

Updated Transportation Master Plan Background

The 2007 Council approved HTMP was developed concurrently with the Growth Related Integrated Development Strategy (GRIDS) process to incorporate the six (6) municipalities (City of Hamilton, Town of Dundas, City of Stoney Creek, Town of Ancaster, Township of Glanbrook and Town of Flamborough) forming the Regional Municipality of Hamilton-Wentworth to form the City of Hamilton. The HTMP is utilized to assist in the implementation of transportation investments to support future growth objectives for the City as described in the Urban Hamilton Official Plan.

The development of the HTMP pre-dates the 2008 Metrolinx release of "*The Big Move*". However, the plan that was developed is consistent with the direction taken by Metrolinx. However, the HTMP update is an opportunity to address any policy gaps between these two (2) documents. It also provides the opportunity to embed the health perspective into the transportation policy. Metrolinx is expected to undertake a review of "The Big Move", the HTMP update is an opportunity to provide input into this regional transportation planning initiative.

One of the key strategic objectives in the City of Hamilton's 2012-2015 Strategic Plan is to "Improve the City's transportation system to support multi-modal mobility and encourage inter-regional connections". Consistent with this objective, Council approved the February 2013 report "Rapid Ready Expanding Mobility Choices in Hamilton". This report identified several key considerations in the development of the TMP update, which are embedded in this Request for Proposal, including the development of a Complete Streets strategy.

The transportation system must meet the needs of drivers, pedestrians, cyclists and transit users in the short, intermediate and long term. By 2031 it is anticipated that the population of Hamilton will increase to six hundred and sixty thousand (660,000) and employment projections to reach three hundred thousand (300,000). In addition, the Province has released updated projections for 2041. Although, the City has not reconciled specific information to accommodate this growth, consideration should be given to these 2041 projections.

The successful proponent will be required to outline and define expected transportation-related problems as a result of this anticipated increase in growth and provide solutions the City can contemplate to mitigating these matters. Therefore, a review of the existing system and associated road network is required which will be fundamental in understanding the current status and provide a clearer understanding of how to plan for and implement a system that meets the future objectives of the Official Plan.

The HTMP is a City-Wide policy that encompasses a workable document that has passed through the Environmental Assessment (EA) process. It also serves as an implementation tool for the Urban Hamilton Official Plan (OP); the document will provide legal justification of implementing future projects to provide the City with an integrated

transportation system. Consistent with the EA process, the City of Hamilton has initiated this mandatory five (5) year review of the HTMP. The objective of this review is to determine whether the recommendations of the 2007 HTMP EA for the projects that have not yet been implemented are still valid or whether a more detailed review and analysis of the 2007 recommendations is justified to accommodate the 2031 planning horizon, as well as considering potential impacts for 2041.

The preferred direction of growth, as identified in the OP, is a series of nodes and corridors which will form the major areas for intensification, as well as the development of Greenfields. To meet this shift in change, transportation must face the challenges and meet the future needs of drivers, pedestrians, cyclists and transit users in the City and regional commuters, both in the short, intermediate and long term. Among the existing identified targets within the HTMP, a modal shift to walking and cycling trips to fifteen percent (15%) and increasing per capita transit ridership from forty (40) to eight (80) to one hundred (100) by 2031 have been identified as key performance measures. In essence, the overriding transportation strategy is to rely on active transportation alternatives to the automobile in combination with road capacity optimization (transportation demand management, car share, bike share, carpooling etc.) to solve transportation problems, before looking to road expansion.

In February 2013, Council approved *Rapid Ready Report: Expanding Mobility Choices* in Hamilton Report sets out actions and investments Hamilton will have to make if it is going to realize its approved transportation strategy. Actions in the full report are grouped around three themes: growing the use of public transportation, creating supportive land uses and communities, and developing a seamless multi-modal transportation system. The rate of the investment is inextricably linked to the timing of successful achievement of the goals. The report also outlines access to jobs, school, recreation, health care and other destinations are critical in ensuring healthy and age-friendly communities. Enabling people to get to where they want to go, when they want to go, and providing appropriate choices is what mobility management is all about. Facilitating mobility choices through fully integrated transportation modes will benefit residents. Therefore, the City must build a blueprint of mobility management to achieve seamless, convenient, customer focused journeys for the travelling public.

