REGIONAL MUNICIPALITY OF WATERLOO
PLANNING AND WORKS COMMITTEE
AGENDA
Tuesday, October 22, 2013
11:00 A.M. (Time is approximate –
Immediately following Administration and Finance Public Meeting)
Regional Council Chambers
150 Frederick Street, Kitchener

1. DECLARATIONS OF PECUNIARY INTEREST UNDER THE MUNICIPAL CONFLICT OF INTEREST ACT

2. DELEGATIONS

CONSENT AGENDA ITEMS
Items on the Consent Agenda can be approved in one motion of Committee to save time. Prior to the motion being voted on, any member of Committee may request that one or more of the items be removed from the Consent Agenda and voted on separately.

3. REQUEST TO REMOVE ITEMS FROM CONSENT AGENDA

4. MOTION TO APPROVE ITEMS OR RECEIVE FOR INFORMATION

a) CR-RS-13-087, Authorization to Expropriate Lands (1st Report) for Franklin Blvd Improvements Project – Year 1, North Phase (Pinebush Road to South of Bishop Street) and Year 1, South Phase (North of Clyde Road to South of Main Street), in the City of Cambridge (Approval)  

b) E-13-129, Intersection Improvements at New Dundee Road and Strasburg Road Extension, City of Kitchener (Information)  

c) Ottawa Street Improvements, Highway 7 Eastbound Ramp to Lackner Boulevard, City of Kitchener - Information Package in Advance of Public Consultation Centre (Information)  

d) E-13-122, 2014 GRT Replacement Bus Purchase (Approval)  

e) E-13-105, Collision Countermeasure Program Operational Review (Information)  

f) E-13-125, Consultant Selection for the Threats and Policies Database (Approval)  

g) P-13-097, Monthly Report of Development Activity for September 2013 (Approval)  

h) P-13-100, Niagara to Greater Toronto Area (GTA) Corridor Transportation Development Strategy (Approval)
REGULAR AGENDA RESUMES

5. REPORTS – TRANSPORTATION AND ENVIRONMENTAL SERVICES

TRANSPORT SERVICES

a) GRT Marketing and Communications Plan (presentation)

TRANSPORTATION


REPORTS - PLANNING, HOUSING AND COMMUNITY SERVICES

COMMUNITY PLANNING

c) P-13-102, Enbridge Line 9 Project – National Energy Board Application

COMMUNITY SERVICES

d) P-13-103, Regional Implementation Guideline for Cultural Heritage Landscape Conservation

TRANSPORTATION PLANNING

e) P-13-104, Go Transit / VIA Rail Service - Requests for Enhancement and Reinstatement of Service

f) P-13-105, Travelwise Transportation Management Association – Pilot Program Review

6. INFORMATION/CORRESPONDENCE

a) Council Enquiries and Requests for Information Tracking List

7. OTHER BUSINESS

8. NEXT MEETING – November 12, 2013

9. ADJOURN

10. MOTION TO GO INTO CLOSED SESSION

THAT a closed meeting of the Planning and Works Committee be held on Tuesday, October 22, 2013 immediately following the Planning and Works Committee meeting in the Waterloo County Room, in accordance with Section 239 of the Municipal Act, 2001, for the purposes of considering the following subject matters:

a) education related to procurement and a project agreement
NEXT MEETINGS

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<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tr>
<td>Planning and Works Committee</td>
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<tr>
<td>November 12, 2013</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber&lt;br&gt;2nd Floor, Regional Administration Building&lt;br&gt;150 Frederick Street&lt;br&gt;Kitchener, Ontario</td>
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<tr>
<td>December 3, 2013</td>
<td>1:00 P.M.</td>
<td>Planning and Works Committee</td>
<td>Council Chamber&lt;br&gt;2nd Floor, Regional Administration Building&lt;br&gt;150 Frederick Street&lt;br&gt;Kitchener, Ontario</td>
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<td>Planning, Housing and Community Services</td>
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<tr>
<td>Thu. October 24, 2013</td>
<td>7:30 P.M.</td>
<td>Walk Cycle Waterloo Region – Active Transportation Master Plan Public Input Meeting</td>
<td>Council Chamber&lt;br&gt;2nd Floor, Regional Administration Building&lt;br&gt;150 Frederick Street&lt;br&gt;Kitchener, Ontario</td>
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<td>Transportation and Environmental Services</td>
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<td>Thu. October 24, 2013</td>
<td>5:30 P.M. - 8:00 P.M.</td>
<td>Ottawa Street Improvements, Highway 7 Eastbound Ramp to Lackner Boulevard, City of Kitchener - Public Consultation Centre</td>
<td>Stanley Park&lt;br&gt;United Brethren Church&lt;br&gt;9 Dreger Avenue&lt;br&gt;Kitchener, Ontario</td>
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REGION OF WATERLOO
CORPORATE RESOURCES
Legal Services

TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: L07-90

SUBJECT: AUTHORIZATION TO EXPROPRIATE LANDS (1\textsuperscript{st} REPORT) FOR FRANKLIN BLVD IMPROVEMENTS PROJECT – YEAR 1, NORTH PHASE (PINEBUSH ROAD TO SOUTH OF BISHOP STREET) AND YEAR 1, SOUTH PHASE (NORTH OF CLYDE ROAD TO SOUTH OF MAIN STREET), IN THE CITY OF CAMBRIDGE

RECOMMENDATION:

THAT The Regional Municipality of Waterloo direct and authorize the Regional Solicitor to take the following actions with respect to the expropriation of lands for the reconstruction of Franklin Boulevard from Pinebush Road to south of Bishop Street, and north of Clyde Road to south of Main Street, in the City of Cambridge, in the Region of Waterloo as detailed in report CR-RS-13-087 dated October 22, 2013:

1. Complete application(s) to the Council of the Regional Municipality of Waterloo, as may be required from time to time, for approval to expropriate land, which is required for the reconstruction of Franklin Boulevard and described as follows:

Temporary Easement:

1. PT LT 6-7 PL 837 being Part 3 on 58R-17759 being Part of 03766-0271 (210 Pinebush Road, Cambridge);
2. PT LT 9 & 11, RCP1384 being Parts 28, 31, 57 and 61 on 58R-17759, being Part of 03796-3637 (225 Pinebush Road, Cambridge);
3. LT 31 RCP 1382 being Parts 38,42, and 44 on 58R-17759, being Part of 22642-0047 (209 Pinebush Road, Cambridge);
4. PT LT 24 RCP 1383 being Part 7, 38 and 39 on 58R-17761, being Part of 03796-0101 (1111 Franklin Blvd, Cambridge);
5. LT 29 RCP 1379 being Part 34 on 58R-17760, being Part of 03790-0051 (1200 Franklin Blvd, Cambridge);
6. PT LT 1 RCP 1380 being Parts 15, 18, 20 and 24 on 58R-17761, being Part of 03796-0115 (1700 Bishop Street, Cambridge);
7. PT LT 30 RCP 1379 being Part 34 on 58R-17761, being Part of 03790-0159 (1625 Bishop Street, Cambridge);
8. PT LT 15, RCP 1378 being Part 30 on 58R-17761, being Part of 03794-0025 (1680 Bishop Street, Cambridge);
9. PT LT 5, CON 10 being Part 14 on 58R-17767, being Part of 03845-0007 (605 Main St. E, Cambridge);
10. LT LT 9 RCP 1384 being Parts 2, 4 and 5 on 58R-17760, being Part of 03796-0027 (1245 Franklin Blvd, Cambridge);
11. PT LT 21 RCP 1383 being Parts 19 and 21 on 58R-17760, being Part of 03796-0068 (225 Sheldon Drive, Cambridge);
12. PT LT 23 PL 1126 being Parts 18 and 21 on 58R-17762, being Part of 03826-0011 (299 Clyde Road, Cambridge);
13. PT LT 28, RCP 1135 being Parts 27 and 30 on 58R-17766, being Part of 03826-0206 (East Franklin Blvd, Cambridge);
14. PT LT 28, RCP 1135 being Part 22 on 58R-17766, being Part of 03826-0192 (East side Franklin Blvd, Cambridge);
15. PT LT 23 PL 1126 being Part 16 on 58R-17762, being Part of 03826-0012 (301 Clyde Road, Cambridge);
16. PT LT 23 PL 1126 being Part 15 on 58R-17762, being Part of 03826-0013 (303 Clyde Road, Cambridge);
17. PT LT 5 CON 10 being Parts 24, 26, 27, 29 and 30 on 58R-17767, being Part of 03824-0045 (200 Franklin Blvd, Cambridge);
18. PT LT 5 CON 11 being Part 37 on 58R-17767, being Part of 03824-0043 (500 Main Street, Cambridge);
19. PT LT 5 CON 10 being Part 12 on 58R-17767, being Part of 03845-0008 (615 Main Street, Cambridge);
20. PT BLK 40 PL 58M241 being Part 17 on 58R-17767, being Part of 03845-0165 (255 Franklin Blvd, Cambridge);
21. PT LT 36 RCP 1135 being Parts 57, 58, 60, 61 and 63 on 58R-17766, being Part of 03822-0086 (364 Franklin Blvd, Cambridge);
22. PT LT 35 RCP 1135 being Part 49 on 58R-17766, being Part of 03822-0087 (354 Franklin Blvd, Cambridge);
23. PT LT 28 RCP 1135 being Parts 37, 39, 41 and 43 on 58R-17766, being Part of 03824-0041 (352 Franklin Blvd, Cambridge);
24. PT LT 2 RCP 1149 being Part 52 on 58R-17759, being Part of 22642-0046 (201 Pinebush Road, Cambridge);
25. LT 30 RCP 1379 being Parts 34 and 37 on 58R-17759, being Part of 22642-0049 (1250 Franklin Blvd, Cambridge);
26. PT LT 1 RCP 1380 being Part 10 on 58R-17761, being Part of 03796-0116 (1710 Bishop Street North, Cambridge);
27. PT LT 22 RCP 1383 being Part 30 on 58R-17760, being Part of 03796-0070 (1195 Franklin Blvd, Cambridge);
28. PT LT 28 RCP 1382 being Part 41 on 58R-17760, being Part of 22642-0066(R) (200 Sheldon Drive, Cambridge);
29. PT LT 2, RCP 1384 being Parts 11, 14, 16, 17 and 20 on 58R-17759, being Part of 03765-0106 (220 Pinebush Road, Cambridge);
30. PT LT 21 RCP 1383 being Parts 24, 26 and 28 on 58R-17760, being Part of 03796-0069 (1201 Franklin Blvd., Cambridge).

Serve notices of the above application(s) required by the Expropriations Act;

2. Forward to the Chief Inquiry Officer any requests for a hearing that may be received;
3. Attend, with appropriate Regional staff, at any hearing that may be scheduled;

4. Discontinue expropriation proceedings or any part thereof, in respect of the above described lands, or any part thereof, upon the registration on title of the required documentation to complete a transaction whereby the required interests in the lands are conveyed; and

5. Do all things necessary and proper to be done, and report thereon to Regional Council in due course.

SUMMARY: NIL

REPORT:

Regional Council approved the reconstruction of the Franklin Boulevard (Regional Road 36) corridor from Pinebush Road to Myers Road, in the City of Cambridge (the “Project”). The Environmental Assessment was approved by Council in March 2010 and by the Ministry of Environment in July 2011. This study investigated the need to increase traffic capacity on Franklin Boulevard and approved constructing roundabouts at the major intersections and reconstructing Franklin Boulevard with 4 lanes and raised centre median.

The detailed design of the project is presently underway. As a result of the potential for significant impacts of construction on traffic and the local community, Council approved a Construction Phasing plan that allows for construction to be undertaken in two phases. Phase 1 (Year 1) from Pinebush Road to south of Bishop Street (North Section), and north of Clyde Road to south of Main Street (South section) will be constructed in 2015. Phase 2 (Year 2) from south of Bishop Street to north of Clyde Road and south of Main Street to north of Myers Road is currently planned for construction in 2016.

On August 22, 2013 Regional Council approved the application to expropriate lands and easement interests required from 79 properties for the year 1 Phase of the project as detailed in Report CR-RS-13-065. The required lands and easements were identified as Fee Simple Partial Takings, Temporary Easements, Permanent Easements and Fee Simple Full Takings. There are parcels of land that are required for both Temporary Easements and Permanent Easements. Upon further review of the purposes of the various easements Region staff have determined that several of the parcels of land required for Temporary Easements for grading in connection with the road improvements were included only with the descriptions of Permanent Easements for hydro purposes rather than separately identified. The parcels of land identified for Temporary Easements in this Report CR-RS-13-087 identifies those specific parcels of lands required for grading purposes on a temporary basis as well as for hydro purposes. It is noted that the specific identification of these parcels of land required temporarily for grading is intended to minimize the impacts of the Permanent Easements on the subject properties and does not include any more lands or interests than previously identified for all affected property owners in their respective Property Impact Plans.

All of the property owners affected by this report, or their representatives, have been contacted by Legal Services Real Estate staff by letter to explain the purpose of this Report and provide details of the meeting dates of Planning and Works Committee and Council when this report will be considered.

The clarification of the parcels of lands affected by Temporary Easements detailed in Report
CR-RS-13-087 does not impact the time line of the expropriation process to insure the required lands and interests are acquired to meet project needs.

The expropriation of the lands is on an “as is” basis and upon acquisition the Region assumes all responsibility for the lands.

The Project Areas and Phases are shown attached as Appendix “A”.

CORPORATE STRATEGIC PLAN:

One of the focus areas of the Corporate Strategic Plan is to develop greater, more sustainable and safe transportation choices.

FINANCIAL IMPLICATIONS:

Transportation and Environmental Services staff advises that the 2013 Ten Year Transportation Capital Program includes $51,680,000 over the years 2013 to 2017 for this project to be funded from the Regional Development Charges Reserve Fund.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transportation and Environmental Services staff have been consulted in the preparation of this Report.

ATTACHMENTS

Appendix “A” - Project Area

PREPARED BY:  Tom Penwarden, Manager, Realty Services
               Fiona McCrea, Solicitor, Property

APPROVED BY:  Gary Sosnoski, Commissioner, Corporate Resources
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: T04-20, 7315

SUBJECT: INTERSECTION IMPROVEMENTS AT NEW DUNDEE ROAD AND STRASBURG ROAD EXTENSION, CITY OF KITCHENER

RECOMMENDATION:

For information.

SUMMARY:

NIL

REPORT:

1.0 Background

The City of Kitchener is undertaking a Municipal Class Environmental Assessment (EA) study for the extension of Strasburg Road in the southwest area of the City of Kitchener from approximately 500 metres north of Stauffer Drive southerly to New Dundee Road. This extension of Strasburg Road would connect to the previously approved (not yet constructed) extension of Strasburg Road from Rush Meadow Street to north of Stauffer Drive. The study area extends from existing Reidel Drive in the east westerly approximately 1 kilometre. Please refer to Appendix A for a key plan of the study area. Region staff members from the Transportation and Environmental Services Department and the Planning, Housing and Community Services Department are members of the City’s project team.

Through the course of this Class EA, the City’s project team developed and assessed various route alternatives for the extension of Strasburg Road and connection to New Dundee Road. Please refer to Appendix B for a plan showing the different alignments that were assessed by the City’s project team in developing a technically preferred alignment for the Strasburg Road Extension and connection to New Dundee Road. The study also included extensive public and agency consultation including four public information centres and several presentations to City Council. Based on the technical assessments and in consideration of all public input received, the City’s project team has identified W1 as the technically preferred alignment. W1 would connect to New Dundee Road approximately 750 metres west of existing Reidel Drive and would form a future “T” intersection at that location. The City’s Class EA is nearing completion and City staff plan to make a final presentation to City Council and place the Environmental Study Report on the public record by the end of October, 2013.
2.0 Intersection of Strasburg Road Extension and New Dundee Road

As New Dundee Road is a Regional road, the location, type of traffic control and design of the connection of Strasburg Road is subject to the approval of the Region of Waterloo. Based on a very preliminary roundabout screening of the new “T” intersection to compare a roundabout option with a traffic signals option, the City’s project team has identified a roundabout as the preferred option. Region and City staff have agreed that prior to a roundabout being approved at this location, the following must occur:

1. The City must undertake an Intersection Control Study (ICS) to complete a more detailed comparison of a roundabout to traffic signals;
2. The City must do a preliminary design of both options including associated revisions to proposed grading, drainage and property impacts;
3. The City must present both options to the public for input regarding the preferred method of traffic control;
4. Region staff must document the preliminary design, assessment and consultation process in a report to be presented in 2014 to the Region’s Planning and Works Committee for approval of the proposed traffic control at the Strasburg Road/New Dundee Road intersection; and
5. All other requirements of the Strasburg Road Class EA must be met.

3.0 Other Issues Regarding New Dundee Road

During this Class EA study, Region staff as well as members of the public have raised concerns about motorists’ difficulty turning left at the existing intersection of Reidel Drive/Cameron Road and New Dundee Road due to restricted visibility to the east caused by a hill on New Dundee Road. This intersection is located along the east limit of the City’s Class EA study. Reidel Drive constitutes the north leg of this intersection and is under the jurisdiction of the City of Kitchener. Potential local road network changes associated with the Strasburg Road Extension project may include the possible closure of Reidel Drive between Blair Creek Drive and New Dundee Road. At New Dundee Road, Cameron Road constitutes the south leg of this intersection and is under the jurisdiction of the Township of North Dumfries. The City’s consultant has confirmed that the sightlines for drivers exiting either Reidel Drive or Cameron Road are less than what is required by the current standards. Region staff have reviewed the 5-year collision history for this intersection and note that no unusual collision patterns exist at present. Region staff raised concerns that once Strasburg Road is connected to New Dundee Road, traffic using the existing Cameron Drive/New Dundee Road intersection will increase and could potentially result in more collisions at this location. To address this concern, the City has agreed to phasing the implementation of the Strasburg Road Extension, subject to available funding, as follows:

1. Phase 1: Strasburg Road Extension from Rush Meadow Street to Robert Ferrie Drive as soon as the funding is available; and
2. Phase 2: complete the remainder of the extension, including the connection to New Dundee Road subject to the City and Region completing all the tasks identified in the City’s Environmental Study report for the Strasburg Road Extension and all the tasks identified in this report E-13-129.

The City and the Region will investigate mitigation of the existing substandard sight distance at the New Dundee Road/Cameron Road intersection and will consider the implementation a solution in collaboration with the Township of North Dumfries and area property owners before opening of the Strasburg Road intersection at New Dundee Road.
4.0 Project Cost Estimate and Future Capital Works

The scope of the City’s Strasburg Road Extension project to be funded by the Region of Waterloo includes the Region’s share of the proposed new intersection of Strasburg Road and New Dundee Road as well as the Region’s share of any road work to mitigate the poor sightlines at the New Dundee Road/Cameron Road intersection.

The City’s consultant has yet to develop a detailed cost estimate for the Region’s share of this project; however, City staff expect to develop the detailed cost sharing as part of the detailed design for the Strasburg Road Extension. The Region’s 2013 Transportation Capital Budget and Ten Year Capital Forecast includes funds in 2016 to construct the Region’s share of the new Strasburg Road/New Dundee intersection as well as funds in 2021 to undertake road widening and other improvements on New Dundee Road between Homer Watson Boulevard and Fischer-Hallman Road. As part of developing the Region’s future Ten Year Transportation Capital Forecasts, Region staff will work closely with City staff to coordinate the Region’s capital program with the timing of the City’s Strasburg Road project to ensure the Region’s share of the proposed intersection works at Strasburg/New Dundee and Cameron/New Dundee is fully coordinated with the City’s Strasburg Road project. As part of that coordination process, the Region may have to consider advancing a portion of the future New Dundee Road improvements to address the sightline deficiency at the New Dundee/Cameron Road intersection.

CORPORATE STRATEGIC PLAN:

Road improvements on New Dundee Road support the Region’s Corporate Strategic Plan in the following Focus Areas, Strategic Objectives and Actions:

Focus Area 2.0 - Growth Management and Prosperity: Manage growth to foster thriving and productive urban and rural communities.

Strategic Objective / Action

2.2 Develop, optimize and maintain infrastructure to meet current and projected needs.
2.2.1 Continue to prioritize and implement capital program projects required to meet community needs and ensure sustainability.

FINANCIAL IMPLICATIONS:

The Region’s 2013 Transportation Capital Program and Ten-Year Capital Forecast includes $2 million in 2016 to fund the Region’s share of the Strasburg Road Extension/New Dundee Road intersection and includes $18 million in the years 2017-2021 for the Class EA, design and construction of improvements on New Dundee Road between Homer Watson Boulevard and Fischer-Hallman Road. As part of developing future Ten Year Transportation Capital Forecasts, the funding amounts and timing of these two projects will be adjusted to coordinate with the City’s project timing and with other needs in the corridor as they arise.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL
ATTACHMENTS

Appendix “A” - Key Plan Study Area
Appendix “B” - Key plan Alternative Routes

PREPARED BY: Steve van De Keere, Head, Transportation Engineering

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
APPENDIX “A”
Regional Municipality of Waterloo

OTTAWA STREET IMPROVEMENTS
HIGHWAY 7 EASTBOUND RAMP TO LACKNER BOULEVARD
City of Kitchener

INFORMATION PACKAGE

Public Consultation Centre
Thursday, October 24th, 2013
5:30 p.m. – 8:00 p.m.

at

Stanley Park United Brethren Church
9 Dreger Avenue, Kitchener

There is a Comment Sheet at the back of this package. If you wish, please fill it out and deposit it in the designated box provided at this Consultation Centre.
1. What is the Purpose of this Public Consultation Centre?

The Region of Waterloo is currently considering improvements on Ottawa Street from the Highway 7 Eastbound Ramp to Lackner Boulevard in the City of Kitchener as a Schedule ‘A+’ project under the Class Environmental Assessment. (Please refer to Appendix ‘A’ for a Key Plan.) Ottawa Street is an arterial roadway under the jurisdiction of the Region of Waterloo. The watermain, sanitary sewer and gashmain beneath this road are owned and operated by the City of Kitchener.

This project has been initiated to address the deteriorated roadway condition within the project limits. Some sections of storm sewer will also be replaced due to their deteriorated condition. In addition, pedestrian and cycling enhancements are also being considered as part of this project.

We encourage you to provide comments on the improvements under consideration and request that you fill out the Comment Sheet attached to the back of this Information Package and place it in the box at this Public Consultation Centre or send it to the address indicated on the Comment Sheet. Your comments will be considered by the Project Team, in conjunction with all of the other relevant information, in establishing a preferred design for roadway improvements on Ottawa Street.

2. Who is Directing the Planning of These Improvements?

The planning for these infrastructure improvements is being undertaken by a “Project Team” consisting of staff from the Region of Waterloo, MTE Consultants Inc. (the Region’s engineering consultant), the City of Kitchener and City of Kitchener Councillor Scott Davey.

3. What Improvements are being Considered on Ottawa Street?

Based on technical studies and investigations completed, the Project Team has identified the need for the following repairs to existing infrastructure on Ottawa Street from the Highway 7 Eastbound Ramp to Lackner Boulevard:

- Complete replacement of the deteriorated pavement structure with a slight narrowing of the existing travel lanes;
- Replacement of some sections of the storm sewer system; and
- Upgrades to the existing gas main transmission network infrastructure.

In addition, there is a need to replace an undersized Regional trunk watermain within and beyond the east limits of the project. It is being recommended that this proposed trunk watermain replacement from Heritage Drive to east of Lackner Boulevard (at Keewatin Avenue) be completed as part these Ottawa Street improvements.

Based on the approved Regional Transportation Corridor Design Guidelines, the Regional Cycling Master Plan, the Draft Active Transportation Master Plan, the 2013 Cycling Facility Map and other relevant policies/practices, the Project Team is also recommending the following proposed “Active Transportation” enhancements to the roadway corridor:

- Construction of 1.25 metre wide designated on-road cycling lanes on both sides of Ottawa Street to provide a continuous cycling facility on Ottawa Street within the projects limits (Highway 7 Ramp to Lackner Boulevard);
- Construction of a 3.0m wide multi-use trail on the north side of Ottawa Street between Dreger Avenue and Nottingham Avenue and on both sides of Ottawa Street between Old Chicopee Drive and Lackner Boulevard. Construction of the 3.0m wide multi-use trails is intended to facilitate improved trail connectivity at the project’s west limit and to
support higher pedestrian and cyclist traffic at the project’s east limit. The east limit of the project is adjacent to the Grand River Arena, Grand River High School and the Stanley Park Community Centre and sports fields.

- Construction of new 1.5 metre to 1.8 metre wide sidewalks on the north and south sides of Ottawa Street where none currently exist;
- Replacement/relocation of existing deteriorated sidewalk panels;
- Installation of Detectable Warning Plates to facilitate barrier free access at all sidewalk ramp and road crossing locations;
- Improvements/enhancements to the existing Grand River Transit (GRT) stops and bus shelters including the introduction of new iXpress stop locations (in addition to the regular GRT stops); and
- Provision of 1.0 metre to 2.25 metre wide boulevards and enhanced boulevard landscaping where feasible. (Landscape planting typically occurs 1 year after construction has been completed.)

It is noted that, in order to accommodate these proposed enhancements on Ottawa Street, there is a requirement for the acquisition of strips of property from some adjacent private properties as well as the removal of some existing trees and encroachment of the work into the grassed yards of some properties.

Please refer to Appendix “B” for drawings of the Project Team’s Preferred Design for Ottawa Street through the project limits.

4. Will Ottawa Street between Old Chicopee and Lackner Boulevard be Widened to 4 Lanes?

The Regional Transportation Master Plan’s forecast to 2026 indicates no immediate need for 4 lane widening of Ottawa Street between Old Chicopee and Lackner Boulevard. If the Ottawa Street bridge connection across the Grand River is constructed to the Breslau community after 2026, the 4 lane widening option will be re-evaluated.

5. Are There any Intersection Improvements Planned as Part of this Project?

It is proposed that some intersection modifications also be completed as part of this project to achieve intersection operational improvements. The following improvements are being considered on Ottawa Street as part of this project:

- Extension of the westbound left-turn lane storage to accommodate more vehicles waiting to enter the eastbound ramp to the expressway;
- Extension of the eastbound right-turn lane storage at Franklin Street;
- Extension of the northbound left-turn lane on Franklin Street;
- Introduction of a dedicated eastbound left-turn lane at Hickson Drive;
- Extension of the northbound left-turn lane on River Road; and
- Geometric improvements at Old Chicopee Drive to improve traffic movements through the intersection.

In addition to the intersection improvements listed above, the Project Team is also considering improvements to intersection lighting at the Highway 7 Ramp and River Road intersections, traffic signal equipment upgrades where warranted, and median installations (painted or raised concrete islands) as required to accommodate new lane configurations.
6. **Is a Roundabout Being Considered at the River Road and Ottawa Street Intersection?**

   A roundabout at River Road and Ottawa Street is not being considered by the Project as the level of service at this intersection has been determined to be adequate for present and future use. In addition, land acquisition requirements would be excessive to successfully implement a roundabout at this location.

7. **What Other Improvements are Being Considered as Part of this Project?**

   In addition to the improvements discussed in Sections 3 and 4, other improvements will also be completed including the replacement of deteriorated retaining walls and the installation of new guide rail on the south side of Ottawa Street at Dreger Avenue.

   In addition, Grand River Transit is working with the Project Team in developing alternatives for implementing a transit hub in the vicinity of Ottawa Street and Lackner Boulevard to support the new iXpress service and other planned route service improvements.

8. **How Does this Project Relate to the Objectives of the Regional Official Plan, the Regional Transportation Master Plan and the Regional Transportation Corridor Design Guidelines?**

   The Project Team is planning these improvements to address both the deteriorated roadway infrastructure as well as to include enhancements to the roadway corridor consistent with Regional Bylaws, policies, plans and practices. The Regional Official Plan gives the direction to balance new and retrofitted roads for all modes of transportation including walking, cycling, autos and transit. The proposed enhancements on this project support the Regional Transportation Master Plan (RTMP) goals of optimizing our transportation system, promoting transportation choice and supporting sustainable development. Regional Council also approved the Regional Transportation Corridor Design Guidelines in 2010 that support the integration of active and sustainable transportation on all Regional Roads.

   This project will improve the walking environment by including new sidewalks where they currently do not exist. The sidewalk will be set back from the road with grassed boulevards to further enhance the walking experience. In addition, this project includes the installation of dedicated on and off-road cycling lanes in support of the Region’s Cycling Master plan which designates this section of Ottawa Street as an official cycling route. Improving the walking and cycling environments will support the Transit Modal Share targets in the RTMP.

9. **Who is Responsible for Clearing Snow from the Proposed New Sidewalks and Multi-Use Trails?**

   The City of Kitchener has jurisdiction for the maintenance of sidewalks and multi-use trails on Regional Roads. As per the City of Kitchener’s associated by-law, snow clearing to ensure sidewalks are clear of snow and ice is the responsibility of the property owner when the sidewalk is in the front of a residence. When the sidewalk or multi-use trail is located at the rear of residences or where there are no fronting residences (like most of the new sidewalk proposed on Ottawa Street), the City will plow these sidewalks and multi-use trails.


10. Will Property Acquisition be Required for this Project?

Implementation of the Project Team’s proposed improvements will require that the Region acquire property from several abutting property owners. These proposed property purchases generally consist of small ‘strips’ of land immediately adjacent to the existing roadway right-of-way to provide room for the proposed boulevards, sidewalks and cycling lanes. In areas where property is required, the property owner will be contacted directly by the Region of Waterloo’s Land Purchasing Officer. Compensation will be provided at fair market rates based on recent similar area sales. The plans presented at this Consultation Centre show the proposed property acquisition that will likely be required. Please refer to Appendix “C” for further information on the property acquisition process.

11. How will Trees, Driveways and Lawns be Affected?

It is expected that some existing trees will have to be removed during construction to accommodate the proposed improvements. The plans presented at this Consultation Centre show trees that likely will require removal or trimming. It is the Region’s practice to plant two replacement trees for each tree removed as a result of any road projects. Any grassed areas disturbed during construction will be repaired to equal or better condition with topsoil and sod. In addition to replacing any trees removed on a 2-for-1 basis, new boulevard landscaping, including salt resistant trees and shrubs, will be included as part of the project where feasible. Any new landscaping typically occurs in a separately tendered landscaping contract in the year following construction. Driveways will be re-graded as necessary in order to blend smoothly with the newly constructed roadway.

Some residential/commercial properties along Ottawa Street may currently have hard landscaping features such as rock gardens, ornamental lights, underground sprinkler systems or similar landscape features which are currently situated on the road right-of-way rather than on private property. If your property is identified as having these types of features on the roadway right-of-way, you will be contacted well in advance of construction and be requested to relocate these items from the right-of-way prior to construction.

12. How will the Stanley Park Conservation Area be Affected by this Project?

The Stanley Park Conservation Area is a designated wetland. The intent of the overall design is to avoid impacts to the wetland wherever possible. The Region of Waterloo, in conjunction with the Grand River Conservation Authority (GRCA) established the wetland limit where it abuts the Ottawa Street corridor in order to accurately define the location of the wetland in relation to the proposed works. GRCA and Region policies dictate that any impact to a wetland as a result of the intrusion of public infrastructure must be adequately mitigated if unavoidable. In the event that the proposed works encroach into wetland area(s), best management practices and remedial measures must be employed to adequately restore and enhance the wetland features and functions. This is typically demonstrated through the development of an Environmental Impact Study (EIS). It is anticipated that some tree removals will occur on both sides of Ottawa Street between Dreger Avenue and Nottingham Avenue to accommodate the proposed road cross-section. In addition, minor encroachment into the wetland areas for grading slopes is required but this encroachment is very limited.

13. How is the Natural Environment being Considered?

Sediment and erosion control features will be designed, implemented and maintained throughout construction. Key measures of this sediment and erosion control plan will include silt fencing, temporary sediment basins and other Best Practice measures. As noted previously, the proposed improvements will include new boulevard landscaping where
feasible in order to enhance the natural environment and to provide a more appealing setting for pedestrians and other right-of-way users.

14. When will Construction Occur and Will There be Detours?

Construction on Ottawa Street is tentatively scheduled to commence in 2016 and would occur over two (2) years (2016-2017) in order to maintain traffic and minimize overall disruption to the residents and businesses along the corridor. The Region’s Transportation Capital Program is reviewed annually and the timing of projects may change depending on several factors. The timing of this Ottawa Street work will also be coordinated with other planned GRT improvements along the corridor (see section 3).

It is tentatively proposed that construction will be accomplished in two (2) stages, by completing the section of Ottawa Street from Highway 7 to River Road in 2016 and the section of Ottawa Street from River Road to beyond Lackner Boulevard in 2017. During the works, Ottawa Street will remain open to at least one lane of traffic in each direction and therefore there will be no formal detours required.

