipality of Halton, is part of the Greater Toronto Area. Greenfield growth and intensification is planned for Halton Hills to 2031 through the recently completed Region of Halton Sustainable Halton planning process. Along with the growth, new road infrastructure will be required. Future Capital investments in infrastructure will require a prudent and detailed approach to achieving the transportation needs of the Town to accommodate existing and future development. Improvements will be needed to the existing transportation system. A master plan is needed for the Town to accomplish these objectives. The Town will be looking at updating the existing transportation system policies and standards with the master plan and integrating policies related to active transportation into the Official Plan. This study will develop a Town-wide Transportation Demand Model based on the Regional model. There will be coordination with Halton Region in their concurrent Transportation Master Plan development now underway. Any proponent must show in their proposal that they are independent from potential conflicts of interest related to current and future potential Ontario Municipal Board Hearings, such as the appeal of the Halton Hills Official Plan or engaged to undertake significant land development interests in Halton Hills.

PROJECT OR PROGRAM REQUIREMENTS

2. MUNICIPAL SITUATION/OVERVIEW

2.1 INTRODUCTION

The Town of Halton Hills is seeking a consultant (team) to develop a Halton Hills Transportation Master Plan (HHTMP). The consultant (team) will collect and analyze information to develop current and future transportation needs.

The vision and principles of the Town's transportation system should be to:

- Balance the travel needs of residents and provide them with choices
- Provide a healthy community by supporting healthy and active lifestyles
- Support economic growth in the industrial/commercial sectors/areas while providing appropriate routes for truck traffic
- Itemize infrastructure requirements to build and maintain the system in 5-year increments 2011, 2016, 2021, 2026 and 2031
- Include Transportation principles relating to safety, access, mobility and the environment

2.2 STRATEGIC DIRECTION

The Town of Halton Hills, in the Regional Municipality of Halton, is part of the Greater Toronto Area. Growth continues in and around the Town. Increased transportation needs are forecast for the future. Future capital investments in infrastructure will require a prudent and detailed approach to achieving the transportation needs of the Town to accommodate existing and future development. Improvements will be needed to the existing transportation system. A master plan is needed for the Town to accomplish these objectives. It will be up to the proponent to apprise themselves of the details of the:

- Growth Plan for the Greater Golden Horseshoe
- Provincial Policy Statement
- Greenbelt Plan
- Niagara Escarpment Plan
- Metrolinx Regional Transportation Plan – The Big Move
- Bill 163 (Metrolinx Act)
- Transportation Provincial Policy Statement (when released)
- Ministry of Transportation GTA West corridor planning study
- Ministry of Transportation Niagara to GTA corridor planning study
- Halton Region Official Plan Amendment 38
- Halton-Peel Boundary Area Transportation Master Plan Study
- Halton-Peel Winston Churchill Boulevard improvements between 5 Side Road/Embleton Road and River Drive/Mayfield Road

- Halton Region Trafalgar Road from 10 Side Road to Highway 7 study
- Halton Hills Official Plan
- Halton Hills Intensification Study
- The GO Station and the Mill Street Corridor Secondary Plan
- Halton Hills Gateways Policy
- Cycling Master Plan (Draft version)
- Roundabout Policy (Draft version)
- Traffic Calming Protocol
- Trails and Cycling Master Plan Study

Aside from planned growth assigned to Halton Hills to the 2031 planning horizon, a significant increase in population is projected in the surrounding municipalities of Milton, Caledon and Brampton. The increased use of the transportation system in Halton Hills has already created a strain on the existing road conditions. In order to maintain the infrastructure to keep pace with growth, a review of the existing conditions is required. Recent population and employment forecasts have been developed by the Region of Halton through the Sustainable Halton planning process and Regional Official Plan Amendment No. 38. The future transportation needs can be forecast from these population and employment forecasts for 2021 and 2031.

Municipality	Population			Employment		
	2006	2021*	2031	2006	2021	2031
Burlington	171,000	179,000	193,000	88,000	119,000	106,000
Oakville	171,000	220,000	255,000	82,000	104,000	127,000
Milton	56,000	157,000	238,000	28,000	81,000	114,000
Halton Hills	58,000	65,000	94,000	20,000	32,000	43,000
Halton Region	456,000	621,000	780,000	218,000	336,000	390,000

*Subject to change

2.3 Current Infrastructure

The Town will provide traffic counts and signal timings for the multi-purpose arterial, minor arterial and collector roads in Halton Hills. The Region is currently undertaking the development of a Halton Transportation Master Plan. There will be information sharing as it becomes available. It is expected the Town Consultant (team) will coordinate with the Region of Halton on its Transportation Master Plan Study. The Region is responsible for all major arterial roads in Halton Hills. The Ministry of Transportation is responsible for Highway 7 (except for the connecting link sections in Acton and Georgetown) through Halton Hills and for Highway 401 and Highway 407 at the south limits of the Town.