OBJECTIVES & GUIDING PRINCIPLES

Based on the 2007 Council approved HTMP, a set of guiding principles was established focusing on seven (7) key objectives:

- Offer safe and convenient access for individuals to meet their daily needs
- Offer a choice of integrated travel modes, emphasizing active transportation (walking and cycling), public transit and carpooling
- Enhance the liveability of neighbourhoods and rural areas
- Encourage a more compact urban form, land use intensification and transit-supportive node and corridor development
- Protect the environment by minimizing impacts on air, water, land and natural resources

- Support local businesses and the community’s economic development
- Operate efficiently and be affordable to the City and its citizens

The objective of this HTMP update is to evaluate the above objectives and principles and those outlined in more detail in **Table 1**.

Table 1
2007 Transportation Master Plan Objectives and Guiding Principles

In 2020, the City of Hamilton’s transportation system will:	
Objective 1	Offer safe and convenient access for individuals to meet their daily needs
Principle 1(a)	Transportation facilities and services should be safe, secure and barrier-free
Principle 1(b)	Each transportation mode should have an acceptable level of service
Principle 1(c)	Non-travel alternatives and shorter trips should be encouraged
Objective 2	Offer a choice of integrated travel modes, emphasizing active transportation, public transit and carpooling
Principle 2(a)	Alternatives to single-occupant vehicle travel should be practical and attractive
Principle 2(b)	Transportation facilities and services should be continuous and seamlessly integrated
Principle 2(c)	The health benefits of active transportation should be recognized and promoted
Objective 3	Enhance the liveability of neighbourhoods and rural areas
Principle 3(a)	Transportation facilities should reflect and complement their community context
Principle 3(b)	Noise and other undesirable impacts of traffic on residential areas should be minimized
Objective 4	Encourage a more compact urban form, land use intensification and transit-supportive node and corridor development
Principle 4(a)	Investment in transit-supportive land uses should be encouraged by quality public transit services and facilities
Principle 4(b)	Transportation facilities should meet current needs while remaining adaptable to those of the future
Principle 4(c)	Zoning, urban design and parking management strategies should minimize land consumed by automobile travel

Objective 5	Protect the environment by minimizing impacts on air, water, land and natural resources
Principle 5(a)	The use of green space for new infrastructure should be minimized
Principle 5(b)	Transportation technologies and behaviours should reduce energy consumption and air emissions
Principle 5(c)	The impacts of surface water runoff from transportation facilities should be minimized
Objective 6	Support local businesses and the community’s economic development
Principle 6(a)	The efficiency of goods movement to, from, and within the City should be maximized
Principle 6(b)	Businesses and institutions should remain accessible to employees and visitors
Objective 7	Operate efficiently and effectively to the City and its citizens
Principle 7(a)	Maximum value should be extracted from existing facilities and services
Principle 7(b)	Decisions should be taken into account the life-cycle costs of transportation facilities and services
Principle 7(c)	Transportation funding opportunities involving other governments, the private sector and individual users should be considered

PROJECT SCHEDULE AND BUDGET

The proponent’s submission should include a Gantt chart to explain how they intend to accomplish the proposed timeline. The milestone and completion dates proposed below are a guideline for proponents to use when suggesting dates within their work plan. It is the responsibility of the successful proponent to identify an alternative timeline to facilitate the successful completion of the HTMP update to meet the City’s needs.

The following chart generally describes the timing involved in this project. The consultant will be required to a project schedule that will complete this project in a timely manner.

Key Milestone	Estimated Date
Project Commencement / Initiation Meeting	April 2014
Public Consultation	May 2014
Public Consultation	September 2014
Technical Memorandum	October 2014
Technical Memorandum	November 2014
Public Consultation	December 2014
Technical Memorandum	February 2015

Public Consultation	March 2015
Technical Memorandum	April 2015
Draft Report	September 2015
Final Report	November 2015

Note: If a Citizen’s Engagement Panel is approved, this schedule will be amended to reflect their participation and contributions.