Pedestrian access will be maintained on one side of Ottawa Street for the duration of the construction. Where the sidewalk is close to deep excavations, the sidewalk will be separated from the work area by temporary fencing. Signage will be erected in order to direct pedestrians through the project area.

The City of Kitchener Fire Department, Waterloo Regional Police and Ambulance Services will all be advised of the traffic restrictions during the construction period. Grand River Transit service (Routes 1, 8 and 17) will be maintained during construction through the implementation of temporary bus stop locations as required.

As is customary during Regional Road reconstruction projects, motorists will be advised of the construction timing and traffic restrictions through advance signage and through information on the Region’s web site.

15. How will Access be Maintained to Properties during Construction?

Access to residential/commercial driveways will be maintained to the greatest extent possible during construction. The Contractor will be required to temporarily block access to and from driveways on Ottawa Street and side streets for short-term periods when completing certain construction operations. Where a disruption to your driveway is expected, the Contractor is required to hand-deliver a notice at least 48 hours in advance advising you of the time and duration of the driveway disruption. If necessary, alternate parking arrangements will be made, such as provision for temporary parking on adjacent side streets.

For commercial properties, access for customers will be maintained at all times. If only one driveway access exists, the Contractor will endeavour to complete the work across the driveway in two stages where feasible in order to maintain customer access.

Property and business owners are asked to contact the site supervisor if they have any concerns in relation to access, signage or other issues during the project so it can be determined if reasonable changes or modifications can be made.
16. Will there be Water Service Shutdowns during Construction?

The Region intends to install a new 450mm diameter trunk watermain to replace an existing 300 mm diameter trunk watermain from Heritage Drive to Keewatin Avenue in order to upgrade the existing trunk watermain capacity. The installation of the new trunk watermain will be completed while Ottawa Street is already disrupted for the proposed roadway improvements. In order to make connections to the existing system, temporary water service interruptions will be required as part of this work. Water service interruptions will likely be less than ½ a day in duration and will likely occur between 9:00 am and 2:30 pm Monday to Friday unless other arrangements have been made. "Notices of Water Service Interruption" will be delivered to your front door a minimum of 24 hours before any required water service shutdown.

17. Can my Existing Water Service be Upgraded?

Replacement of the existing distribution watermain within Ottawa Street is not being considered as part of this Project and, as such, water service replacements are not anticipated to be completed as a result; however, if property owners wish to increase the size of the water service to their property beyond the standard 19mm size (i.e. to achieve increased flow) they may chose at their own cost to have this work included during this project. Undertaking these improvements in conjunction with the proposed construction typically results in cost savings to the property owner as compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Kitchener and the property owner, existing water services may be upgraded from the mains under the road to the property line at the property owner’s expense.

If you do wish to discuss an increase in the size of your water service to a size greater than the standard of 19mm diameter (i.e. to achieve increased flow), please indicate so on your comment sheet. From this information, staff will contact you at a later date to discuss your plans and any further requirements.

Additionally, property owners may wish to consider replacing the water service on their private property (i.e. between the property line and their building) during the construction activities. Property owners can inquire to arrange this work directly with the Region’s Contractor on-site during construction but it cannot be guaranteed that the Contractor will be able to accommodate this additional work request.

18. Can my Existing Sanitary Service be Up-graded?

Replacement of the existing sanitary sewer within Ottawa Street is not being considered as part of this Project and, as such, sanitary service replacements are not anticipated to be completed as a result; however, if property owners wish to increase the size of the sanitary service to their property beyond the standard 100mm size (i.e. to achieve increased flow) they may choose at their own cost to have this work included during this project. Undertaking these improvements in conjunction with the proposed construction typically results in cost savings to the property owner as compared to undertaking the work independently at another time in the future. Subject to a mutual agreement between the City of Kitchener and the property owner, existing sanitary services may be upgraded from the sanitary sewer main under the road to the property line at the property owner’s expense.

If you wish to discuss an increase in the size of your sanitary service to a size greater than the standard of 100mm diameter (i.e. to achieve increased flow), please indicate so on your comment sheet. From this information, staff will contact you at a later date to discuss your plans and any further requirements.
Additionally, property owners may wish to consider replacing the sanitary service on their private property (i.e. between the property line and their building) as part of this construction. Property owners can inquire to arrange this work directly with the Region’s Contractor on-site during construction but it cannot be guaranteed that the Contractor will be able to accommodate this additional work request.

19. How will Garbage / Recycling be Collected During Construction?

During construction we ask that you continue to place your garbage and blue boxes at the end of your driveway for pick-up as usual. When work is occurring in front of your home and garbage collection vehicles do not have access to your driveway, our Contractor will deliver your garbage and recyclables to an adjacent side street and return the empty containers afterwards. We ask that all residents mark their containers with their address for easy identification.

20. What about Dust During Construction?

The Region will be monitoring the amount of dust generated by construction activities on a daily basis. When necessary, the Region will ensure that the contractor uses proper dust suppression measures (i.e. the application of water and/or calcium chloride) in accordance with the Region’s standard practice.

21. What are the Expected Working Hours during Construction?

In general, construction working hours are from 7:00 a.m. to 7:00 p.m. Monday through Friday, although the Contractor may also work on Saturdays from time to time. There may also be occasions where the Contractor is required to complete a critical work item outside of these normal working hours. Work outside normal working hours must be approved by the Region and the City of Kitchener.

22. Will there be any Change in Traffic Noise Following this Construction?

The Project Team expects no increase in traffic noise levels on Ottawa Street as a result of the proposed improvements. In fact, improvements to the asphalt pavement compared to the existing irregular and cracked surface will tend to decrease vehicular noise levels after reconstruction. However, the Region of Waterloo will complete a noise study as part of this project’s preliminary design process. This proposed noise study will use current and future forecasted noise levels on Ottawa Street to ensure the Project Team’s assessment that noise walls are not warranted for this project.

23. Will the Posted Speed Limit on Ottawa Street be Changed?

Following construction, the Region will retain the posted speed limit of 50 km/hr on Ottawa Street from the Highway 7 Eastbound Ramp to Lackner Boulevard.

24. What is the Estimated Cost of this Project and How Will it be Funded?

The Region of Waterloo and the City of Kitchener are funding the road improvements on this project. The estimated project cost for the Region’s share of the proposed Ottawa Street improvements is approximately $5,395,000. The City of Kitchener has an additional budget of $150,000 for the City’s share of the storm sewer replacements on Ottawa Street. The cost of the Region trunk watermain work is estimated to be $400,000.
25. What are the Next Steps?

Prior to finalizing the recommended design concept for Ottawa Street for Regional Council's approval, the Project Team is asking for the public’s input on the proposed improvements. This Public Consultation Centre is your opportunity to ask questions, provide suggestions, and make comments. Once your input is received, it will be used by the Project Team, in conjunction with all other relevant information, to finalize the recommended design for the Ottawa Street improvements.

26. When Will Final Decisions be Made for this Project?

The Project Team will review the public comments received from this evening’s Public Consultation Centre and use them as input for recommending a final Design Concept for the Ottawa Street project. This Final Recommended Design Concept will be presented to Regional Planning and Works Committee and Council in the Spring of 2014 for approval. In advance of these meetings, letters will be sent to all adjacent property owners and tenants (as well as to all members of the public specifically registering at this Public Consultation Centre) so that anyone wishing to speak to Committee or Council about this project can do so before final approval.

27. How Can I Voice My Comments At This Stage?

In order to assist us in addressing any comments or concerns you might have regarding this project, we ask that you please fill out the attached Comment Sheet and leave it in the box provided at the registration table. Alternatively, you can mail, fax or e-mail your comments to the Region of Waterloo not later than November 14th, 2013.

We thank you for your involvement and should you have any questions or concerns, please contact:

Mr. Dave Hallman, P.Eng.          Mr. Mike Henderson, C.E.T.,
Vice President, Municipal          Project Manager
MTE Consultants Inc.               Region of Waterloo
520 Bingemans Centre Drive         150 Frederick Street, 6th Floor
Kitchener, ON N2B 3X9              Kitchener, ON N2G 4J3

Phone: (519) 743-6500              Phone: (519) 575-4529
Fax:      (519) 743-6513           Fax:       (519) 575-4430
Email:  dhallman@mte85.com         Email:    MHenderson@regionofwaterloo.ca
Appendix B-1
Typical Cross Section

OTTAWA STREET
(Nottingham to Dreger)

FIG 1
Scale 1:100
TYPICAL SECTION
OTTAWA STREET
Appendix B-4

Typical Cross Section

OTTAWA STREET
(Old Chicopee to Lackner)
Appendix C

Property Acquisition Process Information Sheet

The following information is provided as a general overview of the property acquisition process and is not legal advice. Further, the steps, timing and processes can vary depending on the individual circumstances of each case.

Once the Recommended Design Concept has been approved, the property acquisition process and the efforts of Regional Real Estate staff will focus on acquiring the required lands to implement the approved design. Regional staff cannot make fundamental amendments or changes to the approved design concept.

Property Impact Plans
After the project has been approved and as it approaches final design, the project planners will generate drawings and sketches indicating what lands and interests need to be acquired from each affected property to undertake the project. These drawings are referred to as Property Impact Plans (PIP).

Initial Owner Contact by Regional Real Estate Staff
Once the PIPs are available, Regional Real Estate staff will contact the affected property owners by telephone and mail to introduce themselves and set-up initial meetings to discuss the project and proposed acquisitions.

Initial Meetings
The initial meeting is attended by the project engineer and the assigned real estate staff person to brief the owner on the project, what part of their lands are to be acquired or will be affected, what work will be undertaken, when, with what equipment, etc and to answer any questions. The primary purpose of the meeting is to listen to the owner and identify issues, concerns, effects of the proposed acquisition on remaining lands and businesses that can be feasibly mitigated and/or compensated, and how the remaining property may be restored. These discussions may require additional meetings. The goal of staff is to work with the owner to reach mutually agreeable solutions.

Goal – Fair and Equitable Settlement for All Parties
The goal is always to reach a fair and equitable agreement for both the property owner and the
Region. Such an agreement will provide compensation for the fair market value of the lands and address the project impacts (such as repairing or replacing landscaping, fencing, paving) so that the property owner will receive the value of the lands acquired and the restoration of their remaining property to the condition it was prior to the Project.

The initial meetings will form the basis of an initial offer of settlement or agreement of purchase and sale for the required lands or interests.

**Steps Toward Offer of Settlement or Agreement of Purchase and Sale**

The general steps towards such an offer are as follows;

1) the Region will obtain an independent appraisal of the fair market value of the lands and interests to be acquired, and an appraisal of any effect on the value of the rest of the property resulting from the acquisition of the required lands and interests;
2) compensation will be estimated and/or works to minimize other effects will be defined and agreed to by the property owner and the Region;
3) reasonable costs of the owner will be included in any compensation settlement;
4) an offer with a purchase price and any other compensation or works in lieu of compensation will be submitted to the property owner for consideration; and
5) an Agreement will be finalized with any additional discussion, valuations, etc as may be required.

Depending on the amount of compensation, most agreements will require the approval of Council. The approval is undertaken in Closed Session which is not open to the public to ensure a level of confidentiality.

**Expropriation**

Due to the time constraints of these projects, it is the practice of the Region to commence the expropriation process in parallel with the negotiation process to insure that lands and interests are acquired in time for commencement of the Project. Typically, over 90% of all required lands and interests are acquired through the negotiation process. Even after lands and interests have been acquired through expropriation an agreement on compensation can be reached through negotiation, this is usually referred to as a ‘settlement agreement’.

Put simply, an expropriation is the transfer of lands or an easement to a governmental authority for reasonable compensation, including payment of fair market value for the transferred lands, without the consent of the property owner being required. In the case of expropriations by municipalities such as the Region of Waterloo, the process set out in the Ontario *Expropriations Act* must be followed to ensure that the rights of the property owners provided under that *Act* are protected.
PUBLIC CONSULTATION CENTRE

Please complete and hand in this sheet so that your views can be considered for this project. If you cannot complete your comments today, please take this home and mail, fax or e-mail your comments by November 14th, 2013 to:

Mr. Mike Henderson, C.E.T.,
Project Manager,
Design and Construction Division
Regional Municipality of Waterloo
Facsimile: 519-575-4430

6th Floor, 150 Frederick Street
Kitchener, ON N2J 4G3
email: mhenderson@regionofwaterloo.ca

Are you interested in upgrading your water service as part of this project? YES ___ NO ___

Are you interested in upgrading your sanitary service as part of this project? YES ___ NO ___

Comments or concerns regarding this project:

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Name: ____________________________________________

Address: __________________________________________

Postal Code: ________________________________

COLLECTION NOTICE

All comments and information received from individuals, stakeholder groups and agencies regarding this project are being collected to assist the Region of Waterloo in making a decision. Under the Municipal Act, personal information such as name, address, telephone number, and property location that may be included in a submission becomes part of the public record.
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: F05-31

SUBJECT: 2014 GRT REPLACEMENT BUS PURCHASE

RECOMMENDATION:

THAT the Regional Municipality of Waterloo takes the following action regarding the Grand River Transit’s 2014 replacement bus purchase:

a) grant pre-budget approval for the purchase of fifteen (15) transit buses prior to the approval of the 2014 budget.

b) accept the proposal from New Flyer Bus Industries Canada ULC., for the 2014 delivery of fifteen (15) diesel transit buses at a price of $7,097,032.80 including all applicable taxes.

c) authorize the issuance of debentures in an amount not to exceed $6,400,000 for a term not to exceed 10 years for this purchase.

SUMMARY:

In 2012, Regional Council accepted a proposal from New Flyer (Report: E-12-099/F-12-074) for the delivery of transit buses over the five year period from 2013-2017. This procurement approach was adopted to enhance the operational benefits of fleet standardization and provided a pricing advantage due to the longer term commitment. The proposal was accepted by Regional Council on the understanding that the quantity of buses ordered and the price will be determined annually subject to final council approval.

The production and delivery schedule for transit buses requires a lengthy lead-time from order to delivery and staff are requesting pre-budget approval to ensure the fifteen (15) buses are available when needed in 2014.

REPORT:

Background

In 2012, Regional Council accepted a proposal from New Flyer Bus Industries Canada ULC., for the delivery of transit buses over the five year period from 2013–2017 (Report: E-12-099/F-12-074). This procurement approach was adopted to enhance the operational benefits of fleet standardization and provided a pricing advantage due to the longer term commitment. The proposal was accepted by Regional Council on the understanding that the quantity of buses ordered and the price will be determined annually subject to final council approval.
Transit Fleet Accessibility

Since the inception of GRT, all Regional bus purchases have been low floor accessible vehicles. These buses are easier for all passengers to board and exit as there are no stairs to navigate. This feature is particularly important to customers travelling with mobility devices or strollers. With the conventional bus procurement in 2012 the entire conventional bus fleet is low floor and fully accessible. In 2012 approximately 139,300 rides were provided to MobilityPLUS customers using accessible conventional transit buses.

These replacement buses will also be equipped with advanced technology including automated audible and visual stop announcements. These features greatly assist visually and hearing impaired customers with exiting the bus at the proper bus stop location.

Clean Diesel Technology

These buses operate on Ultra Low Sulphur Diesel fuel and are equipped with post emission control devices known as Continuous Regenerating Technology (CRT) which use particulate filters to reduce diesel emissions to levels comparable to compressed natural gas (CNG). To date 194 buses have been purchased with this technology. On an annual basis, these buses are estimated to have reduced approximately 92 tons of emissions from non-methane hydrocarbons, particulate matter, carbon monoxide and sulphur dioxide.

To meet the 2010 emission control requirements the new buses also include a Selective Catalytic Reduction (SCR) system which, through the injection of a highly purified solution of urea and water into the exhaust system, converts the harmful nitrogen oxides of the exhaust gases into water and atmospheric nitrogen. This technology can deliver near zero emissions of nitrogen oxides.

CORPORATE STRATEGIC PLAN:

The purchase of the clean diesel buses supports Focus Area 1 – Environmental Sustainability: Protect and Enhance the Environment.

FINANCIAL IMPLICATIONS:

Based on the supplier’s confirmed purchase price from P2012-22 to purchase buses for delivery in 2014, the estimated cost to the Region for the supply of fifteen (15) diesel transit coaches as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2012-22</td>
<td>$ 6,280,560</td>
</tr>
<tr>
<td>HST</td>
<td>816,473</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>$ 7,097,033</td>
</tr>
<tr>
<td>Less: Municipal HST Rebate</td>
<td>(705,935)</td>
</tr>
<tr>
<td>Total</td>
<td>$ 6,391,098</td>
</tr>
</tbody>
</table>

Each of the fifteen (15) new buses will be retrofitted to include passenger information displays, automatic stop announcement features, computer aided dispatch, a vehicle location system, surveillance system and an automatic passenger counting system.

The approved 2013 GRT Capital Program and 10 Year Forecast includes $12,000,000 (20 buses at a cost of $600,000 per bus) for scheduled bus replacements in 2014. The base 2014 GRT Capital budget has been adjusted to reduce this budgeted amount to $7,500,000 (15 buses at a cost of $500,000 per bus) to be funded from debentures. Debenture authority in the amount of $6,400,000 is required for this purchase.
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

The Finance Department and Transportation Planning have provided input into this report.

ATTACHMENTS

NIL

PREPARED BY:  Peter Zinck, Assistant Director Transit Services
                Larry Smith, Financial Analyst

APPROVED BY:   Thomas Schmidt, Commissioner, Transportation and Environmental Services
                Craig Dyer, Chief Financial Officer
RECOMMENDATION:

For information

SUMMARY:

The Region is recognizing the positive benefits of collision countermeasure treatments including but not limited to ladder crosswalks and right-turn smart channels. These treatments are reducing collisions effectively. Recognizing the effectiveness of collision countermeasure treatments will help ensure traffic safety programs continue to improve.

REPORT:

The tracking of statistics related to collision countermeasures is considered to be an effective method to ensure positive road safety strategies continue to be implemented appropriately as part of solitary road safety programs and larger transportation capital programs. There are several options to consider when implementing a road safety program. Agencies can adhere to technical engineering guidelines (nominal safety), follow the latest advancements in the industry through technical journals or actively pursue road safety enhancements through pilot studies of new ideas and tracking of the results. Region of Waterloo Transportation staff believe that all of the abovementioned actions are key elements to ensuring a successful road safety program.

Roadway designs that intuitively seem safe because they adhere to technical engineering guidelines (nominal safety standards) surprisingly in some cases may perform poorly with an unusual number of collisions. Alternatively roadways that may be nominally unsafe or “seem” unsafe may in some cases operate with less than normal collisions. Regardless, nominal safety versus substantive safety is a very interesting topic and should be explored in more detail in the transportation industry to enhance the field of road safety. In the Region of Waterloo, collision statistics are now being monitored and assessed more closely than ever before to continue to improve road safety. Doing so enables practitioners to apply collision countermeasures that are proven empirically to be more “safe”. It is strongly believed that such a program will result in positive benefits for the public in the Region of Waterloo not only in terms of safety but in terms of social collision cost savings to the public. Agencies that may rely solely on nominal safety standards and technical journals will continue to reduce collisions on roadways but may not do so as rapidly as agencies seeking improvements by tracking local crash statistics and road safety pilot programs. Variables such as geography or roadway environment can inadvertently affect substantive road safety in different ways. Application of collision countermeasures (e.g. widespread use versus specific application) can also affect countermeasure impacts. In other words, what works for one municipality may not necessarily work for another. For these reasons, it is quite important to understand the substantive safety relationship of collision countermeasure programs being applied to the Region’s roadways.
To track safety on the Region’s road network and in particular the collision countermeasures that have been applied to date, Transportation staff has been developing local collision modification factors (CMF). A CMF can best be described as a factor representing the expected positive or negative percentage change in collisions following implementation of a given countermeasure. It is expressed as a numeric value relative to 1. A CMF of 1.0 represents no impact on safety whereas a value of 0.8 represents a positive impact or a 20% reduction in collisions that can be expected following the implementation of a countermeasure. A value of 1.2 represents an expected negative 20% increase in collisions. CMF can therefore be utilized to assess the impacts of alternative roadway designs under consideration.

The Region’s practice when determining appropriate collisions countermeasures to apply is to rely on local CMF first where available, and where no local data is available rely on respected CMF documented in the Highway Safety Manual. Where CMF are not provided by these resources CMF documented at www.CMFClearinghouse.org can be used if considered reliable. To date the Region of Waterloo has developed several CMF based on either before / after studies or by a more statistically sound control group method where possible. The list of CMF will continue to be expanded and refined as more data becomes available.

Of note, countermeasures that have been noted as highly effective (90% Confident that CMF below 1) in no particular order include:

- Smart channels;
- Ladder crosswalks;
- Converting rural 2-way stop to 4-way stop; and
- Prohibiting the use of electronic devices.

More recent countermeasures developed by Regional staff that are planned to be assessed and documented to ensure appropriateness include but are not limited to:

- Recessed crosswalks;
- Offset crosswalks;
- Wide crosswalks; and
- Live snow fences.

Appendix A summarizes all CMF developed to date based on Regional collision data. The difference between adjusted and unadjusted CMF is important to note. Unadjusted CMF do not account for influences such as time, volume and or environmental conditions. Adjusted CMF attempts to control for time, volume and environmental conditions by comparing collisions at treatment sites to untreated sites. In general, adjusted CMF provides a more accurate depiction of the change to be expected and whether or not the expected change is statistically significant. A 90% confidence interval was utilized to help explain the potential upper and lower range of possible outcome. For example a CMF of 0.14 with a confidence interval of ± 0.12 indicates that 90% of the time the countermeasure will result in a collision reduction between 74% and 98%.

CORPORATE STRATEGIC PLAN:

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2).

FINANCIAL IMPLICATIONS:

NIL
OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A - Summary of Collision Countermeasures and Corresponding CMF

PREPARED BY:  Bob Henderson, Manager, Transportation Engineering

APPROVED BY:  Thomas Schmidt, Commissioner, Transportation and Environmental Services
### Summary of Collision Countermeasures and Corresponding CMF

<table>
<thead>
<tr>
<th>Countermeasure</th>
<th>Projects Evaluated</th>
<th>Total Before Years*</th>
<th>Total After Years*</th>
<th>Before Collisions</th>
<th>After Collisions</th>
<th>Injury</th>
<th>% Change</th>
<th>CMF Unadjusted</th>
<th>CMF Adjusted (90% CI)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.35m lane Striping</td>
<td>8</td>
<td>13</td>
<td>13</td>
<td>34</td>
<td>32</td>
<td>All</td>
<td>All</td>
<td>-5.88</td>
<td>0.94</td>
</tr>
<tr>
<td>Convert RT Channel to RT Smart Channel</td>
<td>3</td>
<td>9.66</td>
<td>9.66</td>
<td>26</td>
<td>4</td>
<td>Rear-end</td>
<td>All</td>
<td>-85%</td>
<td>0.15</td>
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<tr>
<td>Convert RT Channel to RT Smart Channel</td>
<td>3</td>
<td>9.66</td>
<td>9.66</td>
<td>6</td>
<td>2</td>
<td>Rear-end</td>
<td>Injury</td>
<td>-67%</td>
<td>0.33</td>
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<tr>
<td>Change Protected / Permissive to Protected Only Left-turn phasing</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>17</td>
<td>1</td>
<td>Left-turn</td>
<td>All</td>
<td>-94%</td>
<td>0.06</td>
</tr>
<tr>
<td>Install Super-elevation</td>
<td>15</td>
<td>44</td>
<td>44</td>
<td>110</td>
<td>77</td>
<td>All</td>
<td>All</td>
<td>-30%</td>
<td>0.7</td>
</tr>
<tr>
<td>Install Super-elevation</td>
<td>15</td>
<td>44</td>
<td>44</td>
<td>57</td>
<td>17</td>
<td>SMV</td>
<td>All</td>
<td>-70%</td>
<td>0.3</td>
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<tr>
<td>Pedestrian Countdown Signals</td>
<td>10</td>
<td>30</td>
<td>30</td>
<td>497</td>
<td>581</td>
<td>All</td>
<td>All</td>
<td>+17%</td>
<td>1.17</td>
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<tr>
<td>Pedestrian Countdown Signals</td>
<td>10</td>
<td>30</td>
<td>30</td>
<td>21</td>
<td>18</td>
<td>All</td>
<td>All</td>
<td>-14%</td>
<td>0.86</td>
</tr>
<tr>
<td>Left-turn Prohibition Sign</td>
<td>1</td>
<td>0.67</td>
<td>0.67</td>
<td>2</td>
<td>0</td>
<td>All</td>
<td>All</td>
<td>-100%</td>
<td>0.00</td>
</tr>
<tr>
<td>Left-turn Prohibition Sign</td>
<td>1</td>
<td>0.67</td>
<td>0.67</td>
<td>1</td>
<td>0</td>
<td>LT</td>
<td>All</td>
<td>-100%</td>
<td>0.00</td>
</tr>
<tr>
<td>Roundabout Lane lines, shark teeth, approach symbols and circulatory symbols</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>50</td>
<td>43</td>
<td>All</td>
<td>All</td>
<td>-14%</td>
<td>0.86</td>
</tr>
<tr>
<td>Roundabout Lane lines, shark teeth, approach symbols and circulatory symbols</td>
<td>7</td>
<td>3.5</td>
<td>3.5</td>
<td>8</td>
<td>7</td>
<td>All</td>
<td>All</td>
<td>-13%</td>
<td>0.87</td>
</tr>
<tr>
<td>BC MoT Give Trucks Space sign for Roundabouts</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
<td>5</td>
<td>0</td>
<td>All</td>
<td>All</td>
<td>-24%</td>
<td>0.76</td>
</tr>
<tr>
<td>Amber Curve Warning Flasher</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>SMV or Sideswipe</td>
<td>All</td>
<td>-33%</td>
<td>0.67</td>
</tr>
<tr>
<td>Supplemental Advance Curve Warning Flasher</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>SMV or Sideswipe</td>
<td>All</td>
<td>-44%</td>
<td>0.56</td>
</tr>
<tr>
<td>Chevron Curve Alignment Signs on curve</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>SMV</td>
<td>All</td>
<td>-43%</td>
<td>0.57</td>
</tr>
<tr>
<td>Set-back Left-turn Loops</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>29</td>
<td>22</td>
<td>LT</td>
<td>All</td>
<td>-24%</td>
<td>0.76</td>
</tr>
<tr>
<td>Set-back Left-turn Loops</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>78</td>
<td>67</td>
<td>All</td>
<td>All</td>
<td>-14%</td>
<td>0.86</td>
</tr>
<tr>
<td>Replace Traffic Signal (4-leg) with All-way Stop</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>All</td>
<td>All</td>
<td>+14%</td>
<td>1.14</td>
</tr>
<tr>
<td>Replace Traffic Signal (4-leg) with All-way Stop</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>All</td>
<td>Injury</td>
<td>+200%</td>
<td>3</td>
</tr>
<tr>
<td>Convert Urban 3-leg Stop Control to Signal</td>
<td>10</td>
<td>50</td>
<td>50</td>
<td>138</td>
<td>153</td>
<td>All</td>
<td>All</td>
<td>+11%</td>
<td>1.11</td>
</tr>
<tr>
<td>Convert Urban 3-leg Stop Control to Signal</td>
<td>10</td>
<td>50</td>
<td>50</td>
<td>16</td>
<td>3</td>
<td>All</td>
<td>All</td>
<td>-81%</td>
<td>0.19</td>
</tr>
<tr>
<td>Convert Urban 4-leg Stop Control to Signal</td>
<td>15</td>
<td>57</td>
<td>57</td>
<td>148</td>
<td>131</td>
<td>All</td>
<td>All</td>
<td>-11%</td>
<td>0.89</td>
</tr>
<tr>
<td>Convert Urban 4-leg Stop Control to Signal</td>
<td>15</td>
<td>57</td>
<td>57</td>
<td>61</td>
<td>38</td>
<td>All</td>
<td>All</td>
<td>-38%</td>
<td>0.62</td>
</tr>
<tr>
<td>Countermeasure Description</td>
<td>Data Points</td>
<td>Increase/Decrease</td>
<td>Annual Change</td>
<td>SmV</td>
<td>2 Total</td>
<td>95 Confidence Interval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>---------------</td>
<td>-----</td>
<td>---------</td>
<td>------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road Diet – Converting a four lane cross-section to a 3-lane cross-section (2 lanes + TWLTL + Bike lanes)</td>
<td>5 2.5 2.5 8 5 All All</td>
<td>-38%</td>
<td>0.62</td>
<td>0.56 ±0.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flashing Red Beacon on Stop Sign</td>
<td>3 13 13 21 18 All All</td>
<td>-14%</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Speed Limit from 60km/h to 70km/h</td>
<td>4 4 4 3 1 All Midblock All</td>
<td>-66%</td>
<td>0.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease Speed from 80 to 70.</td>
<td>11 49 49 40 65 All Midblock All</td>
<td>+63%</td>
<td>1.63</td>
<td>2.28 ±0.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease Speed from 80 to 70.</td>
<td>11 49 49 20 17 All Midblock SMV All</td>
<td>-15%</td>
<td>0.85</td>
<td>1.18 ±0.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease Speed from 80 to 70.</td>
<td>21 95 95 95 98 All All</td>
<td>+3%</td>
<td>1.03</td>
<td>1.07 ±0.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease Speed from 80 to 70.</td>
<td>21 95 95 30 20 SMV All</td>
<td>-33%</td>
<td>0.66</td>
<td>0.66 ±0.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Island</td>
<td>1 5 5 57 48 All All</td>
<td>-16%</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian Refuge Island</td>
<td>14 22 22 24 119 All All</td>
<td>-21%</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Pedestrian Signals on 4-lane Roadways</td>
<td>11 38 38 59 89 All All</td>
<td>+51%</td>
<td>1.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Pedestrian Signals on 4-lane Roadways</td>
<td>11 38 38 3 0 Pedestrian All</td>
<td>-100%</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ladder Crosswalks</td>
<td>16 57 57 645 540 All All</td>
<td>-16%</td>
<td>0.84</td>
<td>0.75 ±0.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ladder Crosswalks</td>
<td>16 57 57 47 18 Pedestrian All</td>
<td>-61%</td>
<td>0.39</td>
<td>0.30 ±0.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove Protected/permissive Left-turn Phase</td>
<td>6 8 8 46 49 All All</td>
<td>+6%</td>
<td>1.06</td>
<td>1.08 ±0.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove Protected/permissive Left-turn Phase</td>
<td>6 8 8 12 8 LT All</td>
<td>-33%</td>
<td>0.67</td>
<td>0.64 ±0.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add Protected/permissive LT Phase</td>
<td>13 39 39 273 292 All All</td>
<td>+7%</td>
<td>1.07</td>
<td>1.00 ±0.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add Protected/permissive LT Phase</td>
<td>13 39 39 75 80 LT All</td>
<td>+7%</td>
<td>1.07</td>
<td>1.00 ±0.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add Protected/Permissive LT Phase at Offset LT Location</td>
<td>1 5 5 39 22 All All</td>
<td>-43%</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add Protected/Permissive LT Phase at Offset LT Location</td>
<td>1 5 5 17 2 LT All</td>
<td>-88%</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convert Rural 2-way to 4-way stop</td>
<td>5 15 15 64 20 All All</td>
<td>-69%</td>
<td>0.31</td>
<td>0.28 ±0.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prohibited Use of Electronic Devices Region-wide</td>
<td>3 3 1914 1660 SMV All</td>
<td>-13%</td>
<td>0.87</td>
<td>0.85 ±0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prohibited Use of Electronic Devices Region-wide</td>
<td>3 3 400 354 SMV Injury and fatal</td>
<td>-12%</td>
<td>0.88</td>
<td>0.85 ±0.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Total years assessed before or after implementation of countermeasure
** CI = confidence interval
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: E06-02(A)-TID10

SUBJECT: CONSULTANT SELECTION FOR THE THREATS AND POLICIES DATABASE

RECOMMENDATION:

That the Regional Municipality of Waterloo enter into a Consulting Services Agreement with CSDC Systems Inc. to provide services for implementing the Threats and Policy System (TAPS) Database project in 2013 and 2014, at an upset limit of $353,555 plus applicable taxes, as per Report E-13-125 dated October 22, 2013.

SUMMARY:

The Clean Water Act (2006) establishes the legislative framework for undertaking watershed-based source water protection. The Regional Municipality of Waterloo (the Region) has responsibility for assessing risk to its water supply and implementing policies to reduce that risk on approximately 2,655 properties including negotiating risk management plans on over 550 properties. A property-based database with associated GIS applications, input forms and automatic reporting functions is an essential implementation tool to store risk assessment information, track property-specific policy implementation and prepare annual reports on activities for submission to the Province.