2.4 Transportation Demand Model

Model Development

The proponent will develop a transportation demand model based on the Regional model. A sub-area for Halton Hills will be developed from the Regional model. The Town model will be calibrated and validated for use in Halton Hills. The Town model will load in the new land use showing the planned growth comprised of existing and new Designated Greenfield Area and intensification to the 2031 planning horizon. The Halton EMME/3 Model is overseen by AECOM (formerly TSH) and access to the Region model will be coordinated with this consultant.

Land Use

The horizon years will be in 5-year increments with 2011 being the base year. The model will meet the planned growth and intensification requirements for the year 2021 and will show the system requirements needed by the year 2031. Information from the HHTMP will be used to update the proposed road, sidewalk and cycling reconstruction program and the Town's development charges by-law.

Analysis

The model will be able to provide screenline analysis at the boundaries and mid-municipality and provide sensitivity to all areas of the Town. A select link analysis will be functional at the local and regional levels. The analysis will define capacities for sidewalks, bikeways, multi-use pathways, urban roads, and rural roads and show the impacts of heavy vehicles on the system.

Assessment

The model will develop an assessment of the road, cycling and pedestrian needs by horizon year 2011, 2016, 2021, 2026 and 2031. It will indicate the number of lanes, bikeways, sidewalks and multiuse pathways required on the main line of the street. At intersections, the model will be able to show the needed:

- Turn lanes
- Signalization
- Stop control
- Rural upgrades (such as flashing beacons)

A current road classification system should be an output to the HHTMP development. Active transportation needs will be assessed including on-street needs, off-street needs and the ability to identify and assess the needs in special study areas.

Highway Capacity Manual method

The Town of Halton Hills has jurisdiction over twenty-four (24) fully-signalized intersections, five (5) intersection pedestrian signals and two (2) pedestrian crossovers. A model should be developed to analyze the existing and future road conditions using the Synchro traffic signal software based on the 2000 Highway Capacity Manual method. The model will review three (3) signalized intersections on Maple Avenue that are currently under the jurisdiction of Halton Region.

The analysis will identify any needed new traffic signal corridors and traffic signals and indicate the existing and future level of service of the existing traffic signals and corridors. The existing traffic signal corridors include:

- Guelph Street/Main Street North (Hwy 7)
- Mountainview Road
- Main Street South/Eighth Line
- Maple Avenue (Regional road that will be transferred to Halton Hills)
- Queen Street/Young Street/Mill Street East (Hwy 7)
- Main Street (Acton)
- River Drive/17 Side Road

The analysis of these corridors must also consider the interaction of cyclists and pedestrians along with any specific improvements related to the non-auto user.

2.5 The Functional Road Network

Roads are the backbone of Halton Hills' transportation system, and affect the Town's economic well-being. They serve automobile and truck needs, with an ever increasing focus on cyclist and pedestrian traffic. The Town faces increasing pressures from the surrounding population growth to accommodate road infrastructure improvements. Geographical features limit the road network's potential to adequately service, in particular, the east-west network demands.

Road Classifications

Analyze the existing road classification system and recommend changes or updates if required. The 2031 road network will be analyzed for recommended changes to the classification system. The system will be shown in a map form as part of the study. There should be an analysis of the rural roads to determine how they are best classified in the new system. An existing staff report on right of way for local rural roads will be made available to the proponent. The analysis should take into consideration the Cycling Master Plan, the Trails Master Plan and how bicycles and pedestrians will interact with vehicles in the new active transportation network. The existing classifications and right of way widths can be found in the Town's Official Plan.

Design Guidelines and Rights of Ways

Provide detailed corridor design guidelines including suggested road design standards and road cross sections for all types of road classifications. Set a standard for road design and road widths in new developments. These will include pedestrian/bicycle sidewalk and pathways standards. Analyze the existing right of ways and recommend changes for the current system and for the 2031 transportation system. The rights of ways will be shown in a map form as part of the study.

The study should provide right of way width requirements and design elements, including road widths, for the different classifications of roads in Halton Hills:

- Multipurpose arterials
- Minor arterials
- Collector roads
- Local roads

The study should account for automobile, truck, cyclist and pedestrian needs.