The policy review and consideration of new policy papers should be considered within the social, cultural, economic, public health and natural environment contexts. Some key considerations include:

- The prioritization of projects and financial strategies
 - This could include evaluation criteria as part of a transparent framework for assessing future transportation priorities, which may include network connectivity, ridership, level of service, equity and accessibility, environmental sustainability, community impact, cost and constructability
- Consideration of adopting a multi-modal level-of-service approach to planning projects
- Development and implementation of a complete streets policy
 - Consideration should be given to feedback already provided by the Social Planning and Research Council of Hamilton
- Development and integration of a cultural consciousness initiative
- Development of a policy that integrates community-level transportation master plans and traffic management plans into the Hamilton transportation master plan including discussion regarding the hierarchy of plans
- Development of a public health and transportation policy
 - Address Council’s direction to consider Health and Equity criteria during the development of Hamilton’s Transportation Master Plan Update (
- Transit Policy Paper
- Update existing policy papers to include advancements and best practices in policies and consider the feasibility of future projects such as:
 - Municipal Car Pool Lot Network as a means to improve transportation choices for suburban and rural residents by improving opportunities for carpooling and increasing vehicle occupancy ratios.
 - Identify the need for a signal timing review for arterial road corridors City-Wide within level-of-service standards
 - Formalize the impact of development on the traffic signal program and intersection improvements city-wide

Study Work Plan

The consultant’s work plan will need to follow a staged process that should reflect the following stages, as a minimum:

- Stage 1: Review of Preferred Strategy and Targets
- Stage 2: Model Update
- Stage 3: Policy Review
- Stage 4: Study Documentation

On-going: Consultation Plan and Communications Strategy

Public consultation is anticipated at each stage of the study, in order to keep Hamilton's citizens informed on findings, progress and recommendations as well as avenues for communication.

Other strategic City-Wide transportation master planning studies have been completed by the City and approved by Council, including the 2009 Cycling Master Plan, 2010 Transit Operational Review Study, and more recently the 2013 Pedestrian Mobility Plan. These studies are important elements to be integrated into a comprehensive transportation master plan update.

Review of Preferred Strategy and Transportation Targets

The development of a HTMP update should address the transportation requirements for future growth based on the Official Plan's urban structure for the 2031 planning horizon, as well as consideration for 2041 growth implications for constrained areas. Developing transportation options for this growth scenario will be presented to the various stakeholders including regulatory agencies, City of Hamilton staff, members of the public, and Council for consideration. Through a process of evaluation and elimination, the alternatives will be narrowed down until the preferred scenario is identified.

A review of current transportation trends and best practices should be undertaken to establish the shift in transportation planning since 2007. This review should include an evaluation of the implementation progress of the HTMP and determine whether the projects have contributed to achieving the transportation targets established in 2007 by the City. The successful proponent should review the existing objectives and principles, transportation targets, as well as the existing HTMP Problem Statement below:

"Between 2001 and 2031, Hamilton's population will increase by one hundred and sixty two thousand (162,000) people (32%). During the same period, one hundred and five thousand (105,000) new jobs are expected to be created. If current travel characteristics remain the same, there will be one hundred and eighty thousand (180,000) additional auto driver trips per day that will need to be accommodated by the road network. This translates into one million and two hundred thousand (1.2 million) additional kilometres driven by Hamilton residents each day and a consumption of forty (40) million litres of fuel per year. Left unchecked, significant congestion on most Escarpment crossings will result in increased delays to auto drivers, transit riders and commercial vehicles. Accordingly, key objectives of the Transportation Master Plan include reducing dependence on single-occupant vehicles and promoting improved options for walking, cycling and transit, while maintaining and improving the efficiency of trips related to the movement of goods and servicing of employment areas."

Within the context of the above review, recommendations on the current direction and/or alternatives should be provided:

Consultant Deliverable(s):

- Technical memorandum that summarizes the findings of Stage 1 including:
 - Problem and Opportunity Statement
 - Preferred alternative strategy(s)
 - Updated objectives and principles
 - Updated transportation targets

Model Update

The City of Hamilton has calibrated their EMME Model to use in their transportation modelling activities. For the purpose of this study, the City Of Hamilton, the Greater Toronto Area (GTA) and Niagara have been included in the EMME network. The recent calibration of the EMME model has added more traffic zones to the network and more gateways to the areas external to the City of Hamilton.