A Request for an Expression of Interest for the Threats and Policy System (TAPS) was advertised on the Region’s Purchasing website. Based on the selection process completed in accordance with the Region’s consultant selection policy and the Region’s Purchasing By-law, which included review of the consultant’s Letter of Interest, Detailed Work Plans, schedules and upset fee costs, the project team recommends that CSDC Systems Inc. be retained to undertake this assignment at an upset fee of $353,555 plus applicable taxes.

It is anticipated that upon receiving Regional Council approval, construction of TAPS will commence in October 2013, and the assignment will be completed in summer 2014.

REPORT:

Background

The Ontario government passed the Clean Water Act in 2006 to help protect drinking water at the source as part of its multi-barrier strategy to safeguard human health and the environment. The Clean Water Act establishes the legislative framework for undertaking watershed-based source water protection. The Regional Municipality of Waterloo (the Region) has responsibility for assessing risk to its water supply and implementing policies to reduce that risk.

The risk assessment process includes the identification and ranking of threats (existing and future land uses and activities, intake water quality issues and historic water contamination conditions) in municipal well head and surface water intake protection areas. The Clean Water Act requires policies to prevent future threats from becoming significant (i.e., those that have a high threat ranking in these protection areas) and for managing existing threats so they cease to be significant.
In assessing risk, 20,457 properties within the wellhead protection areas were assessed for activities that could pose a risk to municipal water supply. These properties were assessed by a combination of a census completed by the owner and/or tenant as well as an evaluation of existing information. The existing information included MOE Certificates of Approval, zoning information, aerial photography, and previous threat inventories completed by Water Services staff. Of the properties assessed, a total of 2,655 properties were identified to have significant threats.

Policies were developed and are included in the proposed Source Protection Plan (SPP) to prohibit or manage existing and future significant threats for each municipal drinking-water system in the Grand River watershed. The Proposed Grand River SPP policies were presented to and approved by Regional Council in Reports E-12-075 and E-13-003, respectively. The SPP was submitted to the Ministry of Environment for approval by the Grand River Conservation Authority in February 2013 and Region staff are anticipating some initial comments on it in December 2013. The policies use at least one of the following tools to address each threat: traditional tools including land use planning, education, incentives; risk management official processes including prohibition or regulation through a risk management plan; or new tools provided through the Clean Water Act such as amendments or revocation of a provincial prescribed instrument/approval or direction to the local municipality to implement a program to address the threat. The MOE continues to promote that municipalities establish and implement source water protection programs, including policies in their official plans, for their drinking water supplies in advance of approval of the SPP.

Upon approval of the SPP (expected in mid-to-late 2014), Region staff will begin to implement the Policies described therein. In order to prepare for implementation, staff must first confirm the threat rankings of all properties with significant threats. During implementation, property specific tracking must be maintained in order to complete annual reporting to the Province as required by regulation. This tracking will include: all contact with property owners and tenants (informal and formal notices, orders, etc.), all incentives applied for and granted, all risk management plans negotiated, all prescribed instruments reviewed, and all actions required of local municipalities.

Objective of Project

This project will develop a tracking system to house, update, analyze, and report on, all of the data collected as part of the risk assessment process as well as to track the Region’s actions to implement the policies that apply to the Region as described in the SPP.

Consultant Selection

A Request for and Expression of Interest (LOI2013-01) for the Source Water Protection Threats and Policies Database project was advertised on the Region’s Purchasing website in May 2013. Evaluation of the vendor submissions was conducted by the Region’s Project Team:

E. Hodgins, Manager, Hydrogeology and Source Water, Water Services
A. Domaratzki, Senior Hydrogeologist, Water Services
L. Lobe, Supervisor Source Protection Programs, Water Services
T. Van Vliet, Business Analyst, Information Technology

Submissions were evaluated in accordance with the Region’s consultant selection policy and the Region’s Purchasing By-law in order to select the consultant offering the best overall value to the Region. The evaluation criteria and their respective weightings were as follows:

Quality Factors (80%)  
• Project Understanding and Approach (25 percent)
• Ability to Expand to Future Departments (20 percent)
• Experience of the Project Manager (10 percent)
• Experience of the Project Support Staff (10 percent)
• Experience on Similar Projects (15 percent)

Equity Factor (5%)
• Current Regional Workload (3 percent)
• Local Office (2 percent)

Price Factor (15%)
• Upset Fees (15 percent)

As noted above, the quality factors were modified to include Information Technology’s requirement that the new software be scalable to other applications or work areas of the Region.

The Region received a Letter of Interest from five (5) teams, and these were evaluated by the Project Team according to the above Quality and Equity factors. Two (2) teams were short-listed:

• Latitude Geographics Group Ltd.
• CSDC Systems Inc.

The two short-listed teams were invited to submit detailed work plans, along with upset fee budgets in separate envelopes, for further evaluation. The Letters of Interest and Detailed Work Plans submitted by the two short-listed teams demonstrated a good understanding of the project, capable project teams and experience on similar projects. After the project team finalized the evaluation of the Letters of Interest and Detailed Work Plans, the upset fee envelopes were opened and the overall scores, including the Price Factor, were calculated. The CSDC Systems Inc. submission received the highest overall score, with the lowest price. Based on this evaluation, the project team recommends that CSDC Systems Inc. be retained to undertake this assignment at an upset fee of $353,555 plus applicable taxes.

Project Scope

The CSDC Systems Inc. will utilize the Amanda software to develop the database and tracking process. This commercial, off-the-shelf software is used by many municipalities across Canada and is fully configurable to many different processes and data management needs. CSDC Systems Inc. will develop a number of linked databases and processes including:

• A database to house the Assessment Report data in a way that will allow tracking of changes to the data in the future;
• A database to house the Source Protection Plan Policy;
• Links between the Assessment Report data and the Source Protection Plan policies so that the policies which apply to individual properties can be determined;
• Standardized workflows for implementation procedures which will allow real-time tracking of implementation on each affected property; and
• Automatic annual reporting to the Province on the status of Plan implementation.

Each of these databases and work-flow processes will follow a prepare, prototype, fit/gap analysis, configuration, train/test and go-live phasing to ensure the system meet’s the Region’s needs as outlined in the TOR.
Upset Fee

The upset fee for consulting fees, disbursements, and software licensing for the Threats and Policies Database is $353,555 plus applicable taxes. A breakdown of the upset fee is included in Appendix A attached to this report. In addition to this upset fee, ongoing licensing costs related to the software purchase are estimated to range from $19,300 to $21,722 per year.

Schedule

Subject to Council’s approval of this report, the proposed schedule for completion of this project is approximately 9 months commencing in October 2013.

CORPORATE STRATEGIC PLAN:

The Threats and Policy System supports the Corporate Strategic Plan Focus Area 1: Environmental Sustainability; and Strategic Objectives: “1.4 - protect the quality and quantity of our water sources.”

FINANCIAL IMPLICATIONS:

The 2013 Ten Year Water Capital Program includes $862,000 in 2013 and $650,000 in 2014 for source protection technical assessment to cover the cost of this project which is funded through Regional Development Charges and water reserves.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Information Technology staff were integral in developing the terms of reference for this project, and will continue to participate on the project team through its implementation. Financial Services, and Procurement and Supply Services coordinated the tendering process.

ATTACHMENTS:

Appendix A: Breakdown of upset fee

PREPARED BY: Amy Domaratzki, Senior Hydrogeologist, Water Services

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services

### Appendix A – Breakdown of Upset Fee

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Purchase and Licensing</td>
<td>$106,000</td>
</tr>
<tr>
<td>System Configuration</td>
<td>$213,565</td>
</tr>
<tr>
<td>Testing and Training</td>
<td>$33,990</td>
</tr>
<tr>
<td><strong>TOTAL UPSET FEE</strong></td>
<td><strong>$353,555</strong></td>
</tr>
</tbody>
</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: D18-01

SUBJECT: MONTHLY REPORT OF DEVELOPMENT ACTIVITY FOR SEPTEMBER 2013

RECOMMENDATION:


SUMMARY:

In accordance with the Regional By-law 01-023, as amended, the Commissioner of Planning, Housing and Community Services has:

- Released for registration the following plans of subdivision and plan of condominium; and
- Approved the following official plan amendments.

REPORT:

City of Cambridge

Official Plan Amendment No. 41
Applicant: AMA Investments/Fred Benninger
Location: 245 Riverbank Drive
Proposal: To amend Map 15 General Land Use Map of the Cambridge Official Plan by re-designating the subject lands from “Class 1 (Prime) Agricultural District” subject and site-specific policy 17.25 Drive and Putt Special District to “Class 1 (Corridor) Industrial District” and “Class 1 (Significant Natural Features) Open Space District” subject to site-specific policy 17.25 Creekside Special District in order to facilitate a future industrial plan of subdivision.

Regional Processing Fee: Paid September 18, 2013
Commissioner’s Approval: September 25, 2013
Came Into Effect: October 16, 2013

City of Kitchener

Registration of Draft Plan of Subdivision 30T-11203
Draft Approval Date: June 25, 2012
Phase: Stage 1
Applicant: 1841362 Ontario Inc.
Location: 1 Adam Street
Proposal: To permit the development of 201 residential townhouse units and 677 residential high density apartment units.

Regional Processing Fee: Paid August 1, 2013
Commissioner’s Release: September 5, 2013
Registration of Draft Plan of Subdivision 30T-13201
Draft Approval Date: June 18, 2013
Phase: Entire Plan
Applicant: 2269953 Ontario Inc.
Location: 701 Homer Watson Boulevard
Proposal: To permit the development of 87 townhouse units.
Regional Processing Fee: Paid September 5, 2013
Commissioner’s Release: September 17, 2013

Registration of Draft Plan of Subdivision 30T-10202
Draft Approval Date: January 25, 2012
Phase: Stage 1
Applicant: Rockway Holdings Limited
Location: Old Zeller Drive and Fairway Road
Proposal: To permit the development of 20 single detached units.
Regional Processing Fee: Paid September 17, 2013
Commissioner’s Release: September 24, 2013

Registration of Draft Plan of Condominium 30CDM-13203
Draft Approval Date: June 10, 2013
Phase: Entire Plan
Applicant: 2269953 Ontario Inc.
Location: 701 Homer Watson Boulevard
Proposal: To permit a common elements plan of condominium in conjunction with plan of subdivision 30T-13201 for a private road, walkways, amenity area, landscaped areas, stormwater management pond and visitor parking spaces.
Regional Processing Fee: Not applicable
Commissioner’s Release: September 17, 2013

City of Waterloo

Official Plan Amendment No. 3
Applicant: Linden Village Inc.
Location: 203 Lester Street
Proposal: To amend Schedule ‘A6’ Specific Provisions Areas of the City of Waterloo Official Plan to add Specific Provision Area (SPA) 52. SPA will permit a 44 square metre office on the 16th floor of the existing building.
Regional Processing Fee: Paid September 19, 2013
Commissioner’s Approval: September 24, 2013
Came Into Effect: October 16, 2013
Township of North Dumfries

Official Plan Amendment No. 25

Applicant: 1466574 Ontario Inc./Tampa Hall
Location: Greenfield Road and Northumberland Street
Proposal: To amend the designation of the subject property to include a Special Policy Area provision in the “Dry Industrial/Commercial” designation which allows for “commercial land use activities, such as a grocery store and drive through restaurant, while being connected to municipal water and wastewater services”.

Regional Processing Fee: Paid September 9, 2013
Commissioner’s Approval: September 17, 2013
Came Into Effect: October 8, 2013

Residential Subdivision Activity January 1, 2013 to August 31, 2013

<table>
<thead>
<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Kitchener</td>
<td>1147</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Waterloo</td>
<td>0</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>Cambridge</td>
<td>122</td>
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<tr>
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<tr>
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<td>0</td>
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<tr>
<td>Wellesley</td>
<td>54</td>
<td>0</td>
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<tr>
<td>Region of Waterloo</td>
<td>1323</td>
<td>69</td>
<td>734</td>
</tr>
</tbody>
</table>

*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

For comparison, the following table has also been included:

Residential Subdivision Activity January 2012 to September 30, 2012

<table>
<thead>
<tr>
<th>Area Municipality</th>
<th>Units in Residential Registered Plans</th>
<th>Residential Units Draft Approved</th>
<th>Pending Plans (Units Submitted)</th>
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<tr>
<td>*Kitchener</td>
<td>357</td>
<td>N/A</td>
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<tr>
<td>Waterloo</td>
<td>389</td>
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</tr>
<tr>
<td>North Dumfries</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wellesley</td>
<td>0</td>
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</tr>
<tr>
<td>Region of Waterloo</td>
<td>930</td>
<td>0</td>
<td>180</td>
</tr>
</tbody>
</table>

*The acceptance and/or draft approval of plans of subdivision and condominium processed by the City of Kitchener under delegated approval authority are not included in this table.

Area Municipal Consultations/Coordination:

These planning approvals, including consultation with Area Municipalities, have been completed in accordance with the Planning Act. All approvals contained in this report were supported by the Area Municipal councils and/or staff.
CORPORATE STRATEGIC PLAN:

This report reflects actions taken by the Commissioner in accordance with the Delegation By-law adopted by Council. The activities described in this report are operational activities consistent with objectives of Focus Area A: Growth Management and Prosperity.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

NIL

PREPARED BY: Andrea Banks, Program Assistant

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: D09-30/NGTA

SUBJECT: NIAGARA TO GREATER TORONTO AREA (GTA) CORRIDOR TRANSPORTATION DEVELOPMENT STRATEGY

RECOMMENDATION:

THAT the Regional Municipality of Waterloo express its support for the Niagara to GTA Corridor Transportation Development Strategy (TDS) developed by the Ontario Ministry of Transportation (MTO), as described in Report P-13-100, dated October 22, 2013;

THAT the Region of Waterloo encourage MTO to implement the Group 1 (Optimize Existing Networks) and Group 2 (New/Improved Non-Road Infrastructure) elements of the TDS in the short term, and well in advance of road-based improvements to give public transit ridership and supportive land-use patterns the opportunity to develop;

THAT the Region of Waterloo continue to work with MTO, the City of Brantford, the City of Guelph, Brant Country and Wellington County on strategic transportation planning to support the future strategic study of long-term highway improvements in the West Area;

AND THAT the Region of Waterloo continue to participate in the Western Golden Horseshoe Municipal Network (formerly the Municipal Caucus) to advocate for strategic transportation investments that will support the Waterloo Regional economy and promote economic development in Ontario.

SUMMARY:

Since 2007, the Ontario Ministry of Transportation (MTO) has been undertaking an Environmental Assessment to study transportation improvements between Niagara Region and the Greater Toronto Area (GTA). MTO has now released the final Transportation Development Strategy (TDS), which has been approved by the Minister of Transportation, for public review and comment ending November 4, 2013. The TDS recommends improvements in a staged “building block” approach, with the following elements:

- Group 1 (Optimize Existing Networks)
- Group 2 (New/Improved Non-Road Infrastructure)
- Group 3 (Widen/Improve Existing Roads)
- Group 4 (New Transportation Corridors)

The TDS recommends extensive Transportation Demand Management and Transportation System Management measures for Group 1 and rapid expansion of public transit as part of Metrolinx’s “Big Move” for Group 2. These initiatives include MTO’s proposed Active Traffic Management Study, expansion of the current GO Train service to Kitchener/Waterloo along the Kitchener Line and extension of GO Train service to Cambridge along the Milton Line. The Region supports these directions and recommends that they be implemented in the short term, and well in advance of road-
based improvements, to give public transit ridership and supportive land-use patterns the opportunity to develop.

MTO identified Group 3 and Group 4 measures to address long-term transportation needs east of Hamilton/Burlington. However, MTO was unable to identify satisfactory road measures to accommodate long-term needs within the Hamilton/Burlington area. The TDS recommends Group 3 initiatives to meet medium-term needs and further study for the long-term. The Region supports this direction but stresses that such a study needs to consider a longer-term timeframe and strategically integrate several ongoing studies to incorporate broad network planning principles and extensions of the highway grid north of Highway 401.

The Region has also been participating in discussions with the Regions of Halton, Niagara and Peel, the Cities of Burlington and Hamilton, as well as MTO and the Southern Ontario Gateway Council, regarding strategic transportation planning to support economic development. The Western Golden Horseshoe Municipal Network (formerly the Municipal Caucus), currently composed of the City of Hamilton and the Regions of Halton, Niagara, Peel and Waterloo, has articulated a vision that includes a connection between Highways 401 and 403 as part of a comprehensive plan that would connect the GTA West Corridor and the Niagara to GTA Corridor (please see Attachment 8). The Region should continue to participate in these discussions.

REPORT:

Since 2007, the Ontario Ministry of Transportation (MTO) has been undertaking an Environmental Assessment (EA) to study transportation improvements between Niagara Region and the Greater Toronto Area (GTA). The Study Area is shown in Attachment 1. The Niagara to GTA Corridor Planning and EA Study has been developing a multi-modal Transportation Development Strategy (TDS). The TDS has been approved by the Minister of Transportation.

The TDS contains recommended transportation improvements for the Study Area, divided into four groups. Described as a building block approach, Group 1 and Group 2 elements are intended to be implemented first and serve as a foundation for Group 3 and Group 4 elements. The groups are shown in Attachment 2 and are described briefly as follows:

1. Optimize Existing Networks (including transit, transportation demand management and transportation system management)
2. New/Expanded Non-Road Infrastructure (including public transit)
3. Widen/Improve Existing Roads (i.e. improvements to existing highways)
4. New Transportation Corridors (i.e. Group 3 PLUS new highways)

Group 1 (Optimize Existing Networks) elements of the TDS (please see Attachment 3) include traveller information systems, improved access to transit stations, improved integration of active transportation, and more extensive use of Transportation Demand Management (TDM) and Transportation System Management (TSM). The TDS recommends completing an Active Traffic Management Study in the short term. The Region supports the direction of Group 1 and recommends that these measures be implemented as soon as possible. The proposed Active Traffic Management Study represents a short-term project entirely under MTO’s control that could improve both safety and travel time reliability on highways used by Regional residents. Additionally, preliminary cost estimates of the potential recommendations of such a study are between $100M and $200M. This represents a small fraction of the potential cost of providing new rapid transit services, widening existing highways or constructing new highways.

Group 2 (New/Improved Non-Road Infrastructure) elements of the TDS (please see Attachment 4) include “The Big Move” by Metrolinx, express rail service along the GO Lakeshore line, various rapid transit initiatives in the Hamilton/Burlington area, and other improvements to rail lines. Improvements
to public transit service, in particular expanded GO Train service to Kitchener/Waterloo on the Kitchener Line and extended GO Train service to Cambridge on the Milton Line should be implemented before improvements to area highways so that public transit ridership and supportive land-use patterns have time to develop. Sufficient and consistent investment in GO Train services are necessary to promote a shift away from private automobiles for long-distance commuting and help make public transit a viable alternative. Metrolinx has continued to identify improvements related to Waterloo Region priorities, such as proposed service enhancements and electrification of portions of the Kitchener Line. However, extending these improvements to Waterloo Region is not a short-term priority for Metrolinx. The Region must continue to advocate for additional service on the Kitchener Line to Kitchener and extended GO Train service on the Milton Line to Cambridge.

For the Group 3 (Widen/Improve Existing Roads) and Group 4 (New Transportation Corridors) elements of the TDS, MTO divided the study area into three areas: the East Area between St. Catharines and Fort Erie (please see Attachment 5), the Central Area between St. Catharines and Hamilton (please see Attachment 6), and the West Area covering Hamilton and Burlington (please see Attachment 7). The TDS includes the following elements:

- East Area: A new corridor connecting Highway 406 to the QEW
- Central Area: Widening of the QEW to 8 lanes (including high-occupancy vehicle lanes)
- West Area: Widening of highways 6, 403, 407, QEW to address medium-term needs, and a future study to determine how to meet long-term needs

In addition to conventional highway construction, MTO examined several “outside-the-box” alternatives such as a second deck on Highway 403 and a tunnel under Lake Ontario. However, this analysis was unable to identify a satisfactory Group 3/Group 4 alternative for the West Area that would satisfy long-term transportation needs without significant impacts to the natural, cultural and social environments. Consequently, the TDS identifies medium-term improvements to existing highways and recommends a future study to determine how to meet long-term needs for the West Area.

MTO has proposed to expand the study area of this future study to areas further west, which will likely include the Region. This expansion will also permit an examination of the problems and opportunities of this new larger area and an integration of a variety of other ongoing studies, including the Brantford to Cambridge Transportation Corridor and the Waterloo-Wellington-Brant inter-regional transportation planning initiative. The Region should support the future study recommended in the TDS for the West Area, so long as it achieves the following objectives:

1. The future study should consider a longer-term timeframe. The current Provincial Policy Statement (PPS) only permits infrastructure planning for a 20-year timeframe. Proposed changes in the new draft PPS may extend this period, and the future study for the West Area should examine transportation needs for the long-term beyond 20 years.
2. The ongoing studies mentioned above highlight the need for comprehensive network planning that integrates multiple modes of transportation. The proposed long-term study for the West Area should incorporate broad network planning principles and examine extensions of the highway grid north of Highway 401.

Western Golden Horseshoe Municipal Network

Since December 2012, Niagara Region has been leading the formation of a group described as the Western Golden Horseshoe Municipal Network (formerly the Municipal Caucus). This group has been meeting to discuss how to respond to the Niagara to GTA Corridor study recommendations and to encourage MTO to consider long-term transportation planning as an economic growth initiative. The Region of Waterloo has been participating in these meetings, and senior staff has met with their counterparts at the Regions of Halton, Niagara and Peel, the Cities of Burlington and
Hamilton, as well as MTO and the Southern Ontario Gateway Council, to articulate a common vision and commitment to comprehensively plan for this area of the Province. Attachment 8 shows a potential corridor connection between Highways 401 and 403 as part of a comprehensive plan that would connect the GTA West Corridor and the Niagara to GTA Corridor. As these discussions have the potential to further the interests of Regional residents and businesses, the Region should continue to participate in these meetings.

Next Steps

The Niagara to GTA Corridor study is complete. Comments received by MTO in this round of public consultation will be included in future work on the various elements of the strategy, such as the proposed Active Traffic Management Study or Environmental Assessments for expansions to public transit or highways.

Area Municipal Consultations/Coordination

The area municipalities have received copies of previous Regional reports about the Niagara to GTA Corridor, and will receive a copy of this report. The area municipalities would be consulted about the activities of the Western Golden Horseshoe Municipal Network as the initiative proceeds.

CORPORATE STRATEGIC PLAN:

Improved Provincial transportation infrastructure supports Strategic Objectives 2.2 (Develop, optimize and maintain infrastructure to meet current and projected needs) and 2.3 (Support a diverse, innovative and globally competitive economy). The transit components of the Niagara-GTA Corridor may also promote Strategic Objective 3.4 (Encourage improvements to intercity transportation services to and from Waterloo Region).

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Attachment 1 – Niagara-GTA Corridor Study Area
Attachment 2 – “Building Block” Approach (Groups)
Attachment 3 – Group 1 (Optimize Existing Networks) Elements
Attachment 4 – Group 2 (New/Improved Non-Road Infrastructure) Elements
Attachment 5 – East Area Highway Improvements
Attachment 6 – Central Area Highway Improvements
Attachment 7 – West Area Highway Improvements
Attachment 8 – Municipal Caucus Economic Logistics Corridor Vision

PREPARED BY: Geoffrey Keyworth, Senior Transportation Planning Engineer

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
ATTACHMENT 1 – NIAGARA-GTA CORRIDOR STUDY AREA
First, optimize our existing infrastructure.

Then, invest in transit and non-road infrastructure.

Then, invest in roadway expansion (with first priority given to HOV / transit supportive expansion).
Priority: Develop an Active Traffic Management strategy that improves performance of the existing transportation system by reducing demand and improving system efficiency.

The NGTA recommendations also assume and support the full implementation of the Metrolinx RTP:

- Providing information systems for travelers where and when they need it - online and in real-time;
- Providing a wayfinding system to make the transit system easier to use and navigate; and,
- Integrating transit fares so that travelers can cross municipal boundaries or transfer between modes without fare duplication.

Other optimization initiatives under MTO’s jurisdiction include:

- Providing frequent updates on traffic conditions
- Adjustable speed limits (speed harmonization) to avoid stop and go traffic
- Smooth vehicle access to highways with signals on ramps (ramp metering)
- Reversible (contra-flow) lanes and moveable barriers
- HOV / Transit only bypasses on ramps
NEW / EXPANDED NON-ROAD INFRASTRUCTURE

PRIORITY: Improve existing and / or provide new non-road infrastructure and transit.

- Support for the transit projects outlined in the Metrolinx RTP;
- A future Hamilton focused inter-regional transit study to examine the feasibility of new transit services bringing commuters to Hamilton city centre from outlying areas;
- Improve freight rail efficiency by addressing grade separation issues at highway / rail crossings; and,
- Explore options for improving linkages between marine ports and provincial highways.
ATTACHMENT 5 – EAST AREA HIGHWAY IMPROVEMENTS

HIGHWAY EXPANSION – Niagara (Welland to Fort Erie)

In addition to existing plans, optimization and the non-road improvements, a new highway corridor connecting Highway 406 to QEW is recommended. This corridor extends from Highway 406 south of Welland to QEW near Fort Erie. It is anticipated that widening / improvements to Highway 406 will also be required in conjunction with this new highway corridor.

This recommendation will provide support for the Growth Plan objectives for the Gateway Economic Centre and Zone, and aligns with Niagara’s “Grow South” Strategy.
HIGHWAY EXPANSION – Hamilton to Niagara

In addition to existing plans, optimization and the non-road improvements, widening the QEW to eight lanes (including HOV lanes) is recommended.

If current population and employment growth patterns continue as predicted, additional transit services, a new transportation corridor or a further widening of QEW may be required beyond 2031. The study also recommends continued monitoring of the performance of the QEW and transportation network that connects the City of Hamilton to Niagara Region. The results of this monitoring can be used to determine when additional capacity may be required to address the demand for travel beyond 2031.
ATTACHMENT 7 – WEST AREA HIGHWAY IMPROVEMENTS

HIGHWAY EXPANSION – Hamilton to Burlington / Oakville

In addition to existing plans and the recommended optimization and the non-road improvements, widening of key highway facilities has been recommended. This recommendation addresses medium-term transportation requirements (2021 to 2031), and provides the foundation for a future longer-term study.

The medium-term improvements proposed for the West Area include the following:

- Highway 403 Hamilton - widen by two lanes from King Street/Main Street to Jerseyville;
- Highway 403 Oakville - widen by three lanes from the Ford Plant to 407 ETR;
- 407 ETR – widen by two lanes between the Freeman Interchange and Highway 403 Interchange in Oakville;
- QEW Halton – widen by two HOV lanes from the Freeman Interchange over the Burlington Bay Skyway to the Red Hill Valley Parkway Interchange; and,
- Highway 6 (New) – widen by two lanes between Hamilton Airport and Highway 403.

FUTURE STUDY

The longer-term need for additional capacity in the transportation network will be addressed in a separate future study. The scope of this study will be developed in consultation with municipalities and stakeholder groups. Elements of the future study may include:

- Longer planning horizon (e.g. 2041 or later);
- An expanded study area (including areas to the west of the current study area);
- Expansion of the transportation problems and opportunities, based on the expanded study area and planning horizon; and,
- Opportunities for increased mode shift and integration of non-roadway transportation service providers.

Legend
- Future study required to determine a longer term strategy
- Roadway Improvements
- Recommended Improvements
- Future Improvements Southern Ontario Highways Program
- ODA Best Recommendation
- Recommended Lanes
- Base Features
- H403 State Highway
- Highways
- Arterial Road
- Highways
- Town, Village, hamlets
- Lakes & Rivers
- Natural Environment Plan
- Greenbelt - Protected Countryside
- Greenbelt - Natural Heritage System

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RECOMMENDATION:
For information

SUMMARY:
NIL

REPORT:
Introduction
The Region of Waterloo 2012 Collision Report summarizes factors associated with traffic collisions that occurred in 2012. The information presented in this report is based upon vehicle collisions occurring on roads under the jurisdiction of the Region of Waterloo or signalized intersections under the jurisdiction of local municipalities and either investigated by Regional Police or reported at the Collision Reporting Centre.

Appendix A to this report is a copy of the Executive Summary of the 2012 Region of Waterloo Collision Report. The full 2012 Collision Report is available in the Transportation Division of the Transportation and Environmental Services Department, 7th Floor, Administration Headquarters Building. Copies of the full 2012 Collision Report will be circulated to the 7 local municipalities and the Waterloo Regional Police Services for their information and use. The full 2012 Collision Report will also be made available on the Region’s website under Getting Around / Traffic / Collision Reports.

Comparing collision statistics in 2012 to 2011, the following general observations have been made:

- The number of persons sustaining fatal injuries in collisions decreased from 16 in 2011 to 10 in 2012;
- The number of fatal collisions decreased from 15 in 2011 to 10 in 2012;
- The total number of reported collisions decreased by 4% (6031 in 2011 to 5795 in 2012);
- The number of injury collisions decreased from 1379 in 2011 to 1350 in 2012;
- The number of persons sustaining injuries in collisions decreased from 1923 in 2011 to 1898 in 2012;
- The number of collisions involving pedestrians slightly increased from 151 in 2011 to 154 in 2012;
- The number of collisions involving cyclists increased from 104 in 2011 to 130 in 2012; and
- The number of horse-drawn vehicles involved in collisions on the Regional road system increased from 6 in 2011 to 8 in 2012.
Table 1 and Figure 1 show the vehicle collision history on Regional roads.

Table 1: Vehicle Collision History on Regional Roads

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Collisions</th>
<th>Collisions Per 1,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>6657</td>
<td>13.9</td>
</tr>
<tr>
<td>2004</td>
<td>6061</td>
<td>12.4</td>
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<tr>
<td>2005</td>
<td>5748</td>
<td>11.5</td>
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<tr>
<td>2006</td>
<td>5688</td>
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<tr>
<td>2007</td>
<td>5980</td>
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<td>2008</td>
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<td>2010</td>
<td>5809</td>
<td>10.7</td>
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<tr>
<td>2011</td>
<td>6031</td>
<td>10.9</td>
</tr>
<tr>
<td>2012</td>
<td>5795</td>
<td>10.4</td>
</tr>
</tbody>
</table>

Figure 1: Vehicle Collision History on Regional Roads

Motor Vehicle Collision History

Collision Ranking

Collision ranking is a tool that helps to identify locations likely to benefit from collision countermeasures. The 2012 collision ranking is based on the difference between the actual and expected number of collisions that occurred at each Regional intersection and midblock location between 2008 and 2012. The location with the largest difference between the actual and expected number of collisions over 5-years is ranked as #1, with #2 having the second largest difference and so on.

The Region of Waterloo collision prediction model is based on average collision rates for Regional roads with certain characteristics. Generally the Region’s expected collision rates are based on 5-years of collision data in order to have enough data to determine reliable expected
collision rates. For intersections, the collision rate is given in terms of collisions per million vehicles entering the intersection (Coll/MVE) and it varies by the Average Annual Daily Traffic (AADT), the type of traffic control (stop, signal or pedestrian signal) and number of legs at the intersections (3 or 4 leg). For midblock locations, the collision rate is expressed as collisions per million vehicle-kilometers (Coll/MVKm) and it varies by AADT and the type of municipality (city or township).

The 2012 collision ranking provides a snapshot of locations experiencing more collisions than expected over 5-years. Some locations that are highly ranked (close to #1) may have collision patterns that could be mitigated through countermeasures.

Appendix B lists the first 100 ranked vehicular collision locations. Table 2 lists the first 10 ranked locations. Staff will review 5-years of collision data for each location ranked from #1 to #10 to determine if there is a collision pattern that could be mitigated through countermeasures. In addition, staff routinely review all locations where a fatal collision has occurred and also locations that have a high actual vs. expected collision ratio.