Area Specific Analysis

- Maple Avenue from Trafalgar Road to Mountainview Road needs to be reviewed relative to truck traffic and cycling issues
- Mountainview Road from Guelph Street to Eden Place has issues regarding cycling, parking, speeding, truck traffic and commuter traffic
- The east-west connection from Halton Hills to Brampton will need to be reviewed to integrate the findings of the Halton-Peel Boundary Area Transportation Master Plan Study and Planning work in Brampton
- Review Eighth Line and Tenth Line from Steeles Avenue to 10 Side Road to determine the need for reconstruction and widening for automobiles and trucks and to meet cyclist and pedestrian needs
- Review the adequacy of the 17 Side Road and Fourth Line truck route
- Winston Churchill Boulevard from 32 Side Road to Mayfield Road needs to be reviewed in conjunction with the Regions of Halton and Peel to determine what role, if any it should have in the Town's local road network or if it should be part of the Regional road network
- Main Street and Mill Street in Acton left and right turn lane improvements and the cycling requirements need to be addressed
- Review the rural roads that are surface treated to determine at what time the roads need to be reconstructed or upgraded to asphalt surfaced roadways (such as 5 Side Road from Fourth Line to Winston Churchill Boulevard; Fourth Line from 17 Side Road to 5 Side Road; 10 Side Road from Region Road 25 to Trafalgar Road; and 15 Side Road from Town Line to Trafalgar Road)

Confirm a 10 Year Forecast for Road Improvements

Review the capital forecast for the Town to determine what transportation construction projects should be the highest priority within the new transportation master plan. The annual forecast for growth will be updated by staff by August of 2010 for the ten year period 2011 to 2021.

Recommend a Forecast to 2031

Certain transportation construction projects to the years 2016 are included in the Town's development charges by-law. This by-law will be changed in 2011 to reflect the projects in the Transportation Master Plan to 2031.

Integration with the Region of Halton Transportation Master Plan

The proponent will provide connectivity to the Region of Halton Master Transportation Plan, specifically in the development of the Transportation Demand Model and integration of road classifications and rights of ways for Regional roads.

2.6 Roundabouts

Halton Region is currently working with Area Municipalities to develop a Roundabout policy. The Town supports the use of Roundabouts, since they have been proven to reduce societal cost when compared to the cost of installing and maintaining traffic signals or unwarranted all-way stop signs.

The proponent will evaluate the use of roundabouts on Multi-purpose Arterial, Minor Arterial and Collector roads, as well as traffic circles on Local roads.

2.7 Active Transportation

The Town has several on-going projects to improve Active Transportation. Active Transportation is considered one of the key quality of life aspects for the Town of Halton Hills. The successful proponent will incorporate ongoing and past studies and the aspect of safety in communities that are key components of Active Transportation.

Cycling Master Plan

The Town is currently developing a Cycling Master Plan to support active transportation and to reduce pressures exerted by automobile use on the road network. The proponent will evaluate a draft Cycling Master Plan to support future road network.

Walking

Walking helps to improve public health, preserve the environment and reduce pressures on the road network. The Town is actively involved in the Active Safe Routes to School (ASRTS) program with the Public and Catholic School Boards. The program encourages students and parents to walk to schools through educational measures, attitude shift and infrastructure improvements. The Town has also recently approved a Pedestrian Charter which should be reviewed as part of the Transportation Master Plan.

Pedestrian safety is paramount for the Town. The proponent will determine a number of supportive measures to incorporate the goals of the program within the pedestrian route network including existing network of sidewalks in Town.

The multi-use pathways shared by pedestrians and cyclists encourage active transportation and recreational use. The multi-use pathways constructed on Main Street South/Eighth Line and 10 Side Road arterial roads provided a safer and more enjoyable environment for pedestrians and novice and child cyclists due to separation from motor vehicles.

The proponent will examine a development of multi-use pathway system and/or sidewalks and bikeways along the arterial road network. The system will be part of the implementation of the Town's Pedestrian Charter.

Trails Master Plan

The proponent will review the Trails Master Plan in efforts to establish a viable pedestrian and cycling network to encourage active living.

2.8 Truck Route System

The proponent will review current truck traffic patterns and determine a need for a truck route system. Particular attention is required to address significant truck volumes generated by the aggregate industry. The proponent should be aware of a potential expansion of the Acton Quarry (Dufferin Aggregates).