The model should include a review of the rapid transit studies undertaken to date, in the context of the proposed transit network and, in light of other plan elements, including the road network (auto travel), active transportation (transit, cycling and pedestrian networks), travel demand management, the identification of planned transportation infrastructure (road and transit) and the protection of transportation right of ways.

As part of the proposal submission, the proponent should determine what additional data needs are required and include a provisional cost estimate to undertake the necessary data collection.

Below is a list of considerations that should be undertaken in the development of the EMME model update. The outcomes of the model calibration and validation will form part of the overall HTMP update, which will include, but not limited to, the following:

- Update base network from 2001 to 2006
- Traffic Signals 2006 to 2011
- Road Network 2006 to 2011
- Bike network segments 2006 to 2011
- Recommendations from community-level transportation master plans and traffic-management plans (as identified through City resources)
- Air Quality [modelled in EMME /MOVES]
 - Identify if the City can achieve GHG reductions
- Model Considerations:
 - Land-use (employment and population(Planning))
 - Mobility Hubs
 - Rapid Transit
 - Identify any additional projects (e.g. the S-Line - Ancaster Business Park to Eastgate via Centennial Parkway/Rymal Road), which should be prioritized, and could result in possible City requested adjustments to the Metrolinx Regional Transportation Plan;

- Expansion of existing dedicated bus lanes
- One to two way conversions (a separate task has been identified for this scenario)
- Potential need for grade separation for at-grade railway crossings
- Future bike network as identified in the Cycling Master Plan and the following:
 - Identify any additional network adjustments or enhancements, such as a network or segregated bicycle routes (including one and bi-directional travel)
 - Impact of greenways on the local road network
- Goods movement and the related truck route network map
 - Identify impacts associated with roundabouts
- Identification of Emergency Detour Route (EDR) alternatives during Highway and Escarpment Crossing closures
- Account for any transportation system impacts associated with the Niagara Greater Toronto Hamilton Area (NGTHA)
- Addition of HOV Lanes (related to any future plans for Highway 403 and/or QEW)
- Modifications to MTO highway ramp terminal configurations (e.g. Hwy 403/Mohawk Road)
- The potential need for connecting the new Trinity Church Arterial Corridor to the Airport, Highway 6 and NGTA corridor
- Future road closures/alterations
- Capital Improvement Plans and Streetscape Plans
- Regional transit service (GO Transit bus and rail service, and Burlington Transit)
- City-wide speed limit changes (e.g. lower speed limits)
- Travel Demand Management alternatives including:
 - Opportunities to achieve a modal shift for all trips
 - Opportunities to focus modal shifts for trips under 5km
 - Opportunities to focus modal shifts for trips under 2km
 - Quantify impact of various TDM programs including transit oriented developments and land use changes
 - Impact from modal shift at workplaces including reduction in single occupancy vehicles use (SOV) (e.g. existing data indicates there has been a 3% to 7% reduction in SOV use at fifteen (15) Hamilton employers)
- Potential road network impacts including:
 - Removal of Burlington Street Bridge 329
 - Removal of lane control system and related reversible lane on the Sherman Cut
 - Removal of vehicular lanes on the Claremont Access for other uses
 - James Mountain Road - Transit Priority/Emergency Access Only Route
 - Other road network impacts associated with approved and on-going area transportation master plans
 - Other road network impacts as identified through public consultation

Consultant Deliverable(s):

- Technical memorandum that summarizes the findings of Stage 2, including:
 - Preparation of materials and attendance at City and stakeholder meetings
 - EMME database and associated outputs and Model Update
 - Synchro/Simtraffic Outputs and electronic files and other applicable modelling software the successful consultant may deem appropriate
 - Network recommendations on two-way conversions that provides the best outcome for all road users
 - Key performance indicators to guide future decision-making procedures

Policy Review and Development

This stage includes a review of the comprehensive series of *Policy Papers* that were developed to provide direction by Council of various long-range transportation policies. A review and update of these policies will form the foundation for the development of the HTMP update.