**Table 2: First 10 Ranked Collision Locations for 2012**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Location</th>
<th>Municipality</th>
<th>5-year Collisions</th>
<th>Actual</th>
<th>Expected</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OTTAWA ST AT HOMER WATSON BLVD</td>
<td>KIT</td>
<td>2012</td>
<td>209</td>
<td>103</td>
<td>106</td>
</tr>
<tr>
<td>2</td>
<td>KING ST AT FOUNTAIN ST</td>
<td>CAM</td>
<td>2011</td>
<td>115</td>
<td>30</td>
<td>85</td>
</tr>
<tr>
<td>3</td>
<td>KING ST AT UNIVERSITY AVE</td>
<td>WAT</td>
<td></td>
<td>130</td>
<td>67</td>
<td>63</td>
</tr>
<tr>
<td>4</td>
<td>FRANKLIN BLVD AT CAN-AMERA PKWY</td>
<td>CAM</td>
<td></td>
<td>132</td>
<td>76</td>
<td>56</td>
</tr>
<tr>
<td>5</td>
<td>VICTORIA STREET N BTWN BRUCE &amp; EDNA</td>
<td>WAT</td>
<td></td>
<td>71</td>
<td>18</td>
<td>53</td>
</tr>
<tr>
<td>6</td>
<td>UNIVERSITY AVE E BTWN Regina &amp; WEBER</td>
<td>KIT</td>
<td></td>
<td>83</td>
<td>30</td>
<td>53</td>
</tr>
<tr>
<td>7</td>
<td>COURTLAND AVE/FAIRWAY RD AT MANITOUP DR</td>
<td>KIT</td>
<td></td>
<td>94</td>
<td>43</td>
<td>51</td>
</tr>
<tr>
<td>8</td>
<td>EAGLE ST BTWN HESPELER &amp; Industrial</td>
<td>CAM</td>
<td></td>
<td>69</td>
<td>18</td>
<td>51</td>
</tr>
<tr>
<td>9</td>
<td>FRANKLIN BLVD AT Elgin St/Saginaw Pkwy</td>
<td>CAM</td>
<td></td>
<td>120</td>
<td>71</td>
<td>49</td>
</tr>
<tr>
<td>10</td>
<td>HOMER WATSON BLVD at MANITOUP/Doon Village Rd</td>
<td>KIT</td>
<td></td>
<td>121</td>
<td>75</td>
<td>46</td>
</tr>
</tbody>
</table>

There was 1 location (rank 5) moving into the 2012 top 10 ranking. The midblock section of Victoria Street between Bruce Street and Edna Street was ranked #11 in 2011 and is now ranked #5. It should be noted that this section of Victoria Street was ranked within the top 10 locations in 2001 and 2002. The installation of a centre median to mitigate rear-end, turning and sideswipe collisions was recommended in 2002. In March 2013, Regional Council approved a recommended design concept for Victoria Street between Edna Street and Bruce Street. The concept includes temporarily installing a raised median until such time that the Ministry of Transportation completes the Highway 7/8 by-pass. Currently, reconstruction of Victoria Street between Edna Street and Bruce Street is scheduled in 2014.

Each location is ranked according to the difference between the actual and expected number of collisions over a 5-year period. There are a number of factors that can impact rankings. The most influential factors typically include the total number of collisions over a 5-year period and the AADT volume. A slight change to either value at any given location can certainly influence rankings, especially when there are 3400 locations to be ranked.
Generally traffic volumes at any given location are stable and predictable however, changes can occur annually in traffic volumes resulting in adjustments to annual AADT volumes. Approximately 250 to 300 intersections and 100 to 150 midblock sections are counted each year. The information obtained from these counts assist staff in developing AADT volumes for all 3400 ranked locations. In the context of 3400 locations, a year to year shift of ± 50 in overall ranking is a relatively small change.

**Pedestrian and Cyclist Collision Ranking**

Pedestrian and cyclist collision ranking is based on the frequency of collisions at each Regional intersection and midblock location between 2008 and 2012. Appendix C and D lists the first 20 ranked pedestrian and cyclist collision locations while Tables 3 and 4 lists the first 10 ranked locations. Staff will review 5-years of collision data for each location ranked from #1 to #10 to determine if there is a collision pattern that could be mitigated through countermeasures.

**Table 3 - First 10 Ranked Pedestrian Collision Locations for 2012**

<table>
<thead>
<tr>
<th>Rank 2012</th>
<th>Location of Pedestrian Collisions</th>
<th>Municipality</th>
<th>5-year Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KING ST AT UNIVERSITY AVE</td>
<td>WAT</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Main St AT Wellington St</td>
<td>CAM</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>BRIDGEPORT RD AT KING ST</td>
<td>WAT</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>HIGHLAND RD AT WESTMOUNT RD</td>
<td>KIT</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>FRANKLIN BLVD AT Elgin St/Saginaw Pkwy</td>
<td>CAM</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>AINSLIE ST AT Main St</td>
<td>CAM</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>UNIVERSITY AVE AT Phillip St (driveway)</td>
<td>WAT</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>HESPELER RD AT Avenue Rd/Jaffray St</td>
<td>CAM</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>HESPELER RD AT Munch Ave/Isherwood Ave</td>
<td>CAM</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>KING ST W BTWN Andrew &amp; N to signals (Central/KCI)</td>
<td>KIT</td>
<td>4</td>
</tr>
</tbody>
</table>

**Table 4 - First 10 Ranked Cyclist Collision Locations for 2012**

<table>
<thead>
<tr>
<th>Rank 2012</th>
<th>Location of Cyclist Collisions</th>
<th>Municipality</th>
<th>5-year Collisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HESPELER RD AT Munch Ave/Isherwood Ave</td>
<td>CAM</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Cedar St AT King St (XRR15)</td>
<td>KIT</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>WEBER ST AT Franklin St</td>
<td>KIT</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>UNIVERSITY AVE AT Seagram Dr/UofW Ring Rd</td>
<td>WAT</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>WEBER ST N BTWN Columbia &amp; Hickory</td>
<td>WAT</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Lexington Rd AT Dearborn Pl/Dearborn Blvd</td>
<td>WAT</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Franklin St AT Kingsway Dr</td>
<td>KIT</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>WESTMOUNT RD AT Fr David Bauer Dr/Westcourt Pl</td>
<td>WAT</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>QUEEN ST/Queen St AT COURTLAND AVE/Courtland Ave</td>
<td>KIT</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>WESTMOUNT RD AT Greenbrook Dr</td>
<td>KIT</td>
<td>4</td>
</tr>
</tbody>
</table>
Roundabouts

The first full year of roundabout operation occurred in 2005. Established collision rates for roundabouts have not been established because collision rates continue to fluctuate. Once roundabout collision rates have stabilized, staff will include each roundabout location in the overall rankings. At this time Table 6 shows details of the total number of collisions, pedestrian collisions and injury collisions at 18 roundabout locations. Table 7 summarizes Average Annual Daily Traffic Volumes (AADT) at 16 roundabouts. Only roundabouts having at least one complete year of operation were included in this table.

Table 6: Collisions at Roundabout Locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Opened</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erb &amp; Erbsville/Ira Needles,</td>
<td>Nov. 04</td>
<td>2</td>
<td>0</td>
<td>21</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Waterloo</td>
<td></td>
<td>I</td>
<td>P</td>
<td>T</td>
<td>I</td>
<td>P</td>
</tr>
<tr>
<td>Townline &amp; Can-Amera, Cambridge</td>
<td>Dec. 04</td>
<td>1</td>
<td>0</td>
<td>15</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sawmill &amp; Arthur, Woolwich</td>
<td>Jun. 06</td>
<td>1</td>
<td>0</td>
<td>16</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fountain &amp; Blair, Cambridge</td>
<td>Oct. 06</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Can-Amera &amp; Conestoga, Cambridge</td>
<td>Nov. 06</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ira Needles &amp; Highview/Trussler, Kitchener</td>
<td>Nov. 06</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ira Needles &amp; Highland, Kitchener</td>
<td>Nov. 06</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Fischer-Hallman &amp; Huron, Kitchener</td>
<td>Oct. 07</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fischer-Hallman &amp; Seabrook, Kitchener</td>
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<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Victoria &amp; Ira Needles, Kitchener</td>
<td>Dec. 07</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>University &amp; Ira Needles, Waterloo</td>
<td>Dec. 07</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Pinebush &amp; Thompson, Cambridge</td>
<td>Aug. 09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
<td>0*</td>
</tr>
<tr>
<td>Lancaster &amp; Bridge, Kitchener</td>
<td>Nov. 09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>*0</td>
<td>0*</td>
</tr>
<tr>
<td>Ira Needles &amp; The Boardwalk, Kitchener</td>
<td>Sept. 10</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Fountain &amp; Dickie Settlement, Cambridge</td>
<td>Nov. 10</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Homer Watson &amp; Block Line, Kitchener</td>
<td>Aug. 11</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Fountain &amp; Kossuth, Cambridge</td>
<td>Nov. 11</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Fairway &amp; Zeller, Kitchener</td>
<td>Dec. 12</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

* Note: denotes partial year
I = Injury Collision
P = Pedestrian Collision
T = Total Number of Collisions
Table 7 – Average Annual Daily Traffic Volumes at Roundabouts

<table>
<thead>
<tr>
<th>Location</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawmill Road at Arthur Street</td>
<td>23095</td>
<td>21833</td>
<td>25562</td>
<td>24090</td>
<td>28204</td>
<td>33074</td>
</tr>
<tr>
<td>Erb Street at Ira Needles Boulevard</td>
<td>15528</td>
<td>20120</td>
<td>25076</td>
<td>27172</td>
<td>27927</td>
<td>31259</td>
</tr>
<tr>
<td>University Avenue at Ira Needles Boulevard</td>
<td></td>
<td>12477</td>
<td>16623</td>
<td>20682</td>
<td>22703</td>
<td>32209</td>
</tr>
<tr>
<td>Victoria Street at Ira Needles Boulevard</td>
<td></td>
<td>15047</td>
<td>17616</td>
<td>21915</td>
<td>24705</td>
<td>25185</td>
</tr>
<tr>
<td>Highland Road at Ira Needles Boulevard</td>
<td></td>
<td>19579</td>
<td>22923</td>
<td>25204</td>
<td>26714</td>
<td>30179</td>
</tr>
<tr>
<td>Highview Avenue at Ira Needles Boulevard</td>
<td>10848</td>
<td>13689</td>
<td>18238</td>
<td>20036</td>
<td>20899</td>
<td>19086</td>
</tr>
<tr>
<td>Fischer Hallman Road at Seabrook Drive</td>
<td>9784</td>
<td>12203</td>
<td>13015</td>
<td>15089</td>
<td>16335</td>
<td></td>
</tr>
<tr>
<td>Fischer Hallman Road at Huron Road</td>
<td></td>
<td>11042</td>
<td>12747</td>
<td>13137</td>
<td>14860</td>
<td>15101</td>
</tr>
<tr>
<td>Fountain Street at Blair Road</td>
<td>15061</td>
<td>14563</td>
<td>19402</td>
<td>19681</td>
<td>19022</td>
<td>21828</td>
</tr>
<tr>
<td>Can-Amera Parkway at Conestoga Boulevard</td>
<td>14143</td>
<td>13006</td>
<td>16209</td>
<td>16252</td>
<td>15425</td>
<td>15827</td>
</tr>
<tr>
<td>Townline Road at Can-Amera Parkway</td>
<td>17594</td>
<td>17682</td>
<td>21804</td>
<td>21900</td>
<td>23942</td>
<td>22383</td>
</tr>
<tr>
<td>Pinebush Road at Thompson Drive</td>
<td></td>
<td>8940</td>
<td>9045</td>
<td>9622</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lancaster Avenue at Bridge Street</td>
<td></td>
<td>23086</td>
<td>24581</td>
<td>29016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ira Needles Boulevard at The Boardwalk</td>
<td></td>
<td></td>
<td>19577</td>
<td>22808</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fountain Street at Dickie Settlement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23563</td>
<td></td>
</tr>
<tr>
<td>Homer Watson Boulevard at Block Line Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37495</td>
</tr>
</tbody>
</table>

Despite not being ranked with all locations within the Region, a collision prediction model specific to roundabouts has been developed to estimate expected annual collisions at roundabouts based on total average daily turning conflicts at roundabouts. Based on this methodology Table 8 provides a 2012 ranking of roundabouts and summarizes expected collisions verses actual collisions at roundabouts having at least one full year of operation.
Table 8 – 2012 Roundabout Ranking

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Homer Watson Blvd. at Block Line Rd.</td>
<td>55261</td>
<td>24</td>
<td>53</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>Townline Rd. at Can-Amera Pkwy.</td>
<td>17638</td>
<td>9</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Highland Rd. at Ira Needles Blvd.</td>
<td>61121</td>
<td>27</td>
<td>33</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Ira Needles Blvd. at The Boardwalk</td>
<td>13185</td>
<td>8</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Can-Amera Pkwy. At Conestoga Blvd.</td>
<td>16868</td>
<td>9</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Pinebush Rd. at Thompson Dr.</td>
<td>7683</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Fischer-Hallman Rd. at Seabrook Dr.</td>
<td>5967</td>
<td>5</td>
<td>4</td>
<td>-1</td>
</tr>
<tr>
<td>12</td>
<td>University Ave. at Ira Needles Blvd.</td>
<td>48745</td>
<td>22</td>
<td>21</td>
<td>-1</td>
</tr>
<tr>
<td>8</td>
<td>Lancaster St. / Carisbrook Dr. at Bridge St.</td>
<td>29148</td>
<td>14</td>
<td>13</td>
<td>-1</td>
</tr>
<tr>
<td>7</td>
<td>Sawmill Rd. at Arthur St.</td>
<td>47018</td>
<td>21</td>
<td>20</td>
<td>-1</td>
</tr>
<tr>
<td>13</td>
<td>Erb St. at Erbsville Rd. / Ira Needles Blvd.</td>
<td>79645</td>
<td>34</td>
<td>33</td>
<td>-1</td>
</tr>
<tr>
<td>9</td>
<td>Fountain St. at Blair Rd.</td>
<td>29706</td>
<td>14</td>
<td>13</td>
<td>-1</td>
</tr>
<tr>
<td>10</td>
<td>Fischer-Hallman Rd. at Huron Rd.</td>
<td>8196</td>
<td>6</td>
<td>4</td>
<td>-2</td>
</tr>
<tr>
<td>16</td>
<td>Ira Needles Blvd. at Highview Dr.</td>
<td>14764</td>
<td>8</td>
<td>5</td>
<td>-3</td>
</tr>
<tr>
<td>14</td>
<td>Fountain St. at Dickie Settlement Rd.</td>
<td>31532</td>
<td>15</td>
<td>11</td>
<td>-4</td>
</tr>
<tr>
<td>15</td>
<td>Victoria St. at Ira Needles Blvd.</td>
<td>15355</td>
<td>8</td>
<td>4</td>
<td>-4</td>
</tr>
</tbody>
</table>

Intersections retrofitted with roundabouts continue to operate with approximately 46% fewer injury collisions. The overall average roundabout injury collision rate continues to be lower than the average injury collision rate seen at comparable traffic signals. Figure 4 illustrates average injury collisions at intersections retrofitted with roundabouts that have been in operation for a 1-year period.
In the fall of 2012 staff started to implement additional countermeasures at roundabouts in an effort to further reduce collisions which include:

- Approach lane designation symbols;
- Circulatory lane markings;
- Arrow symbols within the circulatory lanes; and
- Shark teeth.

A detailed assessment of the impacts of these measures determined that lane lines, symbols and shark teeth did provide a minimal reduction on entering collisions which typically are a result of failing to yield. Lane designation symbols appear to have had a positive impact in mitigating exit type collisions that occur typically as a result of improper left turns from the right lane.

**2011 Countermeasures Program**

Appendix E to this report summarizes collision trends and recommended countermeasures for the first 10 ranked collision locations identified in the 2011 Collision Report. It also notes where countermeasures have already been implemented.

**CORPORATE STRATEGIC PLAN:**

This report addresses the Region’s goal to implement proven roadway safety strategies and education to enhance the safety of our roadways (Strategic Objective 3.3.2).
FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Appendix A – Executive Summary of the 2012 Region of Waterloo Collision Report
Appendix B – Vehicular Collision Ranking
Appendix C – Pedestrian Collision Ranking
Appendix D – Cyclist Collision Ranking
Appendix E – 2011 Top 10 Collision Locations and Countermeasures Program

PREPARED BY: Ashfaq Rauf, Engineering Technologist (Traffic)

APPROVED BY: Thomas Schmidt, Commissioner, Transportation and Environmental Services
## EXECUTIVE SUMMARY

### 2012 COLLISION REPORT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Collisions</td>
<td>5795</td>
<td>6031</td>
<td>5809</td>
<td>5547</td>
<td>5823</td>
</tr>
<tr>
<td>Number of Fatal Collisions</td>
<td>10</td>
<td>15</td>
<td>8</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Number of Injury Collisions</td>
<td>1350</td>
<td>1379</td>
<td>1341</td>
<td>1196</td>
<td>1359</td>
</tr>
<tr>
<td>Number of Collisions Involving Pedestrians</td>
<td>154</td>
<td>151</td>
<td>119</td>
<td>98</td>
<td>119</td>
</tr>
<tr>
<td>Number of Collisions Involving Cyclists</td>
<td>130</td>
<td>104</td>
<td>142</td>
<td>105</td>
<td>128</td>
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<tr>
<td>Number of Persons Injured in Collisions (includes drivers, passengers, cyclists and pedestrians)</td>
<td>1898</td>
<td>1923</td>
<td>1862</td>
<td>1649</td>
<td>1874</td>
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<tr>
<td>Number of Persons Sustaining Fatal Injuries in Collisions (includes drivers, passengers, cyclists and pedestrians)</td>
<td>10</td>
<td>16</td>
<td>8</td>
<td>10</td>
<td>13</td>
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<tr>
<td>Percentage of Collisions Occurring at Intersections</td>
<td>65%</td>
<td>63%</td>
<td>64%</td>
<td>57%</td>
<td>58%</td>
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<tr>
<td>Day with Highest Number of Collisions</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
<td>Friday</td>
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<tr>
<td>Month with Highest Number of Collisions</td>
<td>January</td>
<td>October</td>
<td>December</td>
<td>January</td>
<td>February</td>
</tr>
<tr>
<td>Time of Day with Highest Number of Collisions</td>
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<td>17:00</td>
<td>17:00</td>
<td>16:00</td>
<td>17:00</td>
</tr>
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<td>Most Common Collision Type</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
<td>Rear End</td>
</tr>
<tr>
<td>Most Frequently Recorded Improper Driving Action</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
<td>Following Too Close</td>
</tr>
<tr>
<td>Percentage of Alcohol-Related Collisions</td>
<td>1.6%</td>
<td>1.5%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Horse-Drawn Vehicle Collisions</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
### VEHICULAR COLLISION RANKING

<table>
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<tr>
<th>Rank</th>
<th>Geo ID</th>
<th>Location</th>
<th>Mun</th>
<th>Tcon</th>
<th>F</th>
<th>PI</th>
<th>PD</th>
<th>SR</th>
<th>Total Coll</th>
<th>2012 Vol</th>
<th>Link Length</th>
<th>Coll Rate</th>
<th>Expect # Coll</th>
<th>Diff</th>
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<td>11768</td>
<td>KIT</td>
<td>TS</td>
<td>58</td>
<td>102</td>
<td>49</td>
<td>209</td>
<td>62613</td>
<td>0.90</td>
<td>103</td>
<td>10</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>17349</td>
<td>CAM</td>
<td>TS</td>
<td>23</td>
<td>59</td>
<td>33</td>
<td>115</td>
<td>27068</td>
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<td>85</td>
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<td>3</td>
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<td>TS</td>
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<td>32</td>
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<td>33</td>
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<td>83</td>
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## CYCLIST TOP 20 COLLISION RANKING

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**Legend**
- **Tcon** = traffic control (TS=traffic signal, SS=stop sign, AWS=all-way stop sign)
- **F** = fatal collisions in 5-years
- **PI** = personal injury collisions in 5-years
- **PD** = property damage collisions in 5-years
- **NR** = non-reportable collisions (property damage less than $1000) in 5-years
- **Total Coll** = total collisions in 5-years
- **2012 Vol** = average annual daily traffic (veh/day)
2011 TOP 10 COLLISION LOCATIONS AND COUNTERMEASURES PROGRAM

<table>
<thead>
<tr>
<th>2011 Rank</th>
<th>Location</th>
<th>Municipality</th>
<th>5-year Collisions</th>
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<td>Actual</td>
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<td>1</td>
<td>Ottawa St at Homer Watson Blvd</td>
<td>Kitchener</td>
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<td>King St at Fountain St</td>
<td>Cambridge</td>
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<tr>
<td>3</td>
<td>University Ave btwn Regina St and Weber St</td>
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<td>Courtland Ave/Fairway Rd at Manitou Dr</td>
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<td>Eagle St btwn Hespeler Rd and Industrial Rd</td>
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<tr>
<td>10</td>
<td>Homer Watson Blvd at Manitou / Doon Village Rd</td>
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<td>117</td>
</tr>
</tbody>
</table>

1. Ottawa Street at Homer Watson Boulevard, Kitchener

Ottawa Street (Regional Road 4) at Homer Watson Boulevard (Regional Road 28) experienced 200 collisions in 5-years (2007 to 2011) including 50 turning movement collisions where 26 would be expected and 114 rear-end collisions where 48 were expected.

On February 2, 2011, Regional Council approved the installation of a roundabout at the intersection which is anticipated to be operational in the year 2015. Along with the roundabout installation, additional improvements to highway ramp terminals and a second roundabout at the Ottawa Street / Alpine Road intersection has also been approved for installation. It’s anticipated that these additional improvements will also occur in 2015.

2. King Street at Fountain Street, Cambridge

King Street at Fountain Street experienced 116 collisions in 5-years (2007 to 2011). Of the 116 collisions, 55 were turning-type collisions where 10 were expected and 29 were sideswipe collisions where 2 were expected.

In April 2012 Council passed a resolution in favor of the proposed solution which includes intersection improvements. The proposed design will reconfigure the intersection geometry and will incorporate two through lanes along Fountain Street to Shantz Hill Road. The proposed design removes the weaving action of motorists between King Street and Shantz Hill Road and as such is anticipated to reduce sideswipe collisions. Further design improvements include the addition of a southbound left-turn lane which removes left-turning motorists from the through lane. Staff anticipate that the addition of a southbound left-turn lane will reduce southbound rear-end collisions.
3. **University Avenue East between Regina Street and Weber Street, Waterloo**

University Avenue between Regina Street and Weber Street experienced 81 collisions in 5-years (2007 to 2011). Of the 81 collisions, 35 were rear-end collisions where 7 were expected, and 35 were turning movement collisions where 3 were expected. The majority of the angle / turning collision types are occurring at the accesses within this section of University Avenue.

The potential for a median island was assessed along this section of University Avenue. The majority of angle/turning movement collisions are occurring between Weber Street to a point 180 metres west. This section provides access to a number of apartment buildings on the north side of University Avenue and provides 5 accesses to commercial properties on the south side of University Avenue. The inclusion of a centre median would have a negative impact to both residences and commercial properties that front this section of University Avenue. Therefore, a potential time-of-day left-turn out restriction will be considered at one or more commercial accesses, rather than providing a median to restrict turning.

4. **Franklin Boulevard at Can-Amera Parkway, Cambridge**

Franklin Boulevard at Can-Amera Parkway experienced 133 collisions in 5-years (2007 to 2011). Of the 133 collisions, 61 were rear-end collisions where 35 would be expected and 46 turning-type collisions where 19 would be expected. Of the 46 turning movement collisions 67% (31 collisions) involve a westbound left-turning motorist not yielding the right of way to an eastbound through motorist.

In June 2012, Regional Council passed a staff recommendation to implement a westbound dual left-turn from Can-Amera Parkway onto Franklin Avenue. The lane configuration required the traffic signals to operate the westbound left-turn movement fully-protected such that westbound left-turning motorists are only permitted to move during an exclusive westbound left-turn phase. The dual left-turn lane configuration and protected left-turn phase in the westbound direction was implemented on July 11, 2012. Since the installation of the dual left-turn lane and protected left-turn phase there have been no collisions where the motorist making a westbound left-turn was at fault compared to 3 collisions one year prior to the change.

In May 2012 Regional Council passed a resolution for road improvements on Franklin Boulevard from Pinebush Road to Myers Road. The improvements include an approved roundabout at the Franklin Boulevard / Can-Amera Parkway intersection.

5. **Courtland Avenue / Fairway Road at Manitou Drive, Kitchener**

There were 104 collisions at the Courtland Avenue / Fairway Road at Manitou Drive intersection between 2007 and 2011. Of the 104 collisions, 75 were rear end type collisions, with 40% (30) occurring in the channelized right-turn lane from Manitou Drive to eastbound Fairway Road.

In 2011 staff reconstructed the right-turn channelized island from Manitou Drive onto Fairway Road. The new channel is known as a smart channel and is designed to reduce rear-end collisions. The smart channel was completed in November 2011 and from November 2011 to December 2012 there has been 2 rear-end collisions associated with turning right compared to 8 rear-end collisions 1 year prior. The smart channel is anticipated to reduce rear-end collisions by approximately 78% based on local studies.
6. King Street at University Avenue, Waterloo

King Street at University Avenue experienced 121 collisions in 5-years (2007 to 2011). Of the 121 collisions, 33 were turning-type collisions where 17 were expected and 53 were rear-end collisions where 31 were expected.

This intersection was also assessed in 2013 due to an unusual number of pedestrian collisions. Following our review, staff recommended the following countermeasures at the King Street / University Avenue intersection:

- Temporarily paint ladder crosswalks on top of the existing brick crosswalks;
- Remove brick crosswalks in 2014; and
- Install offset ladder crosswalks.

In April 2013, Regional Council passed a staff recommendation to implement the above listed countermeasures. In May of 2013, temporary ladder crosswalks were installed on all four legs of the intersection. Staff has planned the removal of the brick crosswalks and the installation of offset ladder crosswalks in 2014. Based on Regional studies, ladder crosswalk markings can potentially reduce pedestrian collisions occurring at intersections by 70%.

In addition to aforementioned countermeasures, pedestrian countdown signals (PCS) were installed in March 2013 as part of the Region’s annual PCS program. PCS have shown a 20% reduction in pedestrian collisions at signalized intersection based on Regional studies.

7. Eagle Street between Hespeler Road and Industrial Road, Cambridge

There were 74 collisions on Eagle Street between Hespeler Road and Industrial Road in 5-years (2007 to 2011). Of the 74 collisions, 48 were turning-movement collisions. When these types of collisions occur on midblock road sections with commercial development they typically involve a vehicle entering or exiting area development. A cluster of these types of collisions are occurring at the accesses to 2445 / 2465 / 2475 Eagle Street and 2386 / 2396 Eagle Street.

As part of the Eagle Street, Hespeler Road to Concession Road / Speedsville Road Environmental Assessment, on Eagle Street a revised median has been proposed to mitigate collisions in this vicinity. Rapid Transit staff is assessing Eagle Street as a future rapid transit route and as such the planned road widening of Eagle Street has been delayed until their assessment is complete.

8. Franklin Boulevard at Elgin St / Saginaw Parkway, Cambridge

A review of the 5-year collision history between 2007 and 2011 at the Franklin Boulevard / Saginaw Parkway / Elgin Street intersection shows that there were 69 (58%) rear-end collisions and 33 (28%) turning movement type collisions. Of the 69 rear-end collisions, 61% occurred in the north / south direction along Franklin Boulevard approaching the intersection. 79% of the turning movement collisions (33) also occurred in the north / south direction turning from Franklin Boulevard.

As shown in Appendices C and D, the Franklin Boulevard/Elgin Street/Saginaw Parkway intersection continues to be a concern with both pedestrian and cyclist collisions; the intersection ranks #5 for pedestrian collisions and #8 for cyclist collisions.
Current countermeasures at the Franklin Boulevard at Saginaw Parkway / Elgin Street intersection include a southbound red light camera that was installed in October 2008. Also in October 2008, Regional staff installed pedestrian countdown signals to aid the crossing of pedestrians utilizing this intersection.

Ladder markings were considered to address the high number of pedestrian collisions however the existing pavement conditions are preventing the installation of ladder markings. Once the pavement conditions are improved ladder markings will be installed within the crosswalks at the Franklin Boulevard/Elgin Street/Saginaw Parkway intersection.

The Transportation Capital Program includes the reconstruction of Franklin Boulevard from Pinebush Road to Myers Road. Proposed intersection improvements include the installation of a roundabout at the Franklin Boulevard/Elgin Street/Saginaw Parkway intersection. In August 2013 Regional Council passed a motion to defer the decision on the recommended traffic control at the Franklin Boulevard / Elgin Street / Saginaw Parkway intersection until 1 year after improvements are complete at adjacent intersections.

9. King Street at Fairway Road, Kitchener

King Street at Fairway Road experienced 105 collisions in 5-years (2007 to 2011). Of the 105 collisions, 63 collisions were rear-end type collisions where 27 were expected.

Typically, rear-end collision types are the result of motorists travelling too close or being inattentive. According to the Motor Vehicle Accident Reports 48% of the rear-end collisions are the result of motorists travelling too close.

One potential measure to reduce rear-end collisions is to consider signal timing adjustments to improve the coordination between intersections and in particular the direction that is experiencing the majority of rear-end collisions. A detailed review of the rear-end collisions shows that the majority of collisions at this intersection are occurring in the southbound direction along King Street. Improving coordination between traffic control signals can sometimes reduce rear-end collisions recognizing that good coordination is also dependent on available lane capacity. A review of the southbound coordination approaching the intersection shows that the signal timing for the southbound direction is providing for optimal coordination. The southbound curb lane at this intersection defaults to a right-turn only lane which consequently impacts through capacity and traffic signal coordination. Currently there are no other countermeasures to address these types of collisions.

10. Homer Watson Boulevard at Manitou Drive / Doon Village Drive, Kitchener

The Homer Watson Boulevard/Manitou Drive / Doon Village Road intersection experienced 117 collisions between 2007 and 2011. Of the 117 collisions, 78 or 67% are noted as rear-end type collisions. Typically, rear-end collision types are the result of motorists travelling too close or being inattentive.

A detailed review of the rear-end collisions shows that majority of collisions (63%) are occurring on Homer Watson Boulevard approaching the intersection. Of the 78 total rear-end collision, 64 (82%) collisions occurred due to inattentive drivers. Eleven of the 78 collisions can also be attributed to poor road surface conditions. Currently, there are no countermeasures to address these types of collisions. However, Regional staff are currently undertaking an environmental assessment along Homer Watson Boulevard between New Dundee Road and Manitou Drive / Doon Village Drive.
Through this process staff will be investigating the use of high friction asphalt to address rear-end collisions at the Homer Watson Boulevard / Manitou Drive / Doon Village Drive intersection.
REGION OF WATERLOO
PLANNING HOUSING AND COMMUNITY SERVICES
Community Planning

TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: October 22, 2013
FILE CODE: F16-50
SUBJECT: ENBRIDGE LINE 9 PROJECT - NATIONAL ENERGY BOARD APPLICATION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo forward a copy of Report P-13-102, dated October 22, 2013, to the National Energy Board and Enbridge Pipeline Inc. as Regional Council’s input into deliberations relating to Enbridge’s Line 9 Project application, with particular emphasis on the need to thoroughly consider fiscal responsibilities, the potential risks of flowing different commodities through the pipeline, ways in which the risk of future spills can be mitigated and, in the event of a spill, how emergency response can occur in the most effective and timely manner possible;

AND THAT a copy of Report No. P-13-102, dated October 22, 2013, be forwarded to all local Members of Parliament.

SUMMARY:

On September 18, 2013, Regional Council directed staff to review the Enbridge Line 9 Project application to the National Energy Board and report on its findings.

Enbridge Pipeline Inc. (Enbridge) has been operating the Line 9 pipeline between Montreal, Quebec and Sarnia, Ontario since 1976. A section of Line 9 traverses the Township of North Dumfries in the south end of Waterloo Region.

In response to customer requests for greater pipeline capacity and access to western Canadian and American crude oil to supply refineries in Eastern Canada, Enbridge applied to the National Energy Board (NEB) for permission to reverse the flow of oil in Line 9 and to increase the volume of flow in the pipeline from 240,000 barrels per day to 300,000 barrels per day.

The NEB’s July 2012 approval of the first phase of Enbridge’s application for the section of Line 9 that runs from Sarnia to North Westover (located southeast of Waterloo Region near Rockton) means that oil in Line 9 through Waterloo Region (entirely through the Township of North Dumfries) now flows from west to east and that the volume of flow through the pipeline has been increased. No new pipeline construction was required in the Region of Waterloo.

In November 2012, Enbridge filed the second phase of the application for the section of Line 9 that runs from North Westover to Montreal. The NEB has set public hearing dates in Montreal (October 8 to 11) and Toronto (October 16 to 19). No new pipeline construction is proposed in the Region of Waterloo. The NEB’s decision on the application is expected by March of 2014.

Municipalities in the Greater Toronto Area and in Eastern Ontario have identified more specific issues such as: Enbridge’s ability to pay clean up and compensation costs associated with an
oil spill; the need to continuously monitor the integrity of the pipeline with particular emphasis on concerns that the Drag Reducing Agents and the wider variety of oil that would flow through the pipeline would cause faster or additional corrosion of the pipeline; opportunities to install shut-off valves at locations where the pipeline crosses rivers, creeks and streams; the development of emergency response protocols and improved communication with local emergency responder groups; and the deployment of more Enbridge emergency response crews in key locations along the Line 9 pipeline. These are also key issues in Waterloo Region and are described in greater detail in this report.