2.9 Traffic Calming

The Town developed a Traffic Calming Protocol to provide its residents with a safer road network, and with a goal to restore roads to their original functions.

The proponent will review the Traffic Calming Protocol and ascertain its role in the future transportation network.

2.10 Meetings, Workshops and Public Information Centres

It will be up to the proponent to determine the number of Steering Committee meetings and Public Information Centres in their proposal. The minimum numbers required in the proposal will be:

- 5 Steering Committee meetings
- 2 Public Information Centres
- 1 Council Workshop at the beginning of the study
- 1 Council presentation to inform of the alternatives and the process to select the preferred alternative
- 1 Council presentation at the end of the process for approval of the study

3. REQUIREMENTS AND PROJECT SCOPE

3.1 PROJECT SCOPE, BUDGET AND TIME-FRAMES

The exact project scope will be determined by the consultant's knowledge of similar work on Transportation Master Plan Studies. The study shall be in compliance with all the legislative requirements of a Master Plan study through the Environmental Assessment processes. Any proponent must show in their proposal that they are independent from potential conflicts of interest related to current and future potential Ontario Municipal Board Hearings, such as the appeal of the Halton Hills Official Plan or engaged to undertake significant land development interests in Halton Hills. The project is to be completed by the end of Summer 2011.

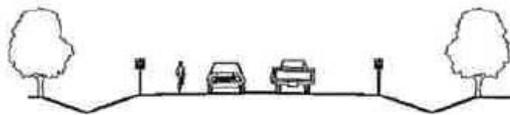
3.2 PROJECT REQUIREMENTS

Project Deliverables

The project deliverables, the Halton Hills Transportation Master Plan, will include:

- A Transportation Demand Model that is
 - Based on the Regional model
 - Accommodates land use changes
 - Provides screenline and select link analyses
 - Produces roadway capacities and classifications
- Signalized and Non-signalized Intersections Review that will
 - Compile traffic count data, signal timings and lane configurations for the study intersections
 - Review corridor systems and organize the Town's intersections into logical groups for analysis
 - Calibrate and analyze signalized intersections using the Synchro 7.0 model. This analysis will include A.M. peaks, Off peaks and P.M. peak periods

- Analyze rural intersections using the Town's All-way Stop Control Warrant
 - Identify short-term and long-term intersection improvements/remedial measures at critical locations
- An analysis of the existing road classification system and recommendations regarding appropriate changes
- An analysis of the proposed 2031 road network, make recommendations regarding appropriate new road classifications and show these on maps of the Town
- An analysis of the proposed 2031 road network and recommend areas for designation as future road corridors
- Proposed standards and guidelines for road designs and road widths for all types of road classifications keeping in mind the active transportation needs for cycling and walking
- An analysis of the existing rights of ways and provide a recommended schedule of right of ways to 2031. The right of way widths will be shown on maps of the Town
- Complete area specific analysis of road sections detailed in the study project requirements
- Confirmation of the 10 year forecast for road improvements from 2011
- Recommendations regarding a forecast for road improvements from 2021 to 2031
- Developing a roundabout policy for the Town that is compatible with Regional policy
- Determining how the new Transportation Master Plan will accommodate cycling as envisioned in the Cycling Master Plan
- Determining how pedestrian traffic is safely accommodated in the Transportation Master Plan and show how pedestrian traffic can link to the walking trails developed by Recreation and Parks in the Trails and Cycling Master Plan
- Recommending a truck route system for the Town, if a need is determined, for the current network and to 2031
- Determining a guideline for the installation of traffic calming devices in conjunction with the Town's Traffic Calming Protocol



Executive Summary

“...a transportation system that is sustainable, integrated and encourages a healthy and active lifestyle”

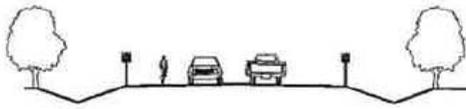
The Transportation Master Plan

The Town of Halton Hills has undertaken a comprehensive Transportation Master Plan study (TMP) to develop an integrated transportation plan and associated strategies to meet the transportation challenges facing the Town to the year 2031. A TMP was undertaken at a broad, strategic level of assessment to identify transportation improvements over the short term (5 years) and long term (20-25 years), making recommendations for future projects and their staged implementation. The TMP integrates municipal transportation planning with environmental assessment objectives and land use planning, ultimately providing for a transportation system that is sustainable, integrated and encourages a healthy and active lifestyle. The Goals and Objectives of the TMP are as follows:

- ♦ Address existing transportation challenges;
- ♦ Identify the policies, programs and investments required to support planned growth and development;
- ♦ Identify and evaluate opportunities to increase/ encourage active transportation modes (including cycling and pedestrian facilities);
- ♦ Identify required infrastructure improvements; and
- ♦ Provide *a transportation system that offers travel choices*, and balances the needs of all users.