The policy review and consideration of new policy papers should be considered within the social, cultural, economic, public health and natural environment contexts. Some key considerations include:

- The prioritization of projects and financial strategies
 - This could include evaluation criteria as part of a transparent framework for assessing future transportation priorities, which may include network connectivity, ridership, level of service, equity and accessibility, environmental sustainability, community impact, cost and constructability
- Consideration of adopting a multi-modal level-of-service approach to planning projects
- Development and implementation of a complete streets policy
 - Consideration should be given to feedback already provided by the Social Planning and Research Council of Hamilton
- Development and integration of a cultural consciousness initiative
- Development of a policy that integrates community-level transportation master plans and traffic management plans into the Hamilton transportation master plan including discussion regarding the hierarchy of plans
- Development of a public health and transportation policy
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- Transit Policy Paper
- Update existing policy papers to include advancements and best practices in policies and consider the feasibility of future projects such as:
 - Municipal Car Pool Lot Network as a means to improve transportation choices for suburban and rural residents by improving opportunities for carpooling and increasing vehicle occupancy ratios.
 - Identify the need for a signal timing review for arterial road corridors City-Wide within level-of-service standards

- Formulate the impact of development on the traffic signal program and intersection improvements city-wide

Responsibilities

Consultant Deliverable(s):

- Technical memorandum that summarizes the findings of Stage 3 that will include:
 - Addendums to existing policy papers
 - Development of new policy papers

Study Documentation

The development of a HTMP update is to address the transportation requirements for future growth based on the Official Plan's urban structure. Developing transportation options for this growth scenario will be presented to the various stakeholders including regulatory agencies, City of Hamilton staff, members of the public, and Council for consideration. Through a process of evaluation and elimination the alternatives will be narrowed down until the preferred scenario is identified.

Deliverable(s):

- Technical memorandum that summarizes the findings of Stage 4 that will include:
 - Policy recommendations
 - Network Improvements and associated priorities
 - Cost impacts including funding sources (e.g. Provincial and Federal Grants) and cost recovery mechanisms (including Development Charges eligibility), capital planning estimates and cost of not doing recommended projects
 - Decision-making toolbox
 - Updated transportation targets
 - Updated performance measures (i.e. annual, 5 year measures)

Consultation Plan

The consultant, through their identified work plan, is to develop a Consultation Plan and a communications strategy to ensure the people are aware of this strategically important project. It will be vital to the citizens of Hamilton that they understand the scope and reason for the project, identification of the issues as well as any potential short, intermediate and long term impacts, both locally in their neighbourhood as well as the city as a whole. Consultation will serve the project team and City staff with an understanding of the position and needs of the community through citizen input. The proposed strategy should make use of emerging technologies, yet be cognizant that not all residents may have access to certain technology and provide alternatives to maximize participation.

Several key stakeholders should be consulted throughout the development of the HTMP update. Below is a summary of potential meetings with the various stakeholders. The consultant should identify the number meetings within their proposal submission.

Stakeholder Group(s)	Estimated Number of Meetings
City Project Team	15
Staff Technical Team	6
Adjacent Municipalities	2
Review Agencies (e.g. Niagara Escarpment Commission, Conservation Authorities, and Utilities)	2
Committees to Council (e.g. seniors advisory, access & equity, and cycling committees etc.)	3
Neighbourhood Planning Teams	2
Business Community (BIAs, Chamber of Commerce)	3
Council Workshops	2
City-wide Public Consultation Meetings	12
Council Meeting	1

The consultant is free to develop their preferred Communications Strategy approach which will likely be based upon their experience on previous related projects, however, the following should be considered, as a minimum:

- Open Forums/Public Information Centres/Workshops, Focus Groups, Open Houses
- Public Surveys/Questionnaires – including collection, analysis, presentation and distribution of data/results
- Meetings - with staff, stakeholders, review agencies, associations, committees and Council
- Social Media consistent with City guidelines

The strategy should be cognizant of AODA requirements, location of meetings, cultural diversity and child-friendly engagement.

Consultant Deliverable(s):

- Preparation of materials and attendance at project team meetings, stakeholder meetings, public meetings and Council
- Preparation of all meeting agendas and minutes
- Preparation of content to be housed on the City’s project web page
- Technical memorandum that summaries the approach and feedback received from each public consultation meeting
- Support City staff with public inquires, as needed.

Note: If a Citizen’s Engagement Panel is approved, this schedule will be amended to reflect their participation and contributions.