Enbridge has collaborated with the Community Emergency Management Co-ordinators in Waterloo Region for several years on a Line 9 Emergency Response Protocol, so emergency response stakeholders are prepared in the event of a spill.

Regional staff has already forwarded a letter to the National Energy Board indicating that Waterloo Regional Council’s input would be forthcoming. Staff has also confirmed that this letter was received by the NEB.

REPORT:

Mr. Dan Kellar and Ms. Rachel Avery, Waterloo Region Coalition Against Line 9, appeared before Council on September 18, 2013 to present a declaration issued by the Waterloo Region Coalition Against Line 9. Regional Council directed staff to look into the matter and report back.

The Enbridge Line 9 Project

Enbridge has been operating the 762-mm (30-inch) diameter Line 9 pipeline between Montreal, Quebec and Sarnia, Ontario since 1976 (see map below).
Originally, oil in Line 9 flowed eastward from Sarnia to Montreal. The direction of oil flow was reversed in 1998 as foreign oil from areas such as West Africa and the Middle East became more affordable. However, as the price of crude oil from Alberta, Saskatchewan, Manitoba and the Bakken Region in the United States dropped relative to the price of foreign crude oil, Enbridge’s customers requested greater pipeline capacity and access to this crude oil to supply refineries in Eastern Canada.

Enbridge subsequently initiated a two-phase application to the National Energy Board (NEB) to reverse the flow of oil in Line 9 and to increase the volume of flow in the pipeline from 240,000 barrels per day to 300,000 barrels per day through the use of Drag Reducing Agents (a polymer compound found in wool, nylon, and silicone) which allow oil to flow with less friction. Line 9 is expected to carry mainly light crude oil. However, shippers will be permitted to ship crude oil blends or types that meet quality specifications set by Enbridge, and filed with the National Energy Board. This includes heavy crudes such as diluted bitumen.

The NEB approved the first phase of Enbridge’s application for the section of Line 9 from Sarnia to North Westover (located southeast of Waterloo Region near Rockton) in July of 2012. Therefore, the NEB has already approved the reversal of oil flow in Line 9 through the Township of North Dumfries in Waterloo Region (see Map 1 on page 7) and the requested flow increase to 300,000 barrels per day. Enbridge filed a second phase application with the NEB in November 2012 for the section of Line 9 from North Westover to Montreal. This application has no direct implications for the section of the Line 9 pipeline that runs through Waterloo Region.

**National Energy Board (NEB) Approval Process**

The approval process for interprovincial pipelines such as Line 9 is regulated by the National Energy Board (NEB) through powers assigned by the National Energy Board Act. No approvals are required by the Regional Municipality of Waterloo or the Township of North Dumfries.

On February 19, 2013, the NEB confirmed that it would hold public hearings to assess Enbridge’s application for the second phase of the Line 9 project. The public hearings are scheduled for October 8-11, 2013 in Montreal and October 16-19, 2013 in Toronto.

Enbridge has indicated that the NEB is expected to issue its decision by March of 2014. Decisions made by the NEB may be appealed to Canada’s Federal Court of Appeal, but only on a point of law or jurisdiction, and only with leave of the Court. A leave to appeal must be filed within 30 days following an NEB decision.

Some of the key issues that are expected to be discussed at the upcoming NEB hearings include the potential environmental and socioeconomic effects of the project, including potential effects of malfunctions or accidents that may occur and any cumulative environmental effects; safety, security and contingency planning associated with the construction and operation of the proposed project, including emergency response planning and third-party damage prevention; and, the impact of the project on landowners and other potentially affected stakeholders.

**Key Line 9 Issues in Waterloo Region**

Municipalities in the Greater Toronto Area and in Eastern Ontario have identified more specific issues such as: Enbridge’s ability to pay clean up and compensation costs associated with an oil spill; the need to continuously monitor the integrity of the pipeline with particular emphasis on concerns that the Drag Reducing Agents and the wider variety of oil that would flow through the pipeline would cause faster or additional corrosion of the pipeline; opportunities to install shut-off valves at locations where the pipeline crosses rivers, creeks and streams; the development of emergency response protocols and improved communication with local emergency responder
groups; and the deployment of more Enbridge emergency response crews in key locations along the Line 9 pipeline. These are also key issues in Waterloo Region and are described in greater detail below.

Enbridge representatives have confirmed that none of the 12 spills that have occurred along Line 9 since 1976 have occurred in Waterloo Region. There are three keys ways in which an oil spill would be of significant concern in Waterloo Region:

**a) Water Supply**

Because Line 9 crosses both the Nith River and the Grand River, a spill in either location could contaminate the water supply of downstream communities such as Brantford and Ohsweken which use water from the Grand River for drinking water. In addition, a spill anywhere near some of the rural residences in North Dumfries could result in the contamination of private wells. However, the Region’s municipal drinking water supplies would not be affected by a spill because Line 9 is located well to the south (downstream) of Regional supply wells and the Hidden Valley Water Intake.

**b) Residential Neighbourhoods**

Line 9 runs directly through some residential neighbourhoods in the Village of Ayr. While a spill should not be an issue for water supply because these neighbourhoods are on full municipal services, a spill could be a significant issue in terms of the need to evacuate residents due to odour concerns and/or the ability to effectively clean up the spill. There has been some discussion about the risk to residents due to fires and/or explosions associated with pipeline oil spills, but the potential to have to respond to combustion emergencies is lower and more commonly associated with natural gas pipelines.

**c) Protection of Sensitive Environmental Areas**

Line 9 runs through large portions of the Dumfries Carolinian Environmentally Sensitive Landscape (ESL) which contains Significant Habitat of Endangered and Threatened Species, Environmentally Sensitive Policy Areas (ESPAs), Provincially Significant Wetlands, Significant Woodlands, and Environmentally Significant Valley Features. Consequently, a spill in Dumfries Carolinian ESL could permanently damage key environmental features and functions.

**Line 9 Emergency Response Protocol in Waterloo Region**

Enbridge has collaborated with the Community Emergency Management Co-ordinators in Waterloo Region (currently the Co-ordinators are Mr. Robert Shantz, Chief of the North Dumfries Fire Department, Mr. Jon Rehill, Deputy Chief of the City of Cambridge Fire Department, and Mr. Steve LaRochelle, Region of Waterloo Program Manager, Emergency Measures) for several years on a Line 9 Emergency Response Protocol. Each Co-ordinator has a binder that describes and explains the Protocol.

Enbridge constantly monitors the integrity of the pipeline. In the event that a spill was detected by Enbridge’s monitoring systems or Enbridge was informed of a spill via its emergency phone line, Enbridge staff would remotely activate the appropriate shut-off valves to minimize the amount of oil that is spilled and dispatch an emergency crew to deal with the spill. There are three shut-off valves in North Dumfries (Blenheim Road, Shouldice Side Road and West River Road) that that can be used to mitigate the impact of a spill.

In the event of an emergency situation such as an oil spill, the North Dumfries Fire Department would be the first due responder. Under the terms of an agreement between the Township of
North Dumfries and the City of Cambridge, the Township could request the City of Cambridge Fire Department to respond to an emergency in those parts of North Dumfries where the Township does not have a station (for example, in the areas near the Grand River). This agreement helps minimize emergency response times.

The responsibility of the first due responders is public safety. This responsibility could mean securing the area, eliminating ignition sources, suppressing any fires, managing traffic (with Waterloo Regional Police) and evacuating residents and onlookers. Enbridge is responsible for spill containment and their emergency response crew would be dispatched from Enbridge’s terminal in Westover (east of Rockton). Response time for the Enbridge crew based on previous emergency response exercises is approximately one hour. The Region of Waterloo’s primary responsibilities in the event of a spill would be to support North Dumfries and Cambridge Emergency Response efforts in the event that residents need to be evacuated or there are air quality or water quality concerns.

The Community Emergency Management Co-ordinators in Waterloo Region are of the opinion that Enbridge has been a reliable partner in terms of ongoing and regular communication and its efforts to co-ordinate and participate in the development and implementation of a Line 9 Emergency Response Protocol for Waterloo Region. For example, in late September 2013, Enbridge, the City of Cambridge, the Township of North Dumfries and the Region of Waterloo participated in a successful two day spill containment exercise on the Grand River. Enbridge also provides ongoing training to fire department staff, annual updates as to any changes in the pipeline, and information about the location and timing of integrity digs in the Township. Integrity digs are where Enbridge removes soil from around a small section of the pipeline so that the pipeline can be manually checked for signs of corrosion, leaks, etc.

The Community Emergency Management Co-ordinators have noted the comprehensiveness of Enbridge’s efforts over the last three years to implement its Public Awareness Program in North Dumfries. The Program, which involves personal visits to landowners that have property on or within 60 metres of the pipeline right-of-way, is designed to inform landowners about the location of the pipeline, review pipeline safety details, reduce the potential for Third Party damage (e.g. people who accidentally cut into the pipeline while digging a hole or trench) which is the main cause of spills on Line 9, and explain what to do in the event of a pipeline emergency.

**Conclusion**

Regional staff does not have the expertise to comment on the question of whether Drag Reducing Agents or wider varieties of oil in the pipeline will cause faster or additional corrosion of the pipeline, or have other negative impacts. However, there is an Emergency Response Protocol in place with local first responders that would be implemented in the event of a spill and Enbridge has demonstrated commitment to community outreach with North Dumfries landowners.

The Region of Waterloo also recognizes that despite best efforts, there can be no guarantee that there will not be a spill from Line 9 in Waterloo Region or elsewhere at some point in the future. Therefore, the Region of Waterloo particularly supports other municipalities along Line 9 asking the NEB to thoroughly consider fiscal responsibilities, the potential risk of flowing different commodities through the pipeline, the ways in which the risk of future spills can be avoided and, in the event of a spill, how emergency response can occur in the most effective and timely manner possible.
Area Municipal Consultation/Coordination

A draft copy of this report was circulated to the Community Emergency Management Coordinators in the Township of North Dumfries and the City of Cambridge for review. The Coordinators provided many of the comments contained in this report.

CORPORATE STRATEGIC PLAN:

This report directly addresses Focus Area 1 – Environmental Sustainability: Protect and enhance the environment, and Focus Area 3 – Healthy and Safe Communities: Support safe and caring communities that enhance all aspects of health.

FINANCIAL IMPLICATIONS:

NIL

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

This report was prepared in consultation with the Region of Waterloo Program Manager, Emergency Measures.

ATTACHMENTS:

Attachment 1 – Location of Line 9 in Waterloo Region

PREPARED BY: Kevin Curtis, Manager, Reurbanization

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
Attachment 1 - Location of Line in Waterloo Region
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: D25-00

SUBJECT: REGIONAL IMPLEMENTATION GUIDELINE FOR CULTURAL HERITAGE LANDSCAPE CONSERVATION

RECOMMENDATION:

THAT the Regional Municipality of Waterloo endorse the *Regional Implementation Guideline for Cultural Heritage Landscape (CHL) Conservation* as described in Report P-13-103, dated October 22, 2013.

THAT the Implementation Guideline be made available to Area Municipal staff for use as they begin the implementation of local official plan CHL conservation policies.

AND THAT staff return to Regional Council for formal approval of the Implementation Guideline once the relevant policies of the Regional Official Plan (2009) come into effect.

SUMMARY:

The Province of Ontario requires that significant Cultural Heritage Landscapes (CHLs) be conserved. The Regional Official Plan (ROP) adopted by Regional Council in 2009 includes policies to ensure that CHLs will be conserved within the Region. The Implementation Guideline for CHL Conservation provides detailed guidance on the application of the CHL policies in the ROP.

The final draft of the Implementation Guideline for CHL Conservation is the culmination of several years of work undertaken by Cultural Heritage staff in consultation with other Regional, Area Municipal and agency staff; the planning and development community; and the general public. The Guideline has been considered by Committee and been circulated for public comment as a first draft in the fall of 2012 and as a second draft in conjunction with a Public Meeting held on April 9, 2013. Additional information on the development of the Guideline can be found in the following reports: First Draft (Report No. P-12-079, August 14, 2012), Second Draft and Request for Public Meeting (Report No. P-13-016, February 26, 2013) and Public Meeting (Report No. P-13-029, April 9, 2013).

During the last round of consultation all comments received were in support of the content of the Guideline, and there has been only minor edits made to the Implementation Guideline. There was concern expressed by a member of the public that Area Municipalities may not have the resources necessary to implement the new guideline, that CHL identification will not be undertaken in a timely manner, and that the value of CHL conservation will need to be conveyed to the general public.

In response to these concerns, Regional staff note: Area Municipal staff are generally supportive of the community-led approach for conserving CHLs outlined in the Implementation Guideline, are including policies to conserve CHLs in their updated Official Plans, and are
making plans to implement the Guideline; the Region has offered in-kind and financial assistance to Area Municipalities to assist with CHL identification and conservation; and a public education initiative on the value of Cultural Heritage Landscapes is being planned for 2014.

The Regional Implementation Guideline for CHL conservation provides a region-wide framework for CHL conservation and will be implemented by Area Municipalities under the authority of their official plan cultural heritage conservation policies as they come into effect.

Several Area Municipalities have already done, or are in the process of undertaking, CHL conservation work in line with the Regional Implementation Guideline. Woolwich Township has identified, documented and designated the West Montrose CHL, the City of Cambridge is considering the Black Bridge Area as a candidate CHL, and the City of Kitchener is undertaking a comprehensive study of cultural heritage landscapes located within the City’s boundaries.

A copy of the final draft Implementation Guideline and a draft of this report was circulated to Area Municipalities and government agencies in October. No further comments have been received.

It is recommended that the final document be endorsed for use within the Region of Waterloo and that staff return to Regional Council for formal approval of the Implementation Guideline once the relevant policies of the Regional Official Plan (2009) come into effect.

REPORT:

Through the Provincial Policy Statement (PPS), the Province of Ontario requires that significant CHLs be conserved. The Regional Official Plan (ROP) adopted by Council in 2009 includes policies to ensure that CHLs will be conserved within the Region. The Implementation Guideline for CHL Conservation provides guidance to development applicants, the Regional Heritage Planning Advisory Committee (HPAC), Municipal Heritage Advisory Committees (MHAC), and Regional and Area Municipal staff in the identification, documentation and further conservation of Cultural Heritage Landscapes (CHLs) within the Region of Waterloo.

The final draft of the Implementation Guideline for CHL Conservation is the culmination of several years of work undertaken by Cultural Heritage staff in consultation with Regional Community Planning, Transportation Planning, Legal Services, and Transportation and Environmental Services Divisions, and with substantial input from Heritage and Planning staff at the Cities of Cambridge, Kitchener and Waterloo; MHACs; HPAC; the Homebuilders Association; the Grand River Conservation Authority; the Ministry of Tourism, Culture and Sport; as well as heritage and planning consulting firms, Waterloo Region Homebuilders Association and the general public.

The Guideline has been considered by Committee and been circulated for public comment as a first draft in the fall of 2012 and as a second draft in conjunction with a Public Meeting held on April 9, 2013. Additional information on the development of the Guideline can be found in the following reports: First Draft (Report No. P-12-079, August 14, 2012), Second Draft and Request for Public Meeting (Report No. P-13-016, February 26, 2013) and Public Meeting (Report No. P-13-029, April 9, 2013). During the final round of consultation all of the comments received were supportive of the content of the document. As a result, there has been minor edits made to the draft of the Implementation Guideline that was circulated for the Public Meeting. The recommended final version of the Implementation Guideline is found in Attachment 1.

The following concerns were expressed by a member of the public, and are being addressed as outlined in the paragraphs below.
1. Area Municipalities may not have the resources necessary to implement the new guideline.

CHL conservation is a municipal responsibility required under the Provincial Policy Statement. The Implementation Guideline is a tool to assist the Area Municipalities in undertaking this requirement. Through the extensive consultation process, Area Municipalities requested that CHL conservation be an Area Municipal led process and that the Region’s role should be to provide a Region-wide framework through the Implementation Guideline. The Implementation Guideline outlines a streamlined Region-wide process that provides straightforward hands-on tools to be used by volunteers and/or professionals at each step of the process. The Region has also offered to assist Area Municipalities both financially and in-kind with the identification of CHLs throughout the Region and with the identification, documentation and ongoing conservation of Regionally significant CHLs.

2. CHL identification will not be undertaken in a timely manner.

The conservation of CHLs is an ongoing process that will be incorporated into the existing heritage review process. As with the conservation of all types of cultural heritage resources, the strength of the conservation framework relies on the proactive identification and timely consideration of the conservation of heritage resources in the land use and infrastructure planning processes. The Region’s CHL conservation process aims at providing a broad brush initial identification of Candidate CHLs that will be a foundation to build upon. Evaluation, documentation and designation will follow; each step allowing for public input and approvals, and providing additional information for the heritage review process.

3. The value of CHL conservation will need to be conveyed to the general public.

A public education initiative on the value of Cultural Heritage Landscapes is being planned for 2014.

Implementation of the Guideline

The Regional Implementation Guideline for CHL conservation provides a region-wide framework for CHL conservation and will be implemented by Area Municipalities under the authority of their official plan cultural heritage conservation policies as they come into effect.

Area Municipal staff is supportive of the common framework for conserving CHLs outlined in the Implementation Guideline and are including policies to conserve CHLs in their updated Official Plans. Several Area Municipalities have already done, or are in the process of undertaking, CHL conservation work in line with the Regional Implementation Guideline. Woolwich Township has identified, documented and designated the West Montrose CHL, the City of Cambridge is considering the Black Bridge Area as a candidate CHL, and the City of Kitchener is undertaking a comprehensive study of cultural heritage landscapes located within the City’s boundaries.

The Regional Official Plan (2009) which directs the Region to prepare and update the Regional Implementation Guideline for Cultural Heritage Landscape Conservation is currently under appeal, and the prior Regional Official Policies Plan (ROPP) dealt with the conservation of CHLs more generally within the broad context of conserving all significant cultural heritage resources. Therefore Regional Council can not formally approve the Implementation Guideline at this time.

Staff recommend that Council endorse the finalized Implementation Guideline document; that the document be made available to Area Municipal staff for use as a guideline as they begin to implement local official plan CHL conservation policies; and that staff return to Regional Council
for formal approval of the Implementation Guideline once the relevant policies of the Regional Official Plan (2009) come into effect.

**Area Municipal Consultation/Coordination**

ROP Policy 10.C.9 requires that the content and scope of Implementation Guidelines be determined by the Region in consultation with Area Municipalities and other appropriate agencies. Regular consultation has taken place with Area Municipal planning and heritage staff, including an informal circulation of an early draft of the Implementation Guideline and discussions with respect to related Official Plan policies.

Comments returned by Area Municipal staff on all previous drafts have been considered in the development of this final version, which was circulated to the Area Municipalities and government agencies in October, and no further comments were received.

**CORPORATE STRATEGIC PLAN:**

The Implementation Guideline for CHL Conservation will help achieve strategic objective 2.4 Promote and enhance arts, culture and heritage.

**FINANCIAL IMPLICATIONS:**

The development of this Implementation Guideline has been undertaken by Regional staff in consultation with Area Municipal staff. In accordance with the Regional Official Plan, the Area Municipalities are responsible for identifying and designating CHLs within their jurisdiction. However, as the conservation of CHLs is a Regional priority, the ROP also states that the Region may assist Area Municipalities in this work.

The preliminary 2014 Cultural Heritage Operating Budget includes a $30,000 provision to cover wages and/or consulting costs incurred by the Area Municipalities which are related to identification and documentation of Regionally-significant CHLs and for the general identification of Candidate CHLs within each jurisdiction. It is anticipated that a budget allocation for this purpose will be required for each of the next 4 years (2014-2017).

**OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:**

Legal Services and Transportation and Environmental Services staff have assisted in the development of the Implementation Guideline. Council and Administrative Services staff has circulated the First Draft of the Implementation Guideline and posted it on the Region’s website.

**ATTACHMENTS:**

Attachment 1 - Final Implementation Guideline for Cultural Heritage Landscape Conservation (August 2013)

**PREPARED BY:** Kate Hagerman, Cultural Heritage Specialist

**APPROVED BY:** Rob Horne, Commissioner, Planning, Housing and Community Services
FINAL
Regional Implementation Guideline for Cultural Heritage Landscape Conservation
August 2013
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A. INTRODUCTION

The purpose of the Region of Waterloo Implementation Guideline for Cultural Heritage Landscape Conservation is to provide guidance to applicants, municipal heritage advisory committees (MHACs) and municipal staff on the implementation of the cultural heritage landscape policies of the 2009 Regional Official Plan (ROP), for the identification of cultural heritage resources, the preparation and review of development applications, and for the undertaking of heritage review during the Environmental Assessment (EA) process.

This document outlines the existing policy context and Cultural Heritage Landscape (CHL) conservation process for the Region of Waterloo, and provides further detail for the implementation of Regional Official Plan policies 3.G.5, 3.G.6 and 3.G.7 through the following guidelines:

- Guideline for the Identification and Evaluation of CHLs
- Guideline for the Preparation of a CHL Technical Study
- Guideline for the Designating CHLs in an Official Plan
- Guideline for the Conservation of a CHL through a Cultural Heritage Impact Assessment

The Regional Official Plan relies on implementation guidelines in a number of subject areas to provide additional technical guidance in the application of certain policies. Implementation guidelines elaborate upon ROP policy, but may not be used as a means of introducing “new policy provisions that could be the basis for denying development applications or for interfering with the natural justice rights of landowners and the public” (Policy 10.B.10).

The content and scope of Regional Implementation Guidelines is determined through a full, open, and transparent consultation process with Area Municipalities, other agencies, interested organizations and citizens. As relevant policies are updated, added, or deleted, the implementation guidelines must also be revised to ensure conformity to the provisions of the Plan.

Italicized terms within this document are defined in the glossary. Terms that are within the glossary but have not been italicized should be understood using their common definition. Bolded text has been used for emphasis.

As stated in the ROP, through the planned conservation of the region’s cultural heritage resources including CHLs, Waterloo Region will realize the benefits of: a higher quality of life; a stronger and more defined regional identity; a wealth of social, environmental and economic opportunities; and a broader foundational understanding of the people and places of our past.
A.1 What are Cultural Heritage Landscapes?

A Cultural Heritage Landscape (CHL) is a location where the influence of humans on the natural landscape has resulted in a place with distinctive character and cultural importance. These historically significant landscapes are valued for the important contribution they make to our understanding of the history of a place, an event, an individual and/or a community.

CHLs are typically characterized by:
- a concentration of cultural heritage resources, such as buildings, structures and landforms;
- a concentration of supporting structural elements such as vegetation, fences or roads;
- a sense of visual coherence; and
- a distinctiveness which enables the area to be recognized from neighbouring areas.

There are three types of CHLs:
- Designed landscapes, which have been intentionally designed;
- Organically evolved landscapes, which have evolved through human use, and are now either relics of the past or are continuing to evolve; and
- Associative landscapes, which have powerful religious, artistic or cultural associations, some of which may have primarily natural elements and limited material cultural evidence.

A Cultural Heritage Landscape (CHL) is defined in the Provincial Policy Statement (2005) as a geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts.

Examples may include, but are not limited to Heritage Conservation Districts, villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trailways, aboriginal trails and industrial complexes of cultural heritage value.

A.2 Rationale for CHL Conservation

Conserving a CHL means identifying, protecting, using and/or managing a CHL in such a way that the heritage value, attributes and integrity of the CHL are retained.

CHL conservation provides a means to conserve groupings of cultural heritage resources that together have greater heritage significance than their constituent elements or parts. A CHL has both property-based cultural heritage resources and attributes that may not be linked to real property (i.e. views, circulation networks, land use patterns, architectural details, natural features, vegetation). The attributes of a CHL help to contextualize, cluster and connect the individual cultural heritage resources. As a result, the conserved CHL is more valuable than the sum of its parts.

Conservation of CHLs, like other cultural heritage resources, provides the following benefits:

- Sense of Place - The region’s tangible cultural heritage resources, combined with stories of the past, provide a physical and psychological foundation for our Regional identity. CHLs provide important information about, and opportunities for, understanding the events, processes and activities that have shaped, and are continuing to shape, our region.
Authenticity - CHLs often support ongoing traditions and reflect particular ways of life. CHLs allow people to participate in our region’s cultural heritage continuum: learning from the multilayered past; enjoying the vibrancy of the present; and creating meaningful linkages for the future.

Quality of Life - CHLs provide economic, environmental, social and cultural benefits through aesthetic, ecological, recreational and educational opportunities. Conserving CHLs will make our region a better place to live, work, play and visit.

A.3 Impacts of Undertaking a CHL Conservation Process

Undertaking a CHL conservation process ensures that cultural heritage resources are proactively identified and that the necessary information is available to effectively consider cultural heritage conservation at a landscape scale during the land use and infrastructure planning process.

Priority-based Planning – The CHL conservation process is a tool to manage change. The process will be used to better inform land use and infrastructure planning decisions and is not meant to negatively impact permitted land uses. Conservation of cultural heritage resources is very often one of many planning priorities (i.e. increasing land-use density, economic development, encouraging tourism or recreation, environmental conservation, increasing transportation choice, providing affordable housing). Full consideration of all priorities, including CHL conservation, during the land use and infrastructure planning process will result in the best possible development or construction/rehabilitation solution that meets as many priorities as possible. Note: Normal farming practices are protected under the Farming and Food Protection Act and will not be impacted by CHL conservation.

Increased Transparency - The CHL conservation process requires Area Municipalities to proactively identify and document CHLs. Designating CHLs within an Official Plan or under the Ontario Heritage Act is a means to making municipal staff, developers, property owners and the public aware of the historically significant landscapes within the community that are to be conserved.

Informed Decision Making – Identified CHLs are supported by documentation which includes a Statement of Significance for the CHL, and inventories and maps the cultural heritage resources and attributes associated with the CHL. This research provides the foundation of information on which proposed development, site alteration and infrastructure projects will be reviewed.

Effective Heritage Protection - Identifying an area as a CHL does not provide automatic protection to the individual cultural heritage resources and attributes associated with the CHL. The CHL conservation process documents the cultural heritage resources and attributes that must be protected in order to conserve the CHL, lists appropriate conservation measures, and ensures that proposed development, site alteration and infrastructure projects undergo heritage review.

Individual cultural heritage resources and attributes located within a CHL continue to be protected through existing and new Ontario Heritage Act designations, conservation easements, municipal register listings, and through the implementation of recommendations made within Cultural Heritage Impact Assessments.
A.4 Policy Context – Provincial Legislation

The Province requires municipalities to conserve significant CHLs and provides a variety of legislative planning and financing tools, primarily under the Ontario Heritage Act, Provincial Policy Statement and Planning Act, to municipalities for use in the conservation of cultural heritage resources, including CHLs.

A.4.1 The Ontario Heritage Act

The Ontario Heritage Act (OHA) provides three key tools for CHL conservation.

1. If a CHL is contained on a single property (i.e. farmstead, park, garden, estate, cemetery), a municipality can designate the CHL as an individual property under Part IV of the OHA
2. If the CHL includes a grouping of properties, a municipality can designate the area as a Heritage Conservation District (HCD) under Part V of the OHA.

An OHA designation provides the strongest heritage protection available for conserving a CHL. It allows the municipality to deny demolition permits, to guide change through development review on and adjacent to the protected property(ies) and to control property alterations through a heritage permit system. Within the Region, there are currently eight CHLs designated as HCDs under Part V, and several other single property CHLs designated under Part IV of the OHA.

3. A municipality may list a CHL as an individual or grouping of non-designated property(ies) of heritage value or interest on their Municipal Heritage Register.

Under the OHA municipalities are required to maintain a Municipal Heritage Register that lists all designated and non-designated cultural heritage resources of heritage value or interest. The list is meant to provide easily accessible information about cultural heritage value for municipal staff, land-use planners, property owners, developers, the tourism industry, educators and the general public. Owners of listed properties must provide 60 days notice prior to demolition or removal of a building or structure, and the property may be subject to a Cultural Heritage Impact Assessment or Conservation Plan during the heritage review process.

A.4.2 The Planning Act and the Provincial Policy Statement

The Province has identified the conservation of cultural heritage resources including CHLs, as an area of Provincial Interest to be considered under the Planning Act and through the Provincial Policy Statement (2005) (PPS).

Under the guidance of the Planning Act, municipalities make local planning decisions and prepare planning documents including Official Plans. A municipal Official Plan sets out the municipality’s general planning goals and policies that will guide future land use, including the conservation of cultural heritage resources. These planning decisions and planning documents determine the future of their community and must be consistent with the Provincial Policy Statement and applicable provincial legislation.

The PPS, policy 2.6.1 states that “Significant built heritage resources and significant cultural heritage landscapes shall be conserved.” Conserved is defined as “the identification,
protection, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment (HIA)".

The initial step in conserving cultural heritage resources - identification, can take place under the OHA, as noted in the previous section, and/or in Official Plans or other planning documents prescribed under the Planning Act, such as Council adopted inventories, plans or studies.

Identified cultural heritage resources are conserved through the requirement of Cultural Heritage Impact Assessments and/or Conservation Plans to support proposed development, site alteration or infrastructure projects that have the potential to directly or indirectly impact the identified cultural heritage resource.

A.4.3 Provincial Resource Documents

The Ministry of Tourism, Culture and Sport (MTCS) provides additional non-legislative resources to assist communities in the conservation of cultural heritage resources, such as toolkits and guides. The MTCS outlines in the Ontario Heritage Toolkit, that cultural heritage resources should be identified, listed, researched, evaluated and protected. It is up to municipalities to use the most effective and appropriate tools available at each step of this process in order to ensure the ongoing conservation of the CHLs within their jurisdiction.

A.4.4 Environmental Assessment Act

The Environmental Assessment Act requires an environmental assessment of any major public sector undertaking that has the potential for significant environmental effects. Environmental assessments (EAs) are a key part of the infrastructure planning process and must be completed before decisions are made to proceed on a project. EAs determine the ecological, cultural, economic and social impact of the infrastructure project and are informed through the undertaking of a variety of studies including Cultural Heritage Impact Assessments.

B. REGIONAL APPROACH

As stated in the previous section, the Province of Ontario requires that significant CHLs be conserved through the land use and infrastructure planning process using complementary policy provisions at the Provincial, Regional and Area Municipal level. The Province has provided a variety of CHL conservation tools, but a uniform province-wide approach to CHL conservation has not been established. The Region has therefore, in discussions with the Provincial and Area Municipal staff, developed the following Regional approach to CHL conservation.

The Regional CHL conservation approach incorporates the full spectrum of provincially legislated tools for CHL conservation and allows municipalities to choose the most appropriate conservation tool for each CHL. The chosen CHL conservation tool will be a reflection of the combined level of heritage conservation and change management desired by the municipality, public and property owners.
B.1 CHL Conservation under the Ontario Heritage Act

Currently, municipalities have three tools to conserve CHLs under the Ontario Heritage Act (OHA):
- Part IV designation of an individual property;
- Part V designation of an Heritage Conservation District; and
- Listing of a CHL on the Municipal Heritage Register as an individual or grouping of non-designated property(ies) of heritage value or interest accompanied by a map or description of the CHL.

In order for a Municipal Heritage Register listing to effectively conserve a CHL, the listing process must include:
- A full evaluation and documentation of the CHL;
- An opportunity for public consultation;
- Council approval; and
- Municipal authority to conserve the CHL during the land use and infrastructure planning processes.

These three CHL conservation tools under the OHA will continue to be used by Area Municipalities in the Region. The complete processes used for designating or listing a CHL under the OHA are not addressed as part of this Implementation Guideline as they are a well entrenched practice. However, portions of this Implementation Guideline may prove useful in the preliminary identification, evaluation and documentation of CHLs being conserved under the OHA.

B.2 CHL Conservation under the Planning Act

Although CHL conservation tools under the OHA have been available for many years, a large number of CHLs within the region remain unidentified with no landscape level conservation measures in place.

In order to assist with the conservation of the full range of CHLs within the region, the Region has developed policies in the Regional Official Plan which enable and require municipalities to conserve CHLs under the Planning Act by designating CHLs in their Official Plans. Note: CHLs that have already been or are planned to be conserved under the OHA as outlined above may also be, but are not required to be, designated in Area Municipal Official Plans.

Conserving CHLs under the Planning Act – the CHL conservation process outlined in this Regional Implementation Guideline, should be used when:
- There are multiple CHLs that a community needs to officially identify and conserve within a short time frame, using limited resources;
- OHA designation cannot currently be achieved and interim conservation is required;
- OHA Part IV and/or V designations are in place to protect individual property-based cultural heritage resources within a CHL, but the OHA designations do not conserve the larger context of the resources (e.g. the attributes of the CHL);
- Future impacts to the CHL can be addressed through requirements for Cultural Heritage Impact Assessment, Conservation Plans, and/or through implementing planning and financial tools that support the conservation of the CHL (i.e. design guidelines, site specific zoning, financial incentives); and/or
There are opportunities for proposed development, site alterations and infrastructure projects to enhance the existing character of the area and/or conserve the grouping of cultural heritage resources.