Context

The TMP complements, builds upon and implements the existing provincial, regional and local policy framework. The plan also takes into account a broad range of ongoing initiatives by other government agencies. The following overarching policies and initiatives were considered in the TMP study:



The TMP Study was undertaken following the requirements of a Schedule B Municipal Class Environmental Assessment (Class EA), including addressing the first two phases of the Class EA Process. A high amount of public involvement was undertaken. Two Public Information Centres, an opinion survey, study website, newsletter and Stakeholder meetings were all utilized to obtain input from review agencies, First Nations, the public and interested stakeholders on transportation priorities.

Existing & Future Conditions

The Town of Halton Hills (Town) provides a transportation network serving commuter, recreational and commercial goods movement travel demands. The transportation network within the Town is primarily centred on road rights-of-way (sidewalks, on-road cycling facilities, and general travel lanes). This local transportation network is supplemented by a regional transportation network of Regional Roads, Provincial Highways and inter-regional transit facilities, including Go Transit bus and rail service. Future demand on the transportation system is expected to increase as the Town grows. Recent forecasts indicate that the Town of Halton Hill’s population will increase 54% over the next 20 years and employment will increase 75% by 2031, for a total of 42,100 jobs. The impact of this increase was assessed using a computer-based model that predicted how future travel demand could change as a result of this anticipated growth.



A summary of the 2031 p.m. peak period person trips originating from and destined to the Town and the mode of travel utilized for these trips is as follows:

- 82% will utilize the automobile;
- 4% will utilize transit;
- 7% will walk and cycle; and
- 7% will utilize the school bus.

In comparison to the summary of the 2031 p.m. peak hour “Do Nothing” system congestion assessment, the majority of the transportation network south of 17 Side Road will experience significant congestion, as well as the transportation network serving Acton.

The recommendations in the Halton Region TMP indicate that they address the majority of the travel demands in the Town; however there are anticipated congestion areas on Region Road 25 through Acton and Trafalgar Road corridor north of Georgetown that will need to be monitored in subsequent TMP studies.

The Halton Hills TMP includes the following recommended changes to road jurisdiction and road classification designations:

Roadway	Classification	From	To	Recommended Action
32 Side Road	Minor Arterial	Highway 7	Trafalgar Road	Consider as part of next Road Rationalization process
32 Side Road	Minor Arterial	Trafalgar Road	Winston Churchill Boulevard	Consider as part of next Road Rationalization process
Winston Churchill Boulevard	Major Arterial	32 Side Road	Norval East-West Alternative Route	Immediate need to transfer roadway to Halton Region jurisdiction
10 Side Road	Minor Arterial	Regional Road 25	Trafalgar Road	Consider as part of next Road Rationalization process
5 Side Road	Minor Arterial	Regional Road 25	Winston Churchill Boulevard	Consider as part of next Road Rationalization process
15 Side Road	Rural Collector	Nassagaweya – Esquesing Town Line	Trafalgar Road	Maintain under Halton Hills jurisdiction
22 Side Road	Minor Arterial	Nassagaweya – Esquesing Town Line	Regional Road 25	Maintain under Halton Hills jurisdiction
Nassagaweya – Esquesing Town Line	Minor Arterial	22 Side Road	20 Side Road (Milton)	Maintain under Halton Hills jurisdiction

The proposed cycling facility types and recommendations from the Halton Hills Cycling Plan have been incorporated into the roadway functional classification and improvement recommendations of the TMP including the provision of paved shoulder bikeways and signed-only bikeways.



Policies to Support the Plan

The policies provide a comprehensive framework for establishing a more sustainable transportation system, in keeping with the directions of the Transportation Vision and the Town's overarching strategy documents, including its Strategic Plan, Official Plan and Green Plan. Each of the recommended Policies are supplemented by recommended actions that define specific implementation activities related to the directive.

Transportation Demand Management (TDM)

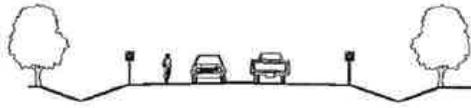
TDM is aimed at changing travel patterns by reducing the amount of travel and shifting travel to non-peak periods or more efficient travel modes. Benefits include enhanced quality of life: lower traffic congestion, fewer emissions, better air quality, improved public health and safety, greater economic competitiveness and increased flexibility in the face of fossil fuel shortages. The policy is as follows: The Town shall develop and implement, in conjunction with Halton Region, Metrolinx and the Province, Transportation Demand Management initiatives to reduce single-occupant vehicle travel, lessen congestion on the Town's road system, especially during peak periods and facilitate more sustainable travel behaviour. The Actions are to:

- ♦ Incorporate TDM policies in the Official Plan; and
- ♦ Development and implement a TDM program.

Active Transportation

Active Transportation as noted in OPA 10, as adopted by the Town and pending Regional approval includes non-motorized or lightly-motorized travel, including walking, cycling, rollerblading and movements with mobility devices. The active transportation network includes sidewalks, crosswalks, designated road lanes and multi-purpose paths to accommodate active transportation. The benefits are well documented and include health, social, transportation, environmental and economic. The policy is as follows: The Town shall continue to implement an interconnected system of active transportation routes providing access to major activity and employment areas. In this regard, the Town shall maintain the Trails and Cycling Master Plans and refer to the plans to provide the basis for the establishment of the active transportation network, policies and programs of the municipality. The Actions are to:

- ♦ Implement the Cycling Master Plan;
- ♦ Update and implement the Trails Master Plan;
- ♦ Update the active transportation policies in the Official Plan;
- ♦ Continue to participate in the Active and Safe Routes to School Program;
- ♦ Develop and implement a Complete Streets Policy;
- ♦ Develop and implement a policy and guidelines for conducting Walking and Cycling Reviews;



- Complete a Sidewalk Strategic Plan;
- Develop and implement a protocol for more effectively managing cycling events; and
- Create a new staff position to champion and coordinate active transportation and TDM initiatives locally and assist with the growing involvement of the community in traffic issues.

Public Transportation

Public Transit

An efficient and effective public transit system can contribute to long-term economic, environmental and community sustainability, enable access to the community for all residents and is essential to achieving more efficient land use patterns. The policy is as follows: The Town shall review the need for municipal transit system, as permitted by its financial capacity, and desire of the residents, and if and when provided, integrate and support other transit systems and co-ordinate transportation planning efforts with Regional, Provincial and Federal transportation initiatives. The Town shall encourage improvements to inter-municipal and inter-regional transit services, in particular the GO Transit system. The Town shall encourage transit-supportive land uses in Nodes, Corridors and new development areas. The Actions are to:

- Update the public transit policies in the Official Plan;
- Request Metrolinx and the Province of Ontario to introduce all-day GO Transit service for Georgetown, Acton and increased GO Transit capacity to and from Guelph;
- Conduct a Transit Feasibility Review as part of the next TMP update; and
- Advocate for a Regional Transit System.

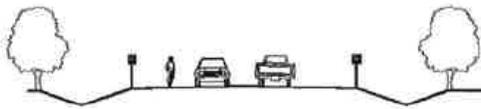
Specialized Services

Access to reliable transportation services poses a challenge for some residents of Halton Hills who are unable to drive or do not have access to an automobile. These individuals must rely on GO Transit, transportation provided by a health or social service agency, taxis or most likely the ActiVan specialized transit service provided by the municipality for persons with a disability and seniors. The policy is as follows: The Town shall encourage and promote the use and expansion of existing specialized transit for persons with a disability, the elderly and if deemed appropriate, local youth through its ActiVan Service. The Action is to:

- Complete a Master plan for the ActiVan Service.

Goods Movement

Efficient and reliable goods movement is fundamental to maintaining a strong economy and ensuring a healthy community. But there is a need for a balance between efficient goods movement and maintaining a liveable



community. The policy is as follows: The Town shall promote efficient and reliable goods movement within and through the Town, and encourage measures to reduce the impact of transient truck traffic on residential communities. The actions are to:

- Introduce goods movement policies into the Town of Halton Hills Official Plan;
- Participate in the Halton Region Goods Movement Study; and
- Request Halton Region and the Province of Ontario to upgrade facilities, provide new connections and complete by-passes on their road networks to provide alternate routes around Halton Hills for through truck traffic.