A comparison of the above mentioned CHL conservation tools can be found in Appendix F.

### B.3 Regional Policy

The Regional Official Plan (ROP) contains the following policies specifically related to the conservation of CHLs.

**Cultural Heritage Landscapes**

3.G.5 The Region will prepare and update a Regional Implementation Guideline for Cultural Heritage Landscape Conservation. This guideline will outline the framework for identifying Cultural Heritage Landscapes, including Cultural Heritage Landscapes of Regional interest, and for documenting each individual landscape through a Cultural Heritage Landscape Conservation Plan (an amendment may be made to change this to CHL Technical Study) that includes:
- a statement of significance;
- a listing of the cultural heritage resources and attributes being conserved within the Cultural Heritage Landscape through the use of existing planning tools, such as Heritage Act designations, listings on the Municipal Register, official plan policies, secondary plans and zoning bylaws; and
- recommendations for additional conservation measures.

3.G.6 Area Municipalities will designate Cultural Heritage Landscapes in their official plans and establish associated policies to conserve these areas. The purpose of this designation is to conserve groupings of cultural heritage resources that together have greater heritage significance than their constituent elements or parts.

Designating a CHL in an Area Municipal Official Plan means identifying a CHL on a list and map or schedule contained in or appended to the Official Plan.

3.G.7 The Region will assist Area Municipalities with the preparation of Cultural Heritage Landscape Conservation Plan (an amendment may be made to change this to CHL Technical Study) for Cultural Heritage Landscapes of Regional interest.

3.G.13 Area Municipalities will establish policies in their official plans to require the submission of a Cultural Heritage Impact Assessment in support of a proposed development that includes or is adjacent to a designated property, or includes a non-designated resource of cultural heritage value or interest listed on the Municipal Heritage Register. (An amendment may be made in order to clarify that this includes the consideration of CHIAs within or adjacent to a Cultural Heritage Landscape).

Adjacent is defined as lands that are situated in sufficiently close proximity such that development, site alteration or an infrastructure project could reasonably be expected to produce a negative impact on an identified cultural heritage resource.

B.4 Area Municipal Policy

General policies for the conservation of CHLs must be included in an Area Municipal Official Plan (OP) in order for the plan to be consistent with the ROP and the PPS.

The Region recommends that the general CHL conservation policies include, but not be limited to, a commitment by the Area Municipality to:

1. Identify and document individual CHLs through a Cultural Heritage Landscape Technical Study as outlined in ROP 3.G.5;
2. Designate individual CHLs in the Area Municipal Official Plan;
3. Review development, site alteration and infrastructure projects within or adjacent to designated Cultural Heritage Landscapes to ensure that the cultural heritage resources and attributes of the CHL will be conserved. A Cultural Heritage Impact Assessment may be required to assist the municipality in making this determination.

Associated CHL conservation policies may include a commitment by the municipality to:
- list and/or designate under the Ontario Heritage Act individual cultural heritage resources and attributes inventoried within a CHL;
- consider the impact of lot creation and/or reconstruction within the CHL;
- further investigate CHLs to identify additional and/or evolving cultural heritage resources and attributes; and
- promote the awareness, appreciation and enjoyment of CHLs.

B.5 Expectations and Outcomes of ROP Policies and Implementation Guideline

Implementation of the ROP CHL conservation policies using this Implementation Guideline will result in:
1. Comprehensive Region-wide identification and evaluation of CHLs;
2. Documentation of individual CHLs in CHL Technical Studies, to include but not be limited to:
   - an official name;
   - a statement of significance; and
   - an inventory and map of cultural heritage resources and attributes, with references to existing and recommended conservation measures;
3. Individually designated CHLs in Area Municipal Official Plans; and
4. Municipal authority to require a Cultural Heritage Impact Assessment to support proposed development, site alteration and infrastructure projects within or adjacent to an identified CHL.
C. CONSERVATION PROCESS

The following process for conserving CHLs under the Planning Act has been developed to ensure that CHLs are recognized early in the land use and infrastructure planning process, and that comprehensive information on the cultural heritage resources and attributes of the CHL are available when making planning decisions.

The CHL conservation process includes:

- identifying and documenting individual CHLs in a Technical Study that evaluates, inventories and maps the cultural heritage resources and attributes associated with the CHL and documents current and proposed conservation measures for the CHL;
- designating of CHLs in Area Municipal Official Plans, excluding CHLs currently conserved under the Ontario Heritage Act; and
- reviewing proposed development, site alteration and infrastructure projects within or adjacent to designated CHLs to determine whether the cultural heritage resources and attributes associated with the CHL will be conserved.

Area Municipalities will incorporate general policies for the conservation of CHLs in their Official Plans to allow for the designating of any individual CHLs using the process outlined below. Information on general policies for CHL conservation at the Area Municipal level can be found in section B.4.

The CHL conservation process has seven key steps to be undertaken through the implementation of the guidelines in this document. The following chart outlines the connection of each key step to the associated guideline. A process chart is included on the following page.

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<th>Key Steps</th>
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**CHL Conservation Process Chart**

**Step 1**
Identification of Candidate CHLs

- Candidate CHL #1
- Candidate CHL #2
- Candidate CHL #3
- Candidate CHL #4
- Candidate CHL #5

**Step 2**
Inventory & Mapping

(Each CHL will undergo the same process as CHL #1 from this point forward)

**Step 3 & Step 4**
Evaluation of Significance

Identification of “Significant” CHL

**Step 5**
NOT a “Significant” CHL
No further action

**Step 6**
(more than one CHL may be ready to designate at one time)

- Documentation of CHL in a Technical Study
- Preparation of Report Recommending CHL Designation through an Area Municipal OP Amendment

**Step 7**
Designate CHL in Area Municipal Official Plan

Conservation of the CHL in the land use and infrastructure planning processes through the requirement of CHIAs
D. GUIDELINES

I. Guideline for the Identification and Evaluation of CHLs

Regional Official Plan

3.G.5 The Region will prepare and update a Regional Implementation Guideline for Cultural Heritage Landscape Conservation. This guideline will outline the framework for identifying Cultural Heritage Landscapes, including Cultural Heritage Landscapes of Regional interest, and for documenting each individual landscape through a Cultural Heritage Landscape Conservation Plan (an amendment may be made to change this to CHL Technical Study) that includes:

a) a statement of significance;

b) a listing of the cultural heritage resources and attributes being conserved within the Cultural Heritage Landscape through the use of existing planning tools, such as Heritage Act designations, listings on the Municipal Register, official plan policies, secondary plans and zoning bylaws; and

c) recommendations for additional conservation measures.

Application

In accordance with policy 3.G.5 of the Regional Official Plan, this guideline will apply when Area Municipal staff and Municipal Heritage Committees are identifying and evaluating the significance of the Candidate CHLs. A CHL that is determined to be a cultural heritage resource of Regional interest is also subject to policies 3.G.2, 3.G.14 and 3.G.15.

Purpose

The purpose of this guideline is to ensure an efficient, consistent, comprehensive and defensible process is used to identify CHLs worthy of conservation within the Region.

Guideline for the Identification and Evaluation of CHLs

A Cultural Heritage Landscape is a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts (Provincial Policy Statement, 2005).

Significant CHLs are to be conserved as required by the PPS section 2.6.1. All CHLs that are evaluated as significant using the process below, which is based on Ontario Heritage Act Regulation 9/06, shall be conserved.

Conservation means the identification, protection, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment (PPS 2005).
Candidate CHLs that are evaluated and found to be significant will be referred to throughout the remainder of the conservation process as CHLs; those evaluated and found to not be significant will not be taken any further through the process and should no longer be referred to as CHLs.

1. Area Municipal staff and Municipal Heritage Committees (MHC) will develop a list of Candidate CHLs for their municipality.

   1.1 The list of Candidate CHLs will include, but not be limited to:
   a) areas that correspond to the historic themes and associations important to the development of the municipality;
   b) areas that contain a grouping of cultural heritage resources identified through a visual survey; and
   c) landscapes valued by a community suggested by the public through consultations or in written documents such as local histories, planning documents, listings of important landscapes, etc.

   1.2 Undertaking public consultation is strongly encouraged during the development of the list of Candidate CHLs.

   1.3 Upon request, the Region will assist with the preliminary identification of Candidate CHLs.

   1.4 Area Municipalities and the Region will work together to develop shared or complementary conservation processes for cross jurisdictional CHLs such as those related to rivers, valleylands or agricultural practices.

   1.5 Municipalities may use the additional information and resources for identifying Candidate CHLs included in Appendix A.

2. The Region will review the list of Candidate CHLs and indicate if any of the Candidate CHLs are of Regional interest, and/or provide a list of CHLs of Regional interest to the Area Municipality to be considered for conservation.

   2.1 Identification of CHLs of Regional interest will take place in accordance with the Regional Implementation Guideline for Conserving Regionally Significant Heritage Resources based on the Criteria for Regionally Significant Heritage Resources (RSHR) adopted by Regional Council in 2002 (P-02-083) (see appendix E).

3. An inventory of cultural heritage resources and attributes will be developed for each Candidate CHL.

   3.1 The inventory of cultural heritage resources and attributes will include but not be limited to:
   - Built features (buildings, structures, monuments, installations or remains associated with architectural, social, political, economic or military history),
   - Ecological features (ecosystems within the landscape),
   - Vegetation (natural or introduced),
   - Landforms (natural or human made),
• Water features (natural or designed),
• Archaeological resources,
• Evidence of traditional practices,
• Views and visual relationships,
• Spatial organization and landmarks,
• Land-use patterns,
• Circulation networks,
• Boundary/linear features,
• Public access, and
• Open space.

3.2 The inventory may include detailed information on each individual cultural heritage resource and attribute i.e. architectural or engineering details, historical associations, etc.,

3.3 The inventory of cultural heritage resources and attributes will be used during the evaluation of significance for the Candidate CHL.

3.4 For CHLs found to be significant, the inventory of cultural heritage resources and attributes will be documented in the CHL Technical Study.

4. Each Candidate CHL will be geographically defined through detailed mapping of the cultural heritage resources and attributes listed in the inventory.

4.1 The detailed mapping of the cultural heritage resources and attributes (as listed above) will be used during the evaluation of significance for the Candidate CHL.

4.2 Mapped boundaries and/or buffer zone(s) should be included if they aid in the conservation of the CHL. Demarcating a firm boundary for an evolved landscape that continues to evolve is not required.

4.2.1 Defining the boundaries of a CHL can involve a range of considerations including, but not limited to the use of: roadways; rights-of-way; river corridors; fences; edges of tree lines and hedge rows; property lines; landforms; and lakeshores (MOTCS InfoSheet #2).

4.2 For CHLs found to be significant, the detailed mapping of the cultural heritage resources and attributes identified in the inventory will be documented in the CHL Technical Study.

5. The significance of each Candidate CHL will be evaluated based on a three pronged approach, related to the PPS definition of a CHL, to include the: cultural heritage value or interest; historical integrity; and community value of the landscape.
5.1 Criteria for determining **cultural heritage value or interest** of a CHL is based on the criteria used to evaluate the cultural heritage value or interest of other forms of *cultural heritage resources* provided by the Province of Ontario in Regulation 09/06. Municipalities will evaluate the cultural heritage value or interest of each Candidate CHL, using the chart in appendix B, and will summarize their findings in a CHL **Statement of Cultural Heritage Value or Interest**.

5.2 **Historical integrity** is a measure of: how well the existing landscape physically reflects the landscape of the past; and the functional continuity of the landscape over time. In order to measure integrity, the historic context of the landscape in terms of use, relationships, views, circulation networks, boundaries, etc. must be understood. Municipalities will evaluate the historic integrity of each Candidate CHL, using the chart in appendix C to gather information, and will summarize their findings in a CHL **Statement of Historical Integrity**.

5.3 The PPS states that a CHL must be **valued by a community**. Community value can be evaluated by determining the presence of indicators of community value. Municipalities will evaluate the community value of each Candidate CHL, using the chart in appendix D to gather information and will summarize their findings in a CHL **Statement of Community Value**.

5.4 An overall **Statement of Significance** which combines the cultural heritage value or interest, historical integrity and community value of the Candidate CHL will be developed.

6. For evolved landscapes, the inventory, mapping and measures of significance must illustrate and evaluate the evolution of the landscape over time.
7. A Candidate CHL that has been evaluated and found to have cultural heritage value or interest, historical integrity and community value is significant.

8. Each significant CHL will be documented in a CHL Technical Study and recommended for being designated in the Area Municipal Official Plan. Candidate CHLs that are evaluated and found not to be significant will not be taken any further through the process and should no longer be referred to as CHLs.

II. Guideline for the Preparation of a CHL Technical Study

Regional Official Plan

3.G.5 The Region will prepare and update a Regional Implementation Guideline for Cultural Heritage Landscape Conservation. This guideline will outline the framework for identifying Cultural Heritage Landscapes, including Cultural Heritage Landscapes of Regional interest, and for documenting each individual landscape through a Cultural Heritage Landscape Conservation Plan (an amendment will be made to change this to CHL Technical Study) that includes:
   a) a statement of significance;
   b) a listing of the cultural heritage resources and attributes being conserved within the Cultural Heritage Landscape through the use of existing planning tools, such as Heritage Act designations, listings on the Municipal Register, official plan policies, secondary plans and zoning bylaws; and
   c) recommendations for additional conservation measures.

3.G.7 The Region will assist Area Municipalities with the preparation of Cultural Heritage Landscape Conservation Plans (an amendment will be made to change this to CHL Technical Studies) for Cultural Heritage Landscapes of Regional Interest.

Application
In accordance with policies 3.G.5 and 3.G.7 of the Regional Official Plan, this guideline will apply when a Cultural Heritage Landscape Technical Study is being developed for a Candidate CHL being recommended for conservation.

Purpose
The purpose of this guideline is to ensure appropriate and consistent methods and report formats are applied in the preparation of CHL Technical Studies.

Compliance with these guidelines will:
- Enable the documentation of the CHL’s cultural heritage resources and attributes, with references to existing and recommended conservation measures;
• Provide the base research needed by consultants to undertake an effective Cultural Heritage Impact Assessment (CHIA); and
• Help to minimize the time required to prepare a CHL Technical Study.

Guideline for the Preparation of a CHL Technical Study

The CHL Technical Study is an important resource document developed and maintained by the municipality, in consultation with Municipal Heritage Committees and/or community stakeholders. A CHL Technical Study is prepared for each CHL found to be significant and worthy of conservation.

The CHL Technical Study builds on the information gathered during the CHL identification and evaluation process. The document includes all of the information gathered during the identification and evaluation of the Candidate CHL as well as information on the current and future heritage conservation measures associated with the CHL.

1. The CHL Technical Study will include, but is not limited to:

   Existing Information from the Identification and Evaluation of the Candidate CHL
   • the Statement of Significance (a summary of the CHL’s Cultural Heritage Value or Interest, Historical Integrity and Community Value) (see section 2 below);
   • an inventory and map of the cultural heritage resources and attributes of the landscape (see section 3 below);

Additional Information
• an analytical listing of current and recommended conservation measures for the cultural heritage resources and attributes of the CHL (see section 4 below);

Additional Recommended Information (Optional)
• a shared vision for the CHL (see section 5 below); and
• a management strategy for the CHL (see section 6 below).

1.1 The Region will assist Area Municipalities in the preparation of CHL Technical Studies for CHLs of Regional interest.

1.2 The Technical Study will be made available to consultants preparing CHIAs for proposed development, site alteration and infrastructure projects within and adjacent to the CHL.

1.3 CHL Technical Studies are evolving documents which will require updating as land use and policy changes are made.

2. The Statement of Significance is a brief summary of the cultural heritage value or interest, historical integrity and community value of the CHL as developed during the evaluation of significance of the Candidate CHL. The Statement of Significance is an important tool as it provides justification for conserving the CHL.

3. The comprehensive Inventory and Map of cultural heritage resources and attributes includes, but is not limited to: buildings and structures; architectural details; landmarks; views; natural features; vegetation; archaeological resources; land-use
patterns; circulation networks; boundary/linear features; public access; and/or open space as developed for the Candidate CHL.

4. The **Analytical Listing of Conservation Measures** for the *cultural heritage resources* and *attributes* of the CHL includes, but is not limited to:
   - a **comprehensive listing** of existing conservation measures;
   - a **thorough evaluation** of the ability of the existing conservation measures to *conserve* the inventoried heritage features and their context; and
   - **recommendations** for additional conservation measures where needed.

4.1 CHL **conservation measures** may include, but are not limited to the following planning and financial tools:
   - Protection of individual properties under the Ontario Heritage Act through designation or conservation easements;
   - Protection of a specific areas within the CHL as Heritage Conservation Districts (HCD) under the Ontario Heritage Act and through related HCD policies, guidelines, studies and plans;
   - Listing of individual or groupings of non-designated property(ies) on the Municipal Heritage Register;
   - Official Plan policies (i.e. settlement boundaries, land designations);
   - Secondary or Community Plans;
   - Community Improvement Plans;
   - Area design guidelines;
   - Corridor management plans or scenic corridor designations;
   - Park management plans;
   - Height, massing and setback restrictions that maintain the character of an area, implemented through zoning and/or site plan control;
   - Demolition control;
   - Subdivision development agreements;
   - Stewardship activities;
   - Financial incentives for OHA designated properties or within Community Improvement Plan areas
   - Public education and heritage resource interpretation, etc.

4.2 The analytical listing of conservation measures process will assist in highlighting *vulnerable cultural heritage resources and attributes* and will result in **recommendations for improved conservation measures**.

5. A **Shared Vision** for the CHL may be created by community stakeholders based on the collective understanding of the significance of the CHL; its cultural heritage value or interest, historical integrity and community value.

6. A **Management Strategy** may be developed that records what role the community will play in maintaining and enhancing the significance of the CHL. The Management Strategy could include:
   - a list of actions and a schedule for their implementation; and
   - a plan to monitor the impact of CHL conservation

7. A CHL Technical Study that includes all of the following may be referred to as a **CHL Conservation Plan** (based on Ministry of Culture, Tourism and Sport – Info Sheet #5):
• Identification of the conservation principles appropriate for the type of cultural heritage resource being conserved;
• Analysis of the cultural heritage resource, including documentation of the resource, descriptions of cultural heritage value or interest, assessment of the resource conditions and deficiencies, discussion of historical, current and proposed use;
• Recommendations for conservation measures and interventions, short or long term maintenance programs, implementation, and the qualifications for anyone responsible for the conservation work;
• Schedule for conservation work, inspection, maintenance, costing, and phases of the rehabilitation or restoration work; and
• Monitoring of the cultural heritage resource and the development of a long term reporting structure.

8. A scoped Conservation Plan may be required by the approval authority for a proposed development, site alteration or infrastructure project in order to conserve a specific cultural heritage resource or attribute that is within a larger CHL and is impacted by the proposed development, site alteration or infrastructure project (see Guideline IV).

9. When a CHL is identified during the land use or infrastructure planning process, rather than proactively identified using the process outlined in this Implementation Guideline, the information usually contained in the CHL Technical Study must be gathered and included in the inventory phase of a required Cultural Heritage Impact Assessment (see Guideline IV) undertaken by the proponent of the project.

III. Guideline for the Designating CHLs in an Official Plan

Regional Official Plan

3.G.6 Area Municipalities will designate Cultural Heritage Landscapes in their official plans and establish associated policies to conserve these areas. The purpose of this designation is to conserve groupings of cultural heritage resources that together have greater heritage significance than their constituent elements or parts.

Designation of a CHL in an Area Municipal Official Plan means to identify each individual CHL on a list and map or schedule contained in or appended to the Area Municipal Official Plan.

Application
In accordance with policy 3.G.6 of the Regional Official Plan, this guideline will apply when Area Municipalities designate a CHL in their Official Plan.
Purpose
The purpose of this guideline is to ensure appropriate and consistent methods and approaches are applied when designating CHLs in Area Municipal Official Plans.

Designating a CHL within an Official Plan:
- enables a community to proactively identify a valued cultural heritage resource;
- provides an opportunity for public consultation and Council approval;
- results in an accessible public record of identified CHLs; and
- allows municipalities to require Cultural Heritage Impact Assessments (CHIAs) to ensure that proposed development, site alteration and infrastructure projects conserve the cultural heritage resources and attributes of the CHL.

Guideline for the Designating CHLs in an Official Plan

1. Area Municipal Official Plans will include general policies for the conservation of significant CHLs.
   1.1 These policies will include a commitment by the municipality to: identify and document individual CHLs through a Cultural Heritage Landscape Technical Study; designate individual CHLs in the Area Municipal Official Plan; and review development, site alteration and infrastructure projects within or adjacent to designated CHLs to ensure that the cultural heritage resources and attributes of the CHL will be conserved.

2. Area Municipal Official Plans will designate CHLs.
   2.1 The Official Plan will identify the designated CHL using an official name, a statement of significance and a general location map of the CHL using a simple location marker such as an unbounded shape or asterisk, and will reference to the detailed documentation within the CHL Technical Study.
   2.2 Additional CHL conservation policies and/or a detailed map may be included.

3. A report that recommends designating a CHL through an amendment to the Official Plan will be prepared to include:
   - Official CHL Name
   - Reason for Designating - Statement of Significance
   - Impacts of Designating, including but not limited to the potential requirement of a Cultural Heritage Impact Assessment for proposed development, site alteration and infrastructure projects within and adjacent to the CHL.
   3.1 The CHL Technical Study shall be provided to support the recommendation.

4. Standard procedures for Official Plan Amendments under the Planning Act will be followed with respect to giving notice, providing information and public consultation.

5. Area Municipalities may have additional processes and methods for identifying and conserving CHLs so long as they result in:
   - Comprehensive identification and evaluation of CHLs;
   - Documentation of each CHL, that includes but is not limited to: an official name; a statement of significance; and an inventory and map of cultural
heritage resources and attributes, with references to existing and recommended conservation measures; and
- Municipal authority to require a Cultural Heritage Impact Assessment to support proposed development, site alteration and infrastructure projects within and adjacent to identified CHLs.

### IV. Guideline for the Conservation of a Cultural Heritage Landscape through a Cultural Heritage Impact Assessment

<table>
<thead>
<tr>
<th><strong>Regional Official Plan</strong></th>
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</table>
| **3.G.6** | Area Municipalities will designate Cultural Heritage Landscapes in their official plans and establish associated policies to conserve these areas. The purpose of this designation is to conserve groupings of cultural heritage resources that together have greater heritage significance than their constituent elements or parts.  

Conservew: the identification, protection, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment. |

| **3.G.13** | Area Municipalities will establish policies in their official plans to require the submission of a Cultural Heritage Impact Assessment in support of a proposed development that includes or is adjacent to a designated property, or includes a non-designated resource of cultural heritage value or interest listed on the Municipal Heritage Register (an amendment may be made in order to clarify that this includes the consideration of CHIAs within or adjacent to a Cultural Heritage Landscape).  

Adjacent will be defined as lands that are situated in sufficiently close proximity such that development, site alteration or an infrastructure project could reasonably be expected to...

**Application**

In accordance with policies 3.G.6 and 3.G.13 of the Regional Official Plan, this guideline will apply when development, site alteration or an infrastructure project is proposed within or adjacent to a designated CHL.

**Purpose**

The purpose of this guideline is to ensure that Cultural Heritage Impact Assessments (CHIA) are required when appropriate and completed effectively, in order to facilitate the conservation of the cultural heritage resources and attributes associated with a CHL during the land use and infrastructure planning process.

The majority of CHLs are expected to be identified in areas where heritage review is already required due to the presence of individual cultural heritage resources. The number of CHIAs required is not expected to significantly increase. Where CHLs are identified, additional
landscape scale assessment will be required. This guideline outlines how heritage review at a landscape scale will be incorporated into the existing heritage review process.

**Guideline for the Conservation of a CHL through a Cultural Heritage Impact Assessment**

1. Proposed development, site alteration and infrastructure projects are reviewed by area municipal staff to determine whether cultural heritage resources will be conserved. To assist in the determination a Cultural Heritage Impact Assessment (CHIA) may be required

1.1 Once a CHL has been designated in an Area Municipal Official Plan, proposed development, site alteration and infrastructure projects within and adjacent to the designated CHL will be reviewed to determine whether the cultural heritage resources and attributes of the CHL as documented in the CHL Technical Study will be conserved.

1.2 Heritage review at a landscape scale should be required if the proposed development, site alteration or infrastructure project may result in any of the following list of potential negative impacts to the CHL (source: Ministry of Culture, Tourism and Sport - InfoSheet #5):

- **Destruction** of any, or part of any, cultural heritage resource or attribute of the CHL
- **Alteration** that is not sympathetic to, or is incompatible with, the historic fabric and appearance of the CHL
- **Creation of shadows** that alter the appearance of cultural heritage resource or attributes, or change the viability of associated vegetation
- **Isolation** of a cultural heritage resource or attribute from its surrounding environments, context or significant relationship
- **Direct or indirect obstruction** of a significant view or vista within, from or of built and natural features
- **Change in land use** where the change in land use negates the property’s cultural heritage value or interest
- **Land disturbance** such as change in grade that alter soils, and drainage patterns that adversely affect a cultural heritage resource or attribute
- **Increase in other disturbances** such as noise and/or traffic in or near the CHL that impacts the property’s cultural heritage value or interest

2. In addition to the standard CHIA requirements, a CHIA undertaken for a property within or adjacent to a CHL will contain the following (based on the Ministry of Culture, Tourism and Sports - Info Sheet #5):

- **Historical research, site analysis and evaluation of the associated CHL.** For designated CHLs, this work will have been completed by the Area Municipality and will be documented in the CHL Technical Study. If a CHL has been identified during the land use or infrastructure planning process, this information must be gathered and included in the inventory phase of the required CHIA (see Guideline II);
• A description of the subject property(ies) in relation to the associated CHL, including but not limited to:
  • Property owner contact information;
  • A location map;
  • A site plan of existing conditions, to include buildings, structures, roadways, driveways, drainage features, trees and tree canopy, fencing, and topographical features;
  • A written and visual inventory (photographs) of all elements of the property(ies) that contribute to the cultural heritage value of the associated CHL, to include: overall site views, views to adjacent properties and views of the site from within the CHL; and internal photographs and floor plans for onsite cultural heritage resources;

• Identification of the significance and cultural heritage resources and attributes of the associated CHL. Include a recommendation as to whether any cultural heritage resources on the subject property are worthy of heritage designation in accordance with Regulation 9/06, Ontario Heritage Act;

• A description of the proposed development, site alteration or infrastructure project, including a site plan and elevations of the proposed development;

• An assessment of the impacts of the proposed development, site alteration or infrastructure project on the associated CHL including to but not limited to the potential negative impacts listen in 1.2 above;

• Consideration of alternatives, mitigation and conservation measures that may reduce the adverse effects of the proposed development, site alteration or infrastructure project on the associated CHL, including but not limited to:
  • Alternative development approaches;
  • Isolating development and site alteration from the significant built and natural heritage features and vistas;
  • Design guidelines that harmonize mass, setback, setting and materials;
  • Limiting height and density;
  • Allowing only compatible infill and additions; and
  • Reversible alterations

• A schedule and reporting structure for implementing the recommended conservation or mitigative or avoidance measures and for monitoring the CHL as the proposed development, site alteration or infrastructure project progresses; and

• A summary statement and conservation recommendations.

3. CHIAs may be scoped or waived based on the potential negative impacts of the proposed work.

4. An approval authority may also require a Conservation Plan for a proposed development, site alteration or infrastructure project in order to conserve a cultural heritage resource or attribute that contributes to the significance of the associated CHL and is impacted by the proposed development, site alteration or infrastructure project.
5. Proposed development, site alteration and infrastructure projects that have the potential to impact a heritage resource of Regional interest will require a CHIA that will be provided to the Region for comment as part of the heritage review process.

6. Where it is determined that a CHIA that includes heritage review at a landscape scale is required, the CHIA will be prepared by a qualified professional with expertise in cultural heritage landscapes.

7. Development proponents and municipal staff are encouraged to consult with Area Municipal planning staff and cultural heritage professionals early in the planning process. Early consultation will provide access to any available background information, ensure that cultural heritage resources are appropriately identified, and enable opportunities for project design to maximize enhancement of and minimize negative impacts to the CHL.
E. GLOSSARY OF DEFINITIONS

Adjacent – means lands that are situated in sufficiently close proximity such that development, site alteration or an infrastructure project could reasonably be expected to produce a negative impact on an identified cultural heritage resource (revised ROP – Contiguous).

Attribute - A quality or characteristic inherent in or ascribed to a cultural heritage landscape. These include, but are not limited to: architectural details; land-use patterns; circulation networks; relationships between built and natural heritage resources; public access; and/or open space.

Heritage attributes - Means the principal features, characteristics, context and appearance that contribute to the cultural heritage significance of a protected heritage property (PPS).

Built heritage resources – one or more significant buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic or military history and identified as being important to the community. These resources may be identified through designation or heritage conservation easement under the Ontario Heritage Act, or listed by local, regional, provincial or federal jurisdictions (PPS/ROP).

Conserve/conserved (for the purposes of ROP Chapter 3) – the identification, protection, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained. This may be addressed through a conservation plan or heritage impact assessment (PPS/ROP).

Cultural Heritage Impact Assessment – a study to determine if cultural heritage resources will be negatively impacted by a proposed development, site alteration or infrastructure project. It can also demonstrate how the cultural heritage resource will be conserved in the context of redevelopment, site alteration or infrastructure improvement. Mitigative or avoidance measures or alternative development approaches may also be recommended (revised ROP).

Cultural heritage landscape – a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts (PPS/ROP).

Cultural heritage resources – the physical remains and the intangible cultural traditions of past human activities. These include, but are not limited to:

- buildings (residential, commercial, institutional, industrial and agricultural);
- cultural heritage landscapes (designed, organic/evolved);
- structures (water tower; bridge, fence and dam);
- monuments (cenotaph, statue and cairn);
- archaeological resources;
- cemeteries;
- scenic roads;
- vistas/viewsheds;
- culturally *significant* natural features (tree and landform);
- movable objects (archival records and artifacts); and
- cultural traditions (language, stories, music, dance, food, celebrations, art and crafts) (ROP).

**Development** – the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act (ROP).

**Development application** – an application for approval under the Planning Act.
Development applications may include applications for approval of the following: Plans of Subdivision; Plans of Condominium; Consent; Part Lot Control Exemption By–laws; Official Plan Amendments; and Zone Change Applications. Development applications do not include *site plans* (ROP).

**Environmental Assessment** – a process for the authorization of an undertaking under legislation such as the Environmental Assessment Act, and the Ontario Energy Board Act (ROP).

**Infrastructure** - physical structures (facilities and corridors) that form the foundation for development. Infrastructure includes: *municipal drinking-water supply systems*, *municipal wastewater systems*, septage treatment systems, storm water management systems, waste management systems, electric power generation and transmission, communications/telecommunications, transit systems and corridors, the Regional Road system, *Provincial Highways*, railways, oil and gas pipelines and associated facilities (ROP).

**Normal farm practices** – a practice, as defined in the Farming and Food Production Protection Act, that is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or makes use of innovative technology in a manner consistent with proper advanced farm management practices. Normal farm practices shall be consistent with the Nutrient Management Act, and regulations made under that Act (ROP).

**Protected heritage property** - means real property designated under Parts IV, V or VI of the Ontario Heritage Act; heritage conservation easement property under Parts II or IV of the Ontario Heritage Act; and property that is the subject of a covenant or agreement between the owner of a property and a conservation body or level of government, registered on title and executed with the primary purpose of preserving, conserving and maintaining a cultural heritage feature or resource, or preventing its destruction, demolition or loss (PPS).

**Significant** – means (g) in regard to cultural heritage and archaeology, resources that are valued for the important contribution they make to our understanding of the history of a place, an event, or a people. Criteria for determining significance for the resources identified in sections (c)-(g) are recommended by the Province, but municipal approaches that achieve or exceed the same objective may also be used (PPS/ROP).

**Site alteration** – activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site (PPS/ROP).

**Site plan** – a plan prepared under Section 41 of the Planning Act which details building location and design as well as other site specific considerations such as walkways, landscaping, lighting and storage areas (PPS/ROP).
F. REFERENCE LIST


Appendix A – Resource to Assist with CHL Identification

1) Defining Community

CHLs by definition are “valued by a community”. A good first step in CHL identification is to broadly define the community(ies) that are part of your municipality e.g. those who reside in or regularly visit an area; historians or heritage advocates; tourists; artists; researchers; cultural groups; etc.