Traffic Calming

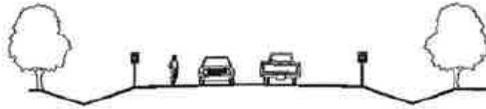
Municipalities apply traffic calming measures in both new developments and existing neighbourhoods to mitigate the adverse impacts of vehicular traffic. Traffic calming reduces vehicle speeds and decreases cut-through traffic on local roads to acceptable levels, while maintaining or improving the aesthetics of the roadway. The policy is as follows: The Town may investigate traffic calming measures to be implemented in certain locations within the Town and / or as a requirement of a development approval to promote pedestrian safety and mitigate the effects of automobile traffic within the Town. Traffic calming features may be permitted subject to an evaluation by the Town of functional, operational, servicing and financial issues associated with their use. The Action is to:

- Update the Traffic Calming Implementation Protocol as required

Roundabouts

Roundabouts are one-way circular intersections without traffic signal equipment in which traffic flows around a centre island in a counter clockwise direction. When appropriately installed and designed, roundabouts have been proven to reduce travel time; reduce the volume and severity of accidents; be part of traffic calming solutions and add to the streetscape environment. The policy is as follows: The Town may consider the use of roundabouts for intersection traffic control:

- In existing developed areas where a traffic control up-grade is warranted, capital improvements are being considered, or safety or capacity issues have been identified.
- In new development areas where a new intersection is planned on:
 - An arterial and/or collector road that warrants or may warrant a future traffic signal or all-way stop, and
 - A local road where traffic calming or development staging is required.



The Actions are to:

- Develop and implement a Roundabout Policy;
- Incorporate design guidelines for roundabouts in the municipal design standards; and
- Prepare and disseminate educational material on the use of roundabouts.

Road Safety

Road safety is a fundamental objective of all jurisdictions responsible for operating road systems. Motor vehicle collisions result in pain and suffering, financial loss and sometimes loss of life. The Town has already taken several actions to enhance road safety locally, including Safety Performance Functions; Rural Safety Reviews; and North Halton Injury Prevention Committee. The policy is as follows: The Town shall design roads to current safety standards and consider safety explicitly in all road improvement projects. The Action is to:

- Develop and implement a Safety Management Strategy.

Implementation and Monitoring

The successful implementation of the TMP will require that concurrent efforts be undertaken to achieve key strategies, including supportive land uses, and managing transportation demand and constructing the transportation infrastructure identified in the plan.

A regular review of the TMP is proposed every five years. The Town may amend the TMP in the intervening period to incorporate changes to the Official Plan review process or other major initiatives.

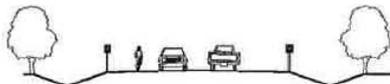
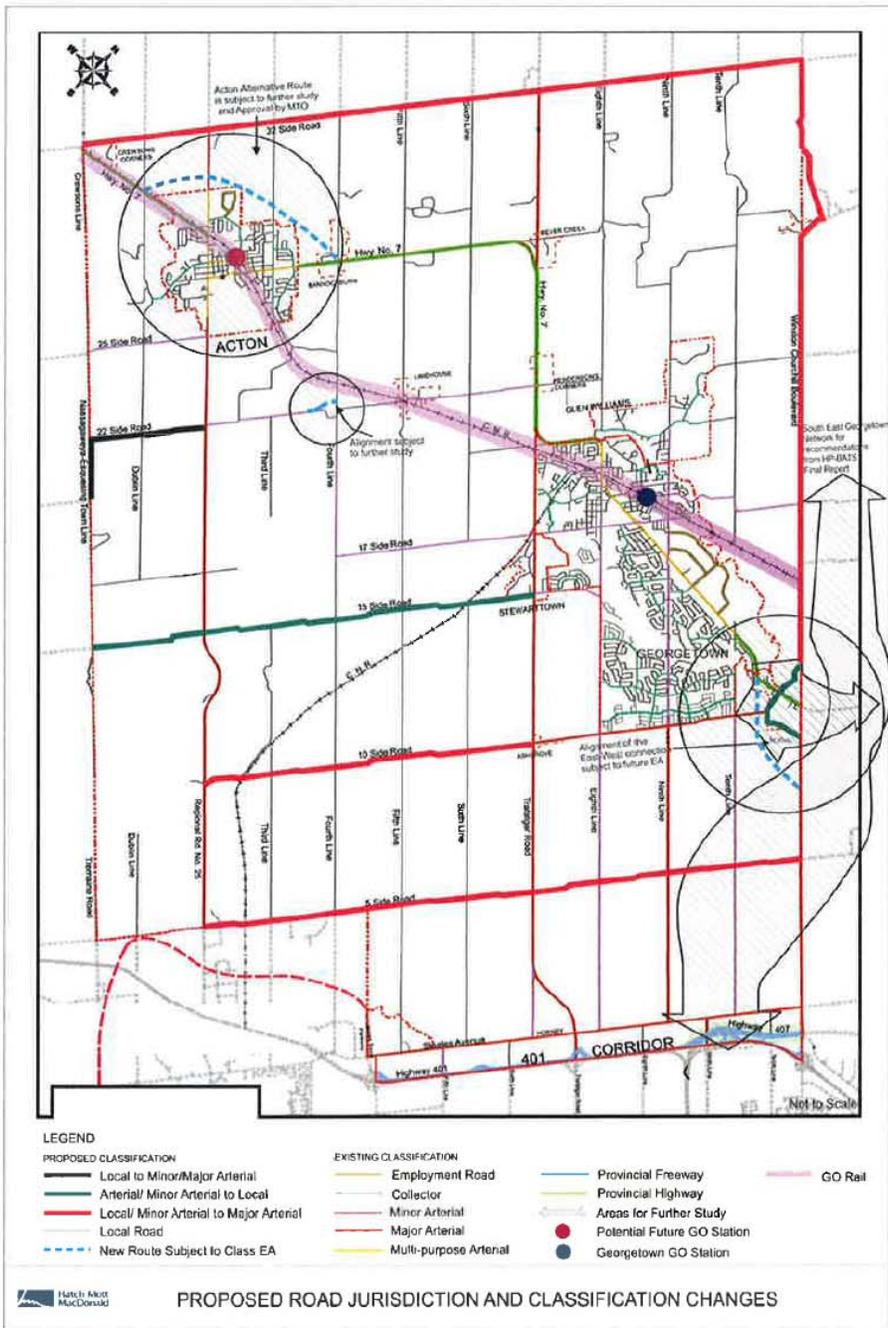


Figure 17. Recommended Road Jurisdiction and Road Classification Changes



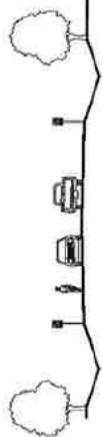


Table 5. Transportation Improvements Timing and Cost Estimates

Roadways/Intersections	Proposed Modifications/Improvements	Year	Improvement Type	Approx. Roadway Length (km)	Approximate Cost in Millions
Mill Street and Main Street	Acton Alternate Route	2012-22	Major Improvement	--	--
Guelph Street and Albert Street	A separate eastbound right turn lane	2014	Intersection Improvement	--	\$0.14
Maple Avenue and Guelph Street	A separate southbound right turn lane	2015	Intersection Improvement	--	\$0.14
Maple Avenue and Main Street South	A separate northbound right turn lane	2015	Intersection Improvement	--	\$0.14
Guelph Street and Sinclair Avenue	A separate northbound right turn lane	2016	Intersection Improvement	--	\$0.14
Guelph Street and Mountainview Road	Northbound and southbound dual left turn lanes	2016	Intersection Improvement	--	\$0.41
Nassagaweya-Esquesing Town Line	Local to Minor Arterial	2018	Road reconstruction – Flexible pavement	1.30	\$1.90
22 Side Road	Local to Minor Arterial	2019	Road reconstruction – Flexible pavement	2.43	\$3.55
Winston Churchill Boulevard	Minor Arterial to Local (Old Pine Road to south of 10 Side Road)	2020	Road reconstruction – Flexible pavement	--	--
Guelph Street and Winston Churchill Boulevard	Norval Alternate Route	2020	Major Improvement	--	--
New Connection on 22 Side Road (west of Fourth Line)	Minor Arterial	2021	Add paved shoulders	0.45	\$0.12
10 Side Road	Local to Minor Arterial	2022	Add paved shoulders	6.92	\$1.87





Roadways/Intersections	Proposed Modifications/Improvements	Year	Improvement Type	Approx. Roadway Length (km)	Approximate Cost in Millions
15 Side Road	Arterial/Minor Arterial to Local	2023	Add paved shoulders	9.32	\$2.53
5 Side Road	Local to Minor Arterial	2024	Add paved shoulders	9.73	\$2.63
32 Side Road	Local to Minor Arterial	2024	Road reconstruction – Flexible pavement	9.54	\$13.93
Winston Churchill Boulevard	Local to Major Arterial (32 Side Road to Old Pine Road)	2025	Road reconstruction – Flexible pavement	12.98	\$19.49

* This table should be read along with Figure 17.

LEGEND
Short
Medium
Long