2) Develop a list of historic themes and associations important to the development of your municipality and list the corresponding landscapes within your municipality.

The historical context of your municipality provides a solid foundation for identifying significant cultural heritage resources including Candidate CHLs. Cultural Heritage Landscapes in Waterloo Region (2004) lists Regional Themes and Associations based on the ‘Topical Organization of Ontario’s History’ developed by the Ontario Ministry of Natural Resources in 1972. The Grand Strategy (1994) collaborative management plan for the Grand River, a nationally designated Canadian Heritage River, contains information on watershed-wide cultural heritage resources and river-based cultural landscapes.

Similar listings may already exist or could be developed for your Area Municipality. The consultant’s report above contains a short history of each municipality that could be used as a starting point. The list of historic themes and associations will aid in both the identification and evaluation of Candidate CHLs.

3) Undertake a visual survey of your municipality and list areas that contain grouping of cultural heritage resources.

In addition to visually surveying the landscape, you can consult land records, maps, photographs, works of art, tourism information and undertake site visits to aide in the identification of areas within the municipality that may have the physical qualities of a Candidate CHL. Landscapes may be agricultural areas, historic settlements, industrial sites, institutional districts, natural areas, residential neighbourhoods, etc.

4) Ask the public to make suggestions of landscapes or “outdoor places” that they value. Be sure to consult the public in a way that would seek input from the variety of communities present in the municipality. In addition, consult the listings of important landscapes that have been developed for various reasons in the past.

Sample Questions to Ask Your Community
Which landscapes or outdoor places in your community…
… help to tell the history of your community?
… are notable due to their design or physical form?
… create a sense of place?
… are continuing to shape the character and identity of your community?

Potential Source Documents
- local histories
- planning documents
- listings of important landscapes
Appendix B – Criteria for Heritage Value or Interest

The following chart can be used as a framework to record information about the cultural heritage value or interest of a landscape. These criteria are based on the criteria provided by the Ministry of Tourism and Culture in Regulation 9/06 under the Ontario Heritage Act. The cultural heritage value and interest of the individual cultural heritage resources within the landscape will add to the overall value and interest of the landscape as a whole.

<table>
<thead>
<tr>
<th>Cultural Heritage Value or Interest Criteria</th>
<th>√</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The landscape has design value or physical value because it,</td>
<td></td>
<td>is rare, unique, representative or an early example of a landscape (style, trend, movement, school of theory, type, expression, material use or construction method, settlement pattern, time period or lifeway)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>displays a high degree of design or aesthetic appeal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>demonstrates a high degree of technical or scientific achievement</td>
</tr>
<tr>
<td>The landscape has historical value or associative value because it,</td>
<td></td>
<td>has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>yields, or has the potential to yield, information that contributes to an understanding of a community or culture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community</td>
</tr>
<tr>
<td>The landscape has contextual value because it,</td>
<td></td>
<td>is important in defining, maintaining or supporting the character of an area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>is physically, functionally, visually or historically linked to its surroundings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>is a landmark</td>
</tr>
</tbody>
</table>
Appendix C – Indicators of Historical Integrity

The following chart can be used as a framework to record information that would indicate that a landscape has historical integrity. These examples are not exclusive and may not be appropriate for all CHLs.

<table>
<thead>
<tr>
<th>Historical Integrity Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land use</strong></td>
<td>The landscape has had continuity in use and/or a compatible use (agricultural, commercial, residential or institutional).</td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
<td>There has been a continuity of ownership or occupation of the site, dating to a historic period.</td>
</tr>
<tr>
<td><strong>Built Elements</strong></td>
<td>The buildings and other built elements (fences, walls, paths, bridges, corrals, pens, garden features, lighting, sidewalks, fountains, piers, etc.) have survived in their historic form and in relatively sound condition.</td>
</tr>
<tr>
<td><strong>Vegetative Elements</strong></td>
<td>Plantings (hedgerows, windrows, gardens, shade trees, etc.) are still evident and their traditional relationship to buildings, lanes, roadways, walks and fields are still discernible.</td>
</tr>
<tr>
<td><strong>Cultural Relationships</strong></td>
<td>The relationships between historic buildings and other built and designed elements (yards, fields, paths, parks, gardens, etc.) are intact.</td>
</tr>
<tr>
<td><strong>Natural Features</strong></td>
<td>Prominent natural features (cliff, stream, vegetation, etc.) remain intact.</td>
</tr>
<tr>
<td><strong>Natural Relationships</strong></td>
<td>The historical relationships to prominent natural features still exist both for the site as a whole and within the site.</td>
</tr>
<tr>
<td><strong>Views</strong></td>
<td>The existing views of and within the site can be closely compared to the same view in the past (certain views may have been captured in historic photos).</td>
</tr>
<tr>
<td><strong>Ruins</strong></td>
<td>Ruins and overgrown elements still convey a clear ‘message’ about the site’s history.</td>
</tr>
<tr>
<td><strong>Designed Landscapes</strong></td>
<td>Changes to a designed landscape can be corrected so that the property retains integrity versus being irrevocable.</td>
</tr>
</tbody>
</table>
Appendix D – Indicators of Community Value

The following chart can be used as a starting point to record information that may indicate that a landscape is valued by a community. A community can be broadly defined to include any grouping of people, such as: those who regularly visit or reside in an area; historians or heritage advocates; tourists; artists; researchers; cultural groups; etc. The listed indicators of Community Value below are examples and may not be appropriate for all CHLs.

<table>
<thead>
<tr>
<th>Indicators that a CHL is valued by a community</th>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community Identity</strong></td>
<td>✓</td>
<td>The landscape contributes to the community’s identity and is used to tell the story of the community</td>
</tr>
<tr>
<td><strong>Landmark</strong></td>
<td></td>
<td>The area is widely recognized as a landmark</td>
</tr>
<tr>
<td><strong>Pride and Stewardship</strong></td>
<td></td>
<td>The community demonstrates a high degree of pride and stewardship in the area (heritage designations, plaques, voluntary upkeep)</td>
</tr>
<tr>
<td><strong>Commemoration</strong></td>
<td></td>
<td>The area or elements within the area are named to celebrate or commemorate someone or something</td>
</tr>
<tr>
<td><strong>Public Space</strong></td>
<td></td>
<td>The area is a site of frequent or longstanding public gatherings or events</td>
</tr>
<tr>
<td><strong>Cultural Traditions</strong></td>
<td></td>
<td>People use the area to express their cultural traditions</td>
</tr>
<tr>
<td><strong>Quality of Life</strong></td>
<td></td>
<td>Aspects of the landscape are valued for their impact on day to day living</td>
</tr>
<tr>
<td><strong>Local History</strong></td>
<td></td>
<td>The place is written about in local histories or spoken about through local stories or lore</td>
</tr>
<tr>
<td><strong>Visual Depiction</strong></td>
<td></td>
<td>The location is widely photographed or depicted in works of art (visual, literary, etc.)</td>
</tr>
<tr>
<td><strong>Genius Loci</strong></td>
<td></td>
<td>People refer to the area as having a distinctive atmosphere or pervading ‘sense of place’</td>
</tr>
<tr>
<td><strong>Community Image</strong></td>
<td></td>
<td>The area is identified with the community image (e.g. appearing in promotions or marketing material)</td>
</tr>
<tr>
<td><strong>Tourism</strong></td>
<td></td>
<td>The area is promoted as a tourist destination</td>
</tr>
<tr>
<td><strong>Planning</strong></td>
<td></td>
<td>The area has been identified through another planning process as being unique</td>
</tr>
</tbody>
</table>
# Appendix E – Criteria for Regional Significance

<table>
<thead>
<tr>
<th>Recognized/Protected</th>
<th>CRITERIA FOR IDENTIFYING A REGIONALLY SIGNIFICANT HERITAGE RESOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old/Rare</td>
<td>The Region will identify cultural heritage resources of Regional interest.</td>
</tr>
<tr>
<td></td>
<td>To be identified as being of Regional interest a cultural heritage resource must meet four (4) or more of the following criteria:</td>
</tr>
<tr>
<td>1. It is, or it contains element(s) that are, recognized on a municipal, regional, provincial or national heritage list;</td>
<td></td>
</tr>
<tr>
<td>2. It dates from a prehistoric or early historical period in the development of the region, province or nation;</td>
<td></td>
</tr>
<tr>
<td>Outstanding Design</td>
<td>3. It is, or contains element(s) that are, a representative example of the work of an outstanding regional, national or international architect, engineer, builder, designer, landscape architect, interior designer or sculptor;</td>
</tr>
<tr>
<td>Associated with a Key Person</td>
<td>4. It is associated with a person(s) who is recognized as having made a significant contribution to the social, cultural, political, economic, technological or physical development or as having materially influenced the course of regional, provincial, national or international events;</td>
</tr>
<tr>
<td>Associated with a Key Event</td>
<td>5. It is directly associated with an historic event which is recognized as having regional, provincial, national or international importance;</td>
</tr>
<tr>
<td>Illustrates Community’s Development</td>
<td>6. It is a significant example and illustration of the region’s prehistoric or historic social, cultural, political, economic or technological development;</td>
</tr>
<tr>
<td>Provides Context</td>
<td>7. It contributes to the effectiveness of the urban and rural composition, streetscape, viewshed, or landscape of which it may form a part;</td>
</tr>
<tr>
<td>Economic Resource</td>
<td>8. It has the potential for contributing to commercial tourist or other development that is based on heritage and/or culture;</td>
</tr>
<tr>
<td>Regional Character</td>
<td>9. It is, or contains elements that are, a good example of vernacular architecture or part of a group of similar bridges/structures/landscapes which contribute to the particular &quot;look&quot; of the area or region;</td>
</tr>
<tr>
<td>Part of a Collection</td>
<td>10. It is part of a group of historically associated structures which may be totally within the region or which may be part of a larger area within the context of the Grand River (a nationally designated Heritage River).</td>
</tr>
</tbody>
</table>
# Appendix F – CHL Conservation Tools Comparison

<table>
<thead>
<tr>
<th>Designating in an Official Plan</th>
<th>OHA Municipal Register Listing</th>
<th>OHA Part IV Designation</th>
<th>OHA Part V Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies the area as a cultural heritage resource</td>
<td>Yes, in Official Plan</td>
<td>Yes, on the MHR</td>
<td>Yes, on title (post-2005) and on the MHR</td>
</tr>
<tr>
<td>Requires the documentation of the landscape</td>
<td>Yes, through a CHL Technical Study, to include: (a) a statement of significance; (b) a listing (and map) of the cultural heritage resources and attributes being conserved within the Cultural Heritage Landscape through the use of existing planning tools; and (c) recommendations for additional conservation measures.</td>
<td>Yes, evaluation form and Statement of Significance including location</td>
<td>Yes, through an HCD Study and then an HCD Conservation Plan, to include: a) objectives to be achieved through the designation; b) a statement of significance for the district; c) an inventory of heritage attributes; d) policies for enhancing the district; e) guidelines which describe the type of work or development that council would find acceptable; and f) a description of external alterations that would not require a heritage permit.</td>
</tr>
<tr>
<td>Plan takes precedence in the event of a conflict with existing municipal zoning and other bylaws that were in place prior to the designation.</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Enables the municipality to require a Cultural Heritage Impact Assessment (CHIA) on proposed development and site alteration within or adjacent to the CHL</td>
<td>Yes</td>
<td>Within – Yes Adjacent – No</td>
<td>Yes</td>
</tr>
<tr>
<td>Designating in an Official Plan</td>
<td>OHA Municipal Register Listing</td>
<td>OHA Part IV Designation</td>
<td>OHA Part V Designation</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Allows the municipality to make financial grants or incentives available to heritage property owners.</td>
<td>Only for OHA protected properties or if the CHL is part of an approved Community Improvement Plan.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Provides the municipality with the power to decide whether alterations, new construction or demolition can take place within the CHL.</td>
<td>No</td>
<td>Alterations and new construction – yes if associated with a development application Demolition – yes through delay of demolition and opportunity to designate under the OHA</td>
<td>Yes</td>
</tr>
<tr>
<td>Allows the municipality to develop and enforce heritage property standards.</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Designation process is appealable to the Ontario Municipal Board</td>
<td>Yes</td>
<td>No</td>
<td>No – But can be objected to, and referred to the Conservation Review Board for a non-binding recommendation</td>
</tr>
</tbody>
</table>
TO: Chair Jim Wideman and Members of the Planning and Works Committee

DATE: October 22, 2013

FILE CODE: D-10-90A

SUBJECT: GO TRANSIT / VIA RAIL SERVICE - REQUESTS FOR ENHANCEMENT AND REINSTATEMENT OF SERVICE

RECOMMENDATION:

That the Regional Municipality of Waterloo approve the following with regard to intercity passenger rail service as described in Report No. P-13-104, dated October 22, 2013:

a) Continue to encourage the Province of Ontario to consider the extension of GO Rail service along the Milton Line to Cambridge;

b) Request Metrolinx to include in its “Next Wave” of projects, the extension of the planned two-way service between Union Station and Mount Pleasant station on the Kitchener line, to the downtown Kitchener Station;

c) Encourage Metrolinx to initiate detailed design work on track improvements in the CN mainline corridor;

d) Encourage the Province of Ontario to develop a comprehensive intercity passenger rail service strategy for Southern Ontario;

e) Encourage VIA Rail to restore trips that were eliminated, and on a trip schedule complementary to GO Rail service; and

f) Circulate this report to local Federal Members of Parliament, Members of Provincial Parliament, the Southwest Economic Alliance (SWEA), Metrolinx and the Ministries of Transportation, Infrastructure and Municipal Affairs and Housing.

SUMMARY:

Inter-regional passenger rail service is essential transportation infrastructure serving the Region of Waterloo. On a daily basis, a 2006 Transportation Tomorrow Survey estimated that more than 25,000 people travel to the Greater Toronto and Hamilton Area (GTHA), and over 16,000 people travel from the GTHA to Waterloo Region. These ties are increasingly important, as, for example, Waterloo Region’s technology sector requires its workforce to travel easily to and from the GTHA. Both GO and Via Rail provide basic service today, with Grand River Transit offering travel links from the downtown Kitchener station to destinations throughout the Region. However, many people continue to travel by private vehicles because rail service is minimal and not able to accommodate a wide range of travel times. In addition, service to and from Cambridge would significantly enhance rail service from many perspectives.

The lack of adequate passenger rail service is also an issue for the Southwest Economic Alliance (SWEA). SWEA is an organization of private and public sector members, including elected officials
and staff from communities in Southwestern Ontario, primarily to the south and west of Waterloo Region. Prompted by the VIA rail cuts, SWEA has embarked on an advocacy campaign in an attempt to restore and enhance VIA rail service and encourage the Province to study and address regional transportation needs beyond the Greater Toronto and Hamilton Area (GTHA).

The Region continues to advocate for improved passenger rail service through actively participating on several transportation studies led by the Province. The Region also continues to request that GO Rail service be extended along the Milton line to Cambridge and that two-way service be provided on the Kitchener line to downtown Kitchener.

Other efforts include: working with VIA Rail, Communitech and their company partners, and the City of Kitchener, City of Waterloo and University of Waterloo, to evaluate the feasibility of a reverse commute trip from the GTA to Waterloo Region with an intermediate stop in Guelph; and undertaking and update to the 2009 Cambridge to GTA Rail Passenger Feasibility Study in collaboration with the City of Cambridge and Metrolinx.

There are numerous benefits for the Province to develop a comprehensive strategy that advances the implementation of a competitive intercity passenger rail service. Reduced highway congestion and improved goods movement, a stronger economy with increase labour force and business travel mobility, health and environmental improvements, and the ability to shape sustainable urban form at rail stations are a few key examples.

REPORT:

GO Rail service was introduced to Kitchener in December 2011. While the first phase of GO Rail service was to include 4 morning trips to Union Station and 4 afternoon trips returning to the downtown Kitchener station, only 2 morning and 2 afternoon trips are currently provided, and are scheduled at sub-optimal times (Attachment 1). On average, 120 passengers board the two GO trains daily.

GO bus service was introduced in December 2011 and service levels and ridership have been increasing. During weekdays, 19 trips are provided from Waterloo Region to the GTA carrying an average of 850 riders daily. This service is supplemented on Thursday and Friday by an additional 8 express trips to accommodate post-secondary student demand and the number of daily riders increases to 1600.

In October 2012, VIA eliminated the 6:30 am trip from Kitchener to Toronto and the 10:10 pm trip from Toronto to Kitchener. In combination, GO and VIA rail services provide only 4 trips to and 4 trips returning from Toronto. This level of passenger rail service is minimal for a regional population of over 500,000 and growing to over 725,000 in 2031. The limited number of trips that are unidirectional in morning and afternoon miss out on important and large travel markets including:

- People living in the GTHA and travelling to Waterloo Region (more than 15,000 per day according to the 2006 Transportation Tomorrow Survey);
- People travelling daily between Waterloo Region and Guelph (more than 25,000 per day according to the 2006 TTS);
- Post-secondary student travel between Waterloo Region, and other southwestern communities and the GTA (GO Bus demand between Waterloo and Mississauga is growing rapidly and currently peaks at 1,600 students per day); and
- Travel for tourism, visiting, personal and medical services is a large travel need for the general public.
The lack of adequate passenger rail service is also an issue for the Southwest Economic Alliance (SWEA). SWEA is an organization of private and public sector members, including elected officials and staff from communities in Southwestern Ontario. Prompted by the VIA rail cuts, SWEA has embarked on an advocacy campaign in an attempt to restore and enhance VIA rail service and encourage the Province to study and address regional transportation needs beyond the GTA.

SWEA’s advocacy efforts are generally aligned with the Region’s, although Waterloo Region has some specific needs (e.g. expansion of GO Train service) in addition to those identified by SWEA.

Related to the problem of infrequent rail service to the Region, passenger rail operations are unacceptably slow. The long travel times between the Region and Union Station shown in Attachment 1 (average speeds are 60 km/h or worse) make it difficult to attract new users to the service. Track improvements to the corridor, estimated at about $400 million, would increase operating speeds, reliability and safety through improved protection at railway crossings. Goods movement by rail along the CN mainline corridor would also benefit from these improvements, improving economic development.

The Region continues to work for improved passenger rail service on several fronts:

**Provincial Transportation Studies**

Regional staff actively participate on provincial transportation studies including the Niagara to GTA Corridor Transportation Development Strategy (Please see report P-13-100, October 22, 2013), the Greater Toronto Area West Corridor, the Highway 401 (Hespeler Road to Halton) Environmental Assessment and the upcoming Waterloo, Wellington, Brant (WWB) study. Throughout these studies, staff has recommended and Regional Council has approved resolutions requesting that passenger rail improvements be implemented well in advance of road-based improvements, in order to give public transit ridership and supportive land-use patterns the opportunity to develop.

**Via Rail Reverse Commute Initiative**

Regional staff has been working with VIA Rail, Communitech and their company partners, and the City of Kitchener, City of Waterloo and University of Waterloo, to evaluate the feasibility of a reverse commute trip from the GTA to Waterloo Region with an intermediate stop in Guelph. This would allow employees who live in the GTA and Guelph to travel to Waterloo Region by train.

VIA Rail is currently evaluating the feasibility of a proposed schedule with rail owners and operators, and will be providing updated costs for the service. VIA Rail has indicated that they cannot incur any costs with the new trip so passenger ticket revenue would have to cover operating costs. Discussions are on-going with Communitech partners to determine the potential for guaranteed ticket revenue.

**Update GO Train to Cambridge Study**

On June 26 2013, Regional Council approved funds to update the 2009 Cambridge to GTA Rail Passenger Feasibility Study for the City of Cambridge (please see follow-up memo to P-13-070). This project would be funded through the Regional Transit Supportive Strategy for the City of Cambridge budget. This strategy is designed to accelerate transit ridership growth in Cambridge in anticipation of Stage 2 ION. Regional staff will be working with City of Cambridge and Metrolinx to undertake this study;
GO Rail Enhancements to Kitchener

Regional staff continue to advocate for two-way GO Train service. In its “Next Wave” of projects, Metrolinx identifies planned two-way service between Union Station and the Mount Pleasant station in Brampton. Staff recommend that the planned two-way service be extended on the Kitchener line to the downtown Kitchener Station.

Conclusion

Congestion on Provincial Highways extends further from the GTHA each year as more and more people and jobs locate in the GTHA and surrounding urbanized regions. There is a definite requirement for a comprehensive strategy that advances the implementation of a competitive intercity passenger rail service. The benefits of improvements in rail passenger service on the Kitchener line and extension of service to Cambridge along the Milton line are significant:

• Reduced traffic growth on highway 401 would assist with goods movement;
• The economic contribution of Waterloo Region would be strengthened by providing access to a broader labour market, particularly in the technology sector and by providing business travellers a convenient and reliable travel option.
• Health and environmental benefits from reduced greenhouse gas emissions, pollutants, stress, and collisions.
• Transit-supportive developments centred on rail passenger stations that make passenger rail travel even more attractive resulting in an upward spiral of ridership and service improvements.

Area Municipal Consultation/Coordination

A copy of this report will be circulated to the Area Municipalities for their information.

CORPORATE STRATEGIC PLAN:

Improved passenger rail service is consistent with Strategic Plan Focus Area 3: Sustainable Transportation, Encourage improvements to intercity transportation services to and from Waterloo Region.

FINANCIAL IMPLICATIONS:

The Region was required to make a $1.39 million funding contribution to GO Transit to assist with funding of track and platform improvements in Kitchener. The contribution is being paid over the 5 year period from 2013-2017.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

NIL

ATTACHMENTS:

Attachment 1 - Current scheduled of rail trips between Waterloo Region and Toronto Union Station

PREPARED BY: John Cicuttin, Acting Director Transportation Planning

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
Attachment 1 - Current schedule of rail trips between Waterloo Region and Toronto Union Station

CURRENT RAIL TRIPS

VIA rail trips are offered every day, GO Transit trips are weekday only
TO: Chair Jim Wideman and Members of the Planning and Works Committee
DATE: October 22, 2013
FILE CODE: D10-70
SUBJECT: TRAVELWISE TRANSPORTATION MANAGEMENT ASSOCIATION – PILOT PROGRAM REVIEW

RECOMMENDATION:

THAT The Regional Municipality of Waterloo enter into a service agreement with organizations currently participating or interested in joining the TravelWise Transportation Management Association for a two year term effective January 1, 2014, in a form satisfactory to the Regional Solicitor, as described in Report P-13-105, dated October 22, 2013;

AND THAT The Regional Municipality of Waterloo enter into a collaborative agreement with Sustainable Waterloo Region to deliver the services of the Transportation Management Association for a two year term effective January 1, 2014, in a form satisfactory to the Regional Solicitor, as described in Report P-13-105, dated October 22, 2013.

SUMMARY:

In January 2012, the Region of Waterloo created a TravelWise Transportation Management Association (TMA) for Waterloo Region as a two year pilot program providing Transportation Demand Management (TDM) services for interested employers and Area Municipalities in Waterloo Region. The TMA was created to fulfil the Region’s 2011-2014 Strategic Objective Action 3.2.2: “To work with the community to develop and support a Transportation Management Association that would work with employers to encourage and support active and sustainable transportation.”

The TMA is a public-private partnership between the Region of Waterloo, the Area Municipalities (Cambridge, Kitchener and Waterloo) and 16 employers throughout Waterloo Region. Sustainable Waterloo Region (SWR), a not-for-profit organization, is contracted by the Region to provide coordination support of the TMA. Partnered employers pay a membership fee to the Region in return for access to TDM services and tools including online carpool matching software, discounted Grand River Transit Corporate Passes, and an Emergency Ride Home service. Employers also gain access to a knowledge exchange working group that shares information and resources on successful employer-led TDM programs. An additional TDM service that is provided to employers is individualized marketing campaigns that promote the TMA’s services through on-site employer events, identification of employees interested in changing travel behaviour, and measuring employee travel behaviour change.

In the first two years, the TMA has grown from its original thirteen partner employers to the pilot period maximum of twenty without any formal outreach. These employers represent over 23,000 employees in Waterloo Region, or approximately 8.2 per cent of the region’s workforce. The majority of employers have experienced measurable decreases in the amount of employees driving to work alone and increases in cycling, walking, carpooling and transit. On average, employers experience a 4.5 per cent decrease in driving to work alone rates after one year of being a TMA member. The TMA has also formed over 200 carpools and supported GRT’s ridership goals by selling 195 discounted Corporate Transit Passes that have generated over $110,000 in revenue.
The growth in TMA membership and uptake in TDM services has reduced the number of employees driving to work alone and illustrated that the program is providing a valuable service for businesses and commuters. To continue providing transportation solutions for the business community, support GRT ridership goals, contribute marketing and promotional support for ION to employers, and help the Region meet the mode shift targets of the Regional Transportation Master Plan, staff recommend that the TMA operate as a continued program.

A 2014 Business Plan (see Appendix A) has been created in partnership with representatives from TMA members to further the success of the TMA. The plan recommends the expansion of memberships, supporting the Region’s Big Shift by providing businesses and new developments with transportation incentives, and increasing collaboration and resource sharing with SWR.

To continue the Region’s TMA, Regional staff recommend that the Region enter into a continued TravelWise Program Services Agreement with existing partnered TMA members and other interested employers for an additional two year term. The program’s membership fees currently contribute to approximately 33 per cent of the program’s operating costs. As the program grows, additional financial resources would be required to support the program’s growth as described in the GRT Communications and Marketing Plan (report E-13-077).

In 2014, a collaborative agreement with SWR would give the TMA access to SWR’s transportation emissions reduction expertise, ongoing engagement with businesses, results-based recognition awards, and volunteers. In addition to adjusted membership fees and growth in GRT Corporate pass sales, the collaborative agreement would help offset the Regional investments needed to operate the TMA.

REPORT:

In January 2012, the Region entered into a two-year pilot program agreement with ten employers and the three Cities to form a TravelWise Transportation Management Association (TMA) that provides Transportation Demand Management (TDM) services.

TMAs are instrumental to supporting a shift to active and sustainable transportation choices by commuters. By working with employers to provide TDM tools and services, the Region can reduce the number of people driving alone to work. The Region established five core services as part of the TMA’s pilot 2011 business plan. These services include:

- Online carpool matching software;
- A Corporate Grand River Transit Pass enabling employees to purchase monthly, seasonal or annual passes at a discounted rate;
- An Emergency Ride Home program designed as an insurance policy for participants who do not have immediate access to a vehicle at work and need to leave in emergency situations;
- Individualized Marketing Campaigns to attract and identify employees interested in the TDM services available to them; and
- Access to knowledge exchange working group knowledge proving solutions to commuter challenges such as reduced parking supplies.

The 2011 TMA Business Plan also established programming fees for employers and Area Municipalities, as well as an overall budget for TMA services. To operate the TMA, the Region contracted the not-for-profit organization Sustainable Waterloo Region (SWR) to provide TMA support services including the coordination of events, employer individualized marketing, and communications.
Program Evaluation

Membership Growth
The TMA has grown from the initial thirteen employers to twenty, representing over 23,000 employees, and reaching the membership cap of twenty employers established in the 2011 Business Plan. Five additional employers have a strong interest in joining in 2014, indicating that there is strong demand from local employers with interests in providing commuting solutions for their employees. Employers are stating that they are interested in providing commuting solutions as a response to parking constraints, request from employees for alternative transportation, including the demands of a younger workforce that is choosing not to commute by car. Representatives from each employer were invited to participate in the TMA Working Group that serves as a forum for employer and employee feedback on services and program improvement opportunities. Table 1 provides a list of existing TMA members and other employers that have expressed an interest in joining.

Table 1: List of Participating and Interested TMA Employers

<table>
<thead>
<tr>
<th>Participating Organizations</th>
<th>Interested Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Cambridge</td>
<td>Equitable Life of Canada</td>
</tr>
<tr>
<td>City of Kitchener</td>
<td>OpenText</td>
</tr>
<tr>
<td>City of Waterloo</td>
<td>Miller Thomson LLP</td>
</tr>
<tr>
<td>Region of Waterloo</td>
<td>University of Waterloo</td>
</tr>
<tr>
<td>Communitech</td>
<td>YWCA of Kitchener-Waterloo</td>
</tr>
<tr>
<td>Wilfrid Laurier University</td>
<td>Paradigm Transportation Solutions</td>
</tr>
<tr>
<td>SunLife Financial</td>
<td>WalterFedy</td>
</tr>
<tr>
<td>BlackBerry</td>
<td>Enermodal Engineering</td>
</tr>
<tr>
<td>Miovision Technologies</td>
<td>Kitchener Public Library</td>
</tr>
<tr>
<td>Hendry Coach Lines</td>
<td>Rogers Communications</td>
</tr>
<tr>
<td>Ontario Teachers Insurance Plan</td>
<td>Arvato</td>
</tr>
<tr>
<td>Desire2Learn</td>
<td>Crawford</td>
</tr>
<tr>
<td>Stantec</td>
<td></td>
</tr>
</tbody>
</table>

Travel Behaviour Changes
As a proven marketing technique used to identify and influence employees who are interested in in TDM services, TMA organizers implemented Individualized Marketing to communicate, incentivize and measure the travel behaviour changes of TMA employees. Through this approach, organizers measured decreases in the number of employees driving to work alone and increases in those taking transit, cycling, walking and carpooling. Table 2 illustrates the starting mode split prior to TDM services being introduced and the average change in travel modes after one year of implementation.

Table 2: TMA Mode Split and Recorded Changes in Travel Behaviour

<table>
<thead>
<tr>
<th></th>
<th>Drive Alone</th>
<th>Transit</th>
<th>Cycle</th>
<th>Carpool</th>
<th>Walk</th>
<th>Telework</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark Mode Split</td>
<td>65.5%</td>
<td>6.2%</td>
<td>3.5%</td>
<td>13%</td>
<td>6.5%</td>
<td>3.5%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Average Change After 1 year</td>
<td>-4.5%</td>
<td>+0.6%</td>
<td>+0.3%</td>
<td>+1.1%</td>
<td>+1.4%</td>
<td>+0.6%</td>
<td>+0.5%</td>
</tr>
</tbody>
</table>

Although the measured change in mode split is expressed as an average, employers along the Central Transit Corridor and in the downtowns experience higher shifts to transit while employers in suburban locations experience less. For example, the Cities of Cambridge and Kitchener have
experienced an increased shift to transit by 5 and 4 per cent respectively. It is expected that with new transit service improvements, the introduction of ION, intensification along the Central Transit Corridor and increased parking costs in the downtown areas, these trends will continue and larger shifts to transit will occur.

Discounted Online Transit Pass
Employees of TMA organizations gain access to a discounted Grand River Transit Corporate Transit Pass. The pass is designed to reward employees who commit to taking transit by providing larger discounts (up to 15%) for longer term passes. Proving to be a popular service with TMA employees, 195 passes have been purchased to date with the majority being 12 month passes; illustrating user loyalty to taking transit and generating $110,000 in guaranteed revenue for GRT.

Online Carpool Matching
Significant interested has been generated for carpooling from commuters registering to use the TMA’s online carpool matching website. To date, over 1,700 users have registered on www.TravelWiseCommute.ca and formed over 200 carpools.

Emergency Ride Home
The emergency ride home program continues to be an effective insurance tool for those that cycle, walk, take transit or carpool to work.

Program Focus in 2014
Program organizers (Regional staff and SWR) utilized the active involvement of TMA employers to jointly develop a 2014 TMA Business Plan (see Appendix A). The Business Plan would focus efforts in 2014 to further reduce the number of employees who drive to work by outlining a number of milestones each member employer would follow including: member service training, goal setting, program implementation, and evaluation.

The Business Plan additionally outlines the success metrics for the TMA that would include building program capacity, providing enhanced services, and measuring impacts at both the employee and employer level.

Expanding Services
In addition to providing a framework that directs the program's operations, the Business Plan outlines how the TMA would expand the number of partner employers by including new member categories for small businesses and developers. These new membership categories would help fulfill membership requests from smaller businesses with less than 50 employees and facilitate the Regional Transportation Impact Study Guidelines that require the Region to offer TMA services to developers by providing membership to the expected tenants of new developments.

Program Partnerships
The TMA’s successes have largely been achieved due to the partnerships between the Region and member employers. To capitalise on these achievements, further partnership opportunities are being planned through the Business Plan to improve the range of TMA promotions and the support of complementary programs run by TMA partners.

Area Municipalities
The collaborative approach of the TMA and its Working Group provides further opportunities for members, including the cities of Cambridge, Kitchener and Waterloo, to share information and resources on successful TDM program development. This helps the cities align municipal transportation policies and programs and closely work with both private and public employers to find
solutions to transportation challenges. The regional scale of the TMA’s services also eliminates the need for each city to create independent TDM programs that serve similar commuter needs.

Sustainable Waterloo Region
Sustainable Waterloo Region (SWR) is a non-for-profit organization contracted by the Region to provide coordination support of the TMA. SWR has played a valuable role by not only coordinating TMA services, but by professionally organizing individualized marketing campaigns, providing technical and front line service support, and actively assisting with membership growth. With the TMA’s mission objectives focused on reducing drive alone rates of member employers, staff support aligning the TMA’s mission with SWR’s mission of collaboration, enabling organizational change, and achieving tangible results.

Furthermore, as the 2014 Business Plan calls for the provision of yearly awards for the recognition of leadership, innovation and progress towards the program’s goals, an enhanced collaborative approach with SWR can allow for the TMA’s recognition awards to be included in SWR’s annual Evening of Recognition ceremony.

Strategic Alignment of Service Improvements

GRT Marketing and Service Improvements
The 2013-2016 GRT Marketing and Communications Plan (report E-13-077) identifies how the Region’s TDM program, including the TMA, has the potential to play a larger role helping GRT achieve its ridership growth through individualized marketing campaigns and incentives. As a growing TMA, the program would continue to support GRT’s ridership growth and provide co-promotional opportunities for new service improvements such as the Electronic Fare Management System.

To provide this support, the Marketing and Communications Plan recommends additional funding through 2016 to provide new outreach activities in future years and build on the success of the customer-facing service of the TMA.

Introduction of ION
The TMA promotes travel options to 23,000 member employees and can provide Rapid Transit promotional opportunities to this essential commuter demographic of prospective ION riders. Program organizers would focus marketing directly to employers in Cambridge to support transit ridership growth for ION aBRT. TMA organizers would similarly work with Rapid Transit planning and communications teams to promote ION and help address congestion challenges during the Rapid Transit construction period to help establish long-term sustainable travel.

New Economic Development
Through the Region’s Traffic Impact Study Guidelines, some new non-residential and mixed-use developments within the Urban Growth Centres, Major Transit Station Areas and Reurbanization Corridors require the submission of a TDM Checklist. The checklist includes TMA membership as a trip reduction incentive. By providing this incentive through the new developer membership category, the TMA is part of the Region’s Big Shift Toolbox (www.regionofwaterloo.ca/BigShift) further incentivizing new urban and economic development throughout the Region’s cores and major station areas.

Many TMA member employers also report using the TMA’s services as an employee recruitment and retention tool and include those services in employee orientation packages. Recent discussions with interested employers have identified a strong interest in finding solutions to increasing employee parking challenges and specific interest in providing the discounted Corporate Grand River Transit pass to their employees.
Resources to Achieve TMA Growth and Goals
Established in the 2011 Business Plan, the TMA’s pilot period membership cap of twenty employers was set according to what Regional resources could sustain. The demonstrated community interest in the program, recommendations from the GRT Marketing and Communication Plan, new requirements of the Regional Traffic Impact Study Guidelines, and the need to assist with congestion challenges during Rapid Transit construction, point to the a for increased investment in this program. In 2014, the TMA would adjust membership fees, integrate operational efficiencies and collaborate with SWR to expand the program to more employers. These changes, along with ongoing growth in GRT Corporate sales, would help to offset the Regional investments needed to operate the TMA in the near term. However, future investment would be required to grow and maintain the TMA as outlined in the Grand River Transit Communications and Marketing Plan.

Area Municipal Consultation/Coordination
The Cities of Cambridge, Kitchener and Waterloo were consulted during the development phase of the 2014 TMA Business Plan and are in concurrence with the continuation of the program. Staff at all three Cities have provided their continued support for the ongoing services of the TMA for area municipal staff and interested employers. A copy of the 2014 TMA Business Plan was provided to the Townships of Wilmot, Wellesley, Woolwich and North Dumfries.

CORPORATE STRATEGIC PLAN:
The continuation of the TMA upholds Strategic Objective 3.2: Develop, promote and integrate active forms of transportation (cycling and walking), by directly supporting Action 3.2.2: Work with the community to develop and support a Transportation Management Association that would work with employers to encourage and support active and sustainable transportation.

The TMA is also integrated with the following Strategic Objectives 3.1, Action 3.1.3: Develop and implement programs to improve access to and awareness of public transit; and 3.3: Optimize existing road capacity to safely manage traffic throughout Waterloo Region.

By providing TDM programs and services directly to employers, the TMA also implements Official Plan policy 3.C.1(b) and Regional Transportation Master Plan policy 7.2.1.2, which recommends a region-wide emergency ride home program.

The TMA program is an example of the Corporate Values of Collaboration, Innovation and Service at work in the community.

FINANCIAL IMPLICATIONS:
The cost to deliver the TMA program for 2014 would be $151,000. To continue providing the services of the TMA, staff recommend continuing a fee for TMA program services as summarized in Appendix A. For 2014, the fees have been amended for medium-sized businesses to account for higher program costs associated with these members. The fees would contribute an estimated $43,000, or approximately 29% of the total program cost.

The remainder of the program costs would be funded out of the Transportation Planning budget and Transport Canada’s ecoMOBILITY grant program. The ecoMOBILITY funding would be used to cover the anticipated 2014 budget challenges and would be available to cover shortages for up to two years. For 2014, the Transportation Planning budget would fund $63,000 and ecoMOBILITY would fund $45,000.
This budget is expected to be sufficient to accommodate growth of the program of up to 40 employers, although growth could be greater than expected and will be monitored. As the program grows, additional financial resources would be required to support the program as described in the GRT Communications and Marketing Plan (report E-13-077). Any additional funding for the TDM program would be subject to Regional Council consideration through the 2015 budget process.

OTHER DEPARTMENT CONSULTATIONS/CONCURRENCE:

Transit Services and Legal Services were consulted in the development of a continued program services agreement of the TMA, the Corporate Pass product, and a collaborative agreement with Sustainable Waterloo Region, and they are in concurrence with the recommended direction.

ATTACHMENTS

Appendix A - 2014 TravelWise@Work Business Plan

PREPARED BY: James LaPointe, Principal Planner, Transportation Demand Management

APPROVED BY: Rob Horne, Commissioner, Planning, Housing and Community Services
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1. The Business Case for TravelWise@Work

Effective Transportation Management Associations (TMAs) business models evaluate the needs of the TMA’s organizations and tailor solutions specific for those group’s members. The models typically focus on employer organizations to provide solutions for their employee’s commuters. Often, business models are done in partnership with local governments. The Region’s TMA (TravelWise@Work) Business Plan outlines how the TMA has performed over the 2012-2013 pilot period and how the program will operate as a continued program.

Business Case: Motivations for Organizations
What does the TMA contribute to the local economy, and why should organizations participate as a member?

Cost Reduction: Reducing provision and operation of parking facilities can be incredibly expensive, particularly throughout the Region’s core areas. For example, parking rates in downtown Kitchener can exceed $1,200 per spot annually. Investing in TDM policies and programs can dramatically reduce these expenses.

Parking shortages: As employers grow, inadequate parking provision can be a challenge. Fostering an environment that supports cycling, transit, walking, and carpooling workforces can reduce the need for expensive parking expansion.

Employee attraction: Recruiting and retaining talented employees is a strategic business challenge. Commuting options are quickly becoming primary considerations that employees are looking for in order to live and work in connected urban environments and select employers that will support commuting choice. Commute time and workplace location are amongst the most important factors when a new employee is determining whether to accept a job offer. To support these choices, TMA services can be marketed alongside other employer programs to recruit and retain top talent.

Employee productivity: Physically active employees are more productive throughout the workday and experience lower levels of stress. These employees also take less sick leave and experience. The TMA connects employees with tools to help plan and access healthy, active commuting practices.

Environmental impact: Over 40% of Waterloo Region’s emissions come from transportation, and commuting is a major component of regional transportation patterns. Reducing a workforce that drives alone is an opportunity to exhibit Corporate Social Responsibility through emission reductions and supportive land-use decisions. The TMA provides a credible way to access the tools to reduce these impacts and gain recognition for positive results.

Supporting Regional Objectives: Hosting a TMA
The TMA provides employers throughout Waterloo Region with tools, support and encouragement for transportation alternatives to driving to work alone, and advances strategic Regional objectives in the following areas:

Economic development: The TMA is an effective service to work with prominent local employers to align business strategies with development policies focusing on core intensification in Kitchener, Waterloo and Cambridge. The program strengthens Waterloo Region’s business environment and attract talented employees to the local economy.
Private sector participation: The unique public-private partnership that the TMA operates as helps draw on the strengths and innovation of Waterloo Region’s business community while providing conduit between regional, municipal and private feedback on transportation challenges and solutions facing Waterloo Region.

Decreasing congestion: By providing unique incentives for transportation alternatives, and reduce single-occupant vehicle use, the TMA is helping to reduce congestion.

Sustainability: Waterloo Region is increasingly becoming known for local innovation not only through the high-tech industry, but for its reputation for fostering sustainability-focused organizations, programs, and services. The TMA cost-effectively enhances this reputation and promotes a community that protects its natural resources, improves air quality, and enables mobility options.

Efficient implementation: A region-wide TMA eliminates the need to continually provide similar programs at a business or Area Municipal level, providing significant cost and operational efficiencies.

2. Feedback from the Pilot

Scope: Objectives of the Pilot
To fulfill the Region of Waterloo’s Council-approved direction of the pilot phase of the TMA, the program’s original business plan identified four goals to measure its success:

Goal A: Develop, implement and maintain a successful TMA with measurable results,
Goal B: Provide direct services to organizations and property owners for the development and implementation of successful commuting programs,
Goal C: Establish organizational cultures that encourage sustainable commuting through strategic marketing, funding and outreach efforts, and;
Goal D: Identify and communicate the needs of pedestrians, cyclists and transit users to improve Regional, Area Municipal and Provincial investment in infrastructure and services.

Implementation: Core Activities
To achieve the identified goals, TMA organizers focused activity on three four areas: Employer-Individualized Marketing, Service Delivery, Promotional Events, and the Working Group.

Employee-Individualized Marketing: Individualized marketing was completed in the form of all-employee surveys that identified existing travel behaviours, barriers to using more active transportation, and each individual’s interest in travel options. Interested employees selected information on walking, cycling, transit, and carpooling in Waterloo Region. Customized information kits were then delivered to those employees. After one year, organizers followed-up with survey respondents to determine any behavioural changes and to track overall mode splits within each organization.

1) Employee Services: All employees at each member organization had access to three core services:
   - Discounted online Grand River Transit Corporate passes
   - Carpool Matching software
   - Emergency Ride Home program

2) Promotions: To promote the available services, TMA organizers held two on-site events per year at each member organization. These were typically informal events with a small incentive to encourage attendance. Organizers also coordinated Region-wide theme events (e.g. Bike Month, Carpool Week & Commuter Challenge).
3) **Working Group:** A key element to the TMA program is organizational support. Potential TMA organizations received an orientation as to the benefits to their staff and organization as well as the needs that the program required in the form of support from an organization’s staff. All member organizations were invited to participate in the TMA Working Group and their feedback on services and improve opportunities where fundamental in the development of this Business Plan.

**Results: Achievements to Date**

With efforts focused on the core activities of the program, organizers have drawn the following successes from the pilot:

- Over 50% increase in organizational membership over two years without advertising, indicating a strong market demand from local employers with interests in paid membership from a diversity of employers.
- Progressive relationships with workplace contacts and internal champions within member organizations, including active input and feedback on Regional and Area Municipal policies that effect business’s transportation challenges.
- Assembled in-depth knowledge of commuter behaviours, trends, and feedback representing approximately 8.2% of the Region workforce.
- Expressed interest and uptake in services from employees, generating over $110,000 in committed transit ridership revenue, 2,500 registered users on the TMA carpool matching site, and over 3,000 participants in outreach events.
- Coordinated communication approach that supports other Regional programs, including Rapid Transit and Public Health.
- Improved efficiency of program delivery through automated processes and reduced reliance on external consultant support.

Thirteen member organizations (representing 21,000 employees) joined the TMA at its launch in 2012. This indicated a strong beginning for a TMA as other well-established TMAs do not have the same employer participation (For example, the City of Hamilton’s TMA formed in 2005 and has 16 organizations). With four new member organizations joining through 2012, and three in 2013, the TMA reached its established pilot-period cap of 20 organizations, representing around 23,000 employees. This growth signalled a strong demand from the business community in Waterloo Region for the TMA’s services as organizers did not actively recruit any new members. Growth was achieved entirely through word of mouth and companies searching for commuting solutions. Data collected through TMA organizations and TravelWise organizers have illustrated the commuting patterns for 8.2% of the Region of Waterloo’s workforce. Figure 2 summarizes the data collected to through
September 2013. In the future, this data will be incorporated into TMA and Regional transportation planning processes to help inform service delivery decisions.

In 2012, Online Corporate Pass sales totaled 83 passes, representing over $45,000 in revenue for GRT. By September 2013, Corporate Pass sales increased by 35% to 112 passes, generating over $66,000 in revenue.

Since launching, the TMA has seen significant interest from commuters registering to use its online carpool matching website. Over 1,700 users have registered throughout the pilot period and have formed over 200 carpools.

Throughout the pilot period, over 50 on-site outreach events with member organizations were held. Focusing on service promotion, these events have attracted over 3000 employees and have been an excellent opportunity to co-promote other Regional activities with Regional Public Health and Rapid Transit. Further co-promotional opportunities through TMA communication channels, including a quarterly newsletters distributed to over 4,000 employees throughout the region, were similarly utilized.

TMA activities have been successful in part due to the effective collaboration and support of member organizers. The organizational representatives have allowed for the increased systemic support for sustainable commuting. Working with these internal contacts, TMA organizers and partnered members have begun establishing workplace cultures that are supportive of walking, cycling, transit, and carpooling. The ongoing collaboration and information sharing of the Working Group ensured regular opportunities for formal input and feedback between organizations. The collaborative framework of the TMA provided an excellent forum for members to share program success, and provide the supports needed to change the way their staff travel to and from work align policies. Their input and feedback helped shape changes to the program during the pilot phase and significantly informed this business plan.

**Challenges: Lessons Learned**

Although the pilot period achieved many successes, three key lessons have helped guide the program’s plan for future development:

- Need for clear success metrics and program objectives.
- Fundamental requirement for a functional, intuitive and innovative online presence.
- Focused and efficient service delivery.

Defining success metrics is a challenge in the ability to measure the progress for TMA organizers, the Region of
Waterloo, and member organizations. The pilot phase provided an opportunity better understand how to collect reliable and meaningful indicators of the program’s progress. Moving forward, this business plan identifies more precise performance metrics to allow the TMA to measure its effectiveness.

Lacking a rich, intuitive online presence for the TMA program was identified a significant challenge during the pilot. The breadth and depth of information that prospective and existing members are seeking is not currently available on the Region of Waterloo’s website. Similarly, the carpool matching software, [www.travelwisecommute.ca](http://www.travelwisecommute.ca), does not provide a robust multi-modal and integrated travel information portal that engages users on a continued basis. This reduces TMA organizer’s ability for continued engagement of member employers and employees. Working Group representatives have uniformly agreed that developing an improved, functional and innovative online presence is the largest area of improvement needed for the TMA.

There is also a clear need to find operational and financial efficiencies to make the TMA scalable and sustainable. Three identified short-term efficiencies improvements include:

- Providing information to employees about transportation options and services in electronic format rather than using printed materials.
- Providing one annual outreach event per member organization with an optional annual community-based event such as Bike Month.
- Creating a forum among TMA members for sharing best practices on internal TDM supports, policies and practices.

Following these improvements will help reduce the time and resources that TMA organizers spend while also helping grow the program more effectively and efficiently.

### 3. Beyond the Pilot Phase: Mission & Objectives

**Mission: Reducing Single Occupant Vehicle Commuting**

In order to provide a clear direction for program service delivery, TMA organizers have highlighted the need for results-oriented practices for member organizations to achieve meaningful results in reducing single-occupancy vehicle commuting. Developed in partnership with the Working Group, the TMA has defined its mission to “bring together public and private interests to support and promote alternatives to Single Occupancy Vehicle (SOV) travel.”

**Objectives: Building Partnership & Impact**

1. Four key objectives were identified by the Working Group to contribute towards accomplishing its mission,
2. Maintain and expand a successful Transportation Management Association with measurable results,
3. Provide services to organizations and property owners to assist the development and implementation of successful commute programs,
4. Encourage workplace cultures that support sustainable transportation through Transportation Demand Management programs within employers, and;
5. Identify and communicate the needs of pedestrians, cyclists and transit users to improve Regional, Area Municipal and Provincial investment in infrastructure and services.
4. Program Framework

The Program Framework establishes how each member organization works towards the program’s mission and supports TMA services. The framework was designed with flexibility and consistency in its approach to be amendable to different organizational structures, management and resources.

Member Milestones: Clean & Easily Understood

Member organizations will work through a set of four milestones. Each milestone is intended to be flexible and accommodate a diversity of employers while maintaining a cohesive structure to the overall program.

1. **Onboarding**: Organization contacts are provided services training and all agreements are finalized.
2. **Goal-Setting**: During the first year of membership, each organization works with TMA organizers to develop baseline organizational travel data to help achieve the mission objective.
3. **Implementation**: Over a 5 year period, the development of supportive internal programs and policies take place. Annual measurements will evaluate progress and identify further opportunities for successful program performance.
4. **Maintain**: Develop further opportunities and organizational action plans to maintain or progress towards the mission objective.

![Figure 3: TMA Milestones for Member Organizations](image)

Support Structure: Focused & Effective

Members will receive four areas of support that form the core operating areas of the program including: 1) Employee Services, 2) Promotion, 3) Recognition, and; 4) Reporting. Each support is described in Figure 4.
Employee Services: Scalable & Productive

All employees of member organizations will have access to an innovative and easy-to-use trip planning portal on a TMA website that provides access to carpool matching, discounted GRT passes, emergency ride home program, trip tracking and promotional events at their workplace.

Online Information and Trip Planning

An enhanced online presence, including an integrated dynamic multi-modal trip planner with smart phone support, was identified as a top priority for the program. This will improve employee access to travel information from the current fragmented information that is located on several separate pages. A single dedicated site where users can navigate through travel information and travel options is vital. Providing program information and the tools available to TMA members through the same site has also been recognized an important investment for attracting prospective organizations.

To enhance the program’s online presence, TMA organizers will develop an integrated online trip planning and TMA resource.

Discounted Transit Pass

The online discounted GRT pass has been a key driver of growth in membership. Focus will be placed on ensuring ease-of-use while maintaining a continuing transit discount for employees when shifting to a Smart Fare system in 2015.

Emergency Ride Home

The Emergency Ride Home service remains an effective tool to remove a potential barrier for sustainable community. It is expected to continue to have minimal financial resources.

Promotions: Targeted & Supportive

Member organizations will continue to play a key supportive role for internal communications with their employees. The pilot period demonstrated that communications and promotion is most effective when it is delivered through internal channels within each organization. Program organizers will continue to support these internal channels through the design of TMA-branded outreach materials, and supporting one on-site outreach event with each member per year.

Organizers will also continue to organize community-wide travel events such as Bike Month and Carpool Week.
These events provide unique opportunities to build excitement for travel and are an excellent channel to recruit new members.

**Success Metrics: Driving Impact**

To support the program’s mission and establish capacity building for organizations to work towards that mission, program success metrics have been defined. These outline specific targets to achieve successes in the areas of Capacity Building, Activity Implementation and Impact Measurement. Figure 5 and Table 1 describe these success metrics.

![Figure 5: Success Metrics Categories](image)

<table>
<thead>
<tr>
<th>Success Area</th>
<th>Definition</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Measures the overall influence and effectiveness towards the program’s mission</td>
<td>• rates of SOV commuting travel and • rating of organization’s internal support programs that help achieve sustainable commuting.</td>
</tr>
<tr>
<td>Activities</td>
<td>Measures the uptake and scale of TMA services</td>
<td>• number of employees participating in services and surveys • breadth of services that the TMA offers to the partner organizations. • efficiency of funding dollars per employee served</td>
</tr>
<tr>
<td>Capacity</td>
<td>Measures the ability to fulfil the program’s mission Measures the program’s operating efficiency and strengths (funding, staffing, and partnerships)</td>
<td>• number of TMA member organizations, • number of staff supporting the program • strength of partnerships (GRT, SWR, Carshare, etc)</td>
</tr>
</tbody>
</table>

**Table 1: Description of Success Metrics**
The amount of SOV travel will continue to be measured through a travel survey completed by staff at each member organization. The organization’s internal support programs will be monitored through an annual interview and audit of policies, programs, and infrastructure. Results from the surveys and audits will assist TravelWise organizers in developing and refining a supportive approach for each organization. These metrics will be measured at both an organizational level and across the TMA.

**Reporting: Relevant Data & Best Practices**

TMA organizers will focus on collecting employer mode-split data, identifying barriers to commuting solutions, and the provision of recognition opportunities. This data will be used for:

- Measuring progress against identified mode split targets,
- Developing best practices on how to implement successful TDM internal programs, and;
- Identify and communicate the opportunities and challenges of employee travel to employers, the Region of Waterloo, and Area Municipalities.

**Recognition: Celebrating Successes**

The TMA will recognize member organizations for their progress towards identified success metrics. Table 2 outlines the standards for employers to focuses on encouraging organizational ambition, deliverable actions, and overall process on the programs mission.

<table>
<thead>
<tr>
<th>Recognition Level</th>
<th>Impact Target</th>
<th>Internal Support Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>15% SOV Decrease Or &lt;50% SOV Mode Split</td>
<td>Strong action plan and robust TDM initiatives</td>
</tr>
<tr>
<td>Silver</td>
<td>10% SOV Decrease Or 50% - 65% Mode Split</td>
<td>Good action plan and developed TDM initiatives</td>
</tr>
<tr>
<td>Bronze</td>
<td>5% SOV Decrease Or 80% - 65% Mode Split</td>
<td>Basic action plan and incentives</td>
</tr>
<tr>
<td>Observing Member</td>
<td>Development goal</td>
<td>Developing action plan</td>
</tr>
</tbody>
</table>

*Table 2: TMA Impact Targets, Support and Recognition Categories*

A member organization will be eligible for a certain recognition levels once it has indicated its commitment to achieve the corresponding milestone. Data collected though the annual employee surveys and assessments will inform both an organization’s progress towards these goals. The targets included above are in draft form, and will be revised in consultation with the Working Group. This will ensure targets are accurate and realistic as additional commuting data is collected and mode shift trends are identified.

TravelWise organizers will provide yearly awards in recognition of exceptional leadership, innovation, or progress. These could include “greatest mode split reduction,” “best cycling culture,” and “most innovative.” Awards will be presented at an annual public awards celebration, possibly in conjunction with Sustainable Waterloo Region’s annual Evening of Recognition. To showcase member progress, recognition and achievements will be published in an annual year-end report, on the Region of Waterloo’s website and on the TMA website.

Recognition is intended to help build accountability among member organizations and provide positive exposure, brand acknowledgement and visibility for both member organizations and the TMA.
6. Marketing & Communication

Communication Plan: Structured & Exciting
The TMA Communication Plan has been effective tool to provide options for reaching different types of employers. It will continue to be utilized to ensure clear timelines and activities for TMA organizers and member organizations, while still allowing flexibility. The core components of the Communication Plan include:

- Events (shown in blue below)
- Data collection & celebration (shown in yellow)
- Online engagement (shown in green)
- Print & digital promotional materials (ongoing or by request)

<table>
<thead>
<tr>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>Feb</td>
<td>Mar</td>
<td>Apr</td>
</tr>
<tr>
<td>Carpool Week</td>
<td>On-Site Event Season</td>
<td>Employer Survey Season</td>
<td></td>
</tr>
<tr>
<td>1/4ly News</td>
<td>Awards Night</td>
<td>1/4ly News</td>
<td>1/4ly News</td>
</tr>
</tbody>
</table>

Table 3: The Standard Yearly TMA Schedule of Communications Activities

7. Growth & Budget

Membership Types: Capturing Employer Classes
To provide services to a wider variety of employers, and facilitate Regional transportation policies (such as the Transportation Impact Study Guidelines) the TMA will offer two new membership categories: Small Businesses and Developers.

The new membership categories for small businesses and developers will focus on core service provision that is readily scalable. Reporting will remain a requirement to meet the goals of the program however; to reduce administrative resources for small business and developers, these members will receive smaller amounts of program support from TMA organizers. Table 4 outlines which services will be provided to the various membership categories.
<table>
<thead>
<tr>
<th>Table 4: TMA Membership Categories and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Employee Services</strong></td>
</tr>
<tr>
<td>Corporate Transit Pass</td>
</tr>
<tr>
<td>Trip Portal Access</td>
</tr>
<tr>
<td>Emergency Ride Home</td>
</tr>
<tr>
<td><strong>Promotional Support</strong></td>
</tr>
<tr>
<td>Community-Wide Events</td>
</tr>
<tr>
<td>Customized Posters &amp; Promo Resources</td>
</tr>
<tr>
<td>1 On-site Event per Year</td>
</tr>
<tr>
<td><strong>Reporting</strong></td>
</tr>
<tr>
<td>Annual Employee Survey + Analysis</td>
</tr>
<tr>
<td>Annual Initiatives Report</td>
</tr>
<tr>
<td>Annual Service Uptake Report</td>
</tr>
<tr>
<td>Yearly Trip Log Data</td>
</tr>
<tr>
<td>Action Plan Coaching</td>
</tr>
<tr>
<td><strong>Recognition</strong></td>
</tr>
<tr>
<td>Year-End Report</td>
</tr>
<tr>
<td>Web Pages for Employers</td>
</tr>
<tr>
<td>Employer Awards</td>
</tr>
</tbody>
</table>

Small Business (1-50 employees) | Corporate (50+ employees) | Developer Expected Tenancies
**Membership Fees: Representative of Size**

Table 5 illustrates the membership fees will be calculated based on the number of employees with a work location in Waterloo Region. This fee structure builds a revenue stream to account for higher costs associated with larger members (such as resource-intensive outreach events and additional incentives). Scaling membership fees in this manner allows larger members to pay a lower cost per employee, allowing the program to grow at an economy of scale.

<table>
<thead>
<tr>
<th>Services</th>
<th>Number of Employees</th>
<th>Membership Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Business</td>
<td>&lt;50</td>
<td>$250</td>
</tr>
<tr>
<td>Corporate</td>
<td>51-100</td>
<td>$650</td>
</tr>
<tr>
<td>Corporate</td>
<td>101-250</td>
<td>$1250</td>
</tr>
<tr>
<td>Corporate</td>
<td>251-500</td>
<td>$1,750</td>
</tr>
<tr>
<td>Corporate</td>
<td>501-1000</td>
<td>$2,750</td>
</tr>
<tr>
<td>Corporate</td>
<td>1001-3000</td>
<td>$4,500</td>
</tr>
<tr>
<td>Corporate</td>
<td>3001-6250</td>
<td>$6,250</td>
</tr>
<tr>
<td>Corporate</td>
<td>6251+</td>
<td>$1/employee, max of $10,000</td>
</tr>
<tr>
<td>Developer</td>
<td>Based on building occupancy</td>
<td>Same rates per tier as above</td>
</tr>
</tbody>
</table>

Table 5: TMA Membership Fees

**Membership Growth: Five-year Projection**

Targeted member growth will be a significant focus in the next two years. As many of the Region’s largest employers are already members, future growth is likely to occur with organizations that have fewer than 1000 employees. It is also reasonable to assume that members may occasionally decide to leave the program. Figure 6 illustrates the projected membership growth based on an average membership category of 101-250 employees.

![Projected Membership Growth and Revenues](image)

Figure 6: Projected Membership Growth and Revenues

Overall, the program will continue to be funded through a combination of membership fees and Regional contributions. Most public-private TMA partnerships in North America operate with 80% public and 20% private
funding. The projected 2014 Regional contribution will be approximately 70% of the TMA’s operating cost, illustrating that the TMA is continuing to operate with efficiency and scalability while maintaining firm financial commitments of partnered members and area municipalities. Furthermore, membership growth will enable greater impact towards the program’s mission and increase the programs capacity by increased membership contributions. It is anticipated that, by increasing these contributions, the cost recovery ratio of program will increase overtime, reducing the Regional portion of funding.

7. Local Partnerships.

Sustainable Waterloo Region: Implementation & Credibility
Sustainable Waterloo Region continues to play a valuable role in the coordination of TMA services, communications, individualized marketing and membership outreach. As the business plan focuses on mission objectives with targeted goals and capacity building for organizations toward towards that mission, building a further partnership with SWR, its mission of collaboration, enabling organizations, and a shared focus on achieving tangible results is supported by staff.

Area Municipalities: Coordination & Resources
As a program offered through the Region of Waterloo, the TMA is unique among other TMAs as its services help support complimentary TDM programs run through local area municipalities. As TMA members, the cities of Kitchener, Waterloo and Cambridge actively promote services to their own corporate staff while enhancing their own TDM programs.

Offering TMA services through the Region is advantageous for area municipal planning and transportation demand management programs. By offering scalable services throughout the Region, the program eliminates the need for area municipalities to duplicate the same programs, effectively supporting area municipalities with services that connect developers and businesses with a suite of travel solutions.

Through the Working Group, the TMA shares information of successful TDM program development that helps to complement municipal policies and programs between private and public sector organizations. By sharing these successes amongst the Working Group, the TMA helps to centralize best-practices and further synergies between the business community and municipal governments.

ION Rapid Transit: Service Promotion
With over 23,000 employees, the usefulness of the TMA’s direct communications channels to this key commuter demographic to promote ION Rapid Transit and GRT becomes readily apparent. Not only does the investment in ION support TMA program activities by making it easier for employees to take transit to work, but tools such as the Discounted Corporate pass will provide tangible incentives to drive ION ridership.

Recruitment of future TMA members can be targeted along the ION transit corridor and iXpress routes to further promote ridership and service uptake. For example, there is an excellent opportunity to utilize the TMA in the Cambridge Transit Supportive Strategy by targeting the 74 businesses with 50 or more employees located in the Station Areas of ION aBRT.

Grand River Transit: Service Provision
Partnership with GRT in the administration of the Corporate Pass will remain a high priority. Ensuring clear communication channels between administrative staff, fare coordinators, and TMA organizations will provide a positive user experience and improve committed ridership. The TMA adds value to for GRT by answering questions to member employees about transit schedules, route maps, service improvements, and fares structures. The TMA will continue to partner with GRT on implementation of a discounted pricing model as the fare structure
transitions to a smartcard model in 2015. Program organizers will continue to participate in the smartcard and fare structure planning process and continue to communicate Corporate Pass changes to member organizations and employees.

**Public Health: Information Distribution**
The program continues to partner with the Region of Waterloo’s Public Health department, distributing several complementary communications pieces promoting active transportation. Organizers will explore opportunities to involve member organizations in Public Health’s workplace based “Project Health” program that provides support to workplaces to develop comprehensive wellness plans to promote and support employees to be more active through awareness raising, skill building, supportive environment and policy development. Public Health is also able to promote the TMA as one component within a comprehensive wellness plan.

**Community Carshare: Integrated Programming**
A common point of feedback during the pilot period was the need for employees to have access to a vehicle for business travel. To help remove this barrier, several member organizations already provide corporate CarShare memberships to their staff. Program organizers will continue to provide information on personal CarShare memberships to help further remove this barrier, and will evaluate partnership with Community CarShare to help provide further solutions such as individual membership discounts for corporate CarShare members and assistance establishing CarShare vehicle storage locations.

**ClimateActionWR: Regional Sustainability Initiatives**
A locale climate action plan is currently being developed in Waterloo Region through ClimateActionWR; a partnership between the Region of Waterloo, Sustainable Waterloo Region, and REEP Green Solutions. In 2012, ClimateActionWR completed a GreenHouse Gas inventory illustrating that over 40% of Regional GHG emissions came from transportation.

As a partner in ClimateActionWR, the Region and the TMA will play an important role in the local strategy to mitigate transportation-related emissions. As an existing program, it can provide an example of how Waterloo Region is demonstrating environmental leadership.
<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Requestor</th>
<th>Request</th>
<th>Assigned Department</th>
<th>Anticipated Response Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>05-Jun-13</td>
<td>G. Lorentz</td>
<td>Staff to review signage on Trussler Road/Ira Needles Boulevard</td>
<td>Transportation and Environmental Services</td>
<td></td>
</tr>
<tr>
<td>18-Jun-13</td>
<td>Council</td>
<td>Operation of Raised Crosswalks Study</td>
<td>Transportation and Environmental Services</td>
<td>Mid 2014</td>
</tr>
<tr>
<td></td>
<td>J. Haalboom</td>
<td>Staff continue to lobby the Province for changes to the <em>Highway Traffic Act</em> providing right of way to pedestrians and on an as needed basis provide an update to Council</td>
<td>Transportation and Environmental Services</td>
<td>as required</td>
</tr>
</tbody>
</table